

WORK, INEQUALITY, AND GENDER: MIGRATION AND MOBILITY IN TWENTY-
FIRST CENTURY MEXICO

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ABSTRACT

Joshua T. Wassink: *Work, Inequality, and Gender: Migration and Mobility in Twenty-First Century Mexico*
(Under the direction of Jacqueline Hagan)

Over the last two decades migration between Mexico and the United States has undergone a profound transformation. While circular migration has long been characteristic of the U.S.-Mexico system, the great recession and increased interior and border enforcement by the U.S. Government escalated return migration to Mexico. Moreover, returnees are increasingly opting to settle in Mexico rather than return to the United States. Between 2005 and 2014, 2.4 million Mexican immigrants returned home from the United States, resulting in a 10 percent decline in the U.S. Mexican-born population. During the same period, annual Mexican migration to the United States fell by 70 percent. Escalating return migration has motivated considerable research on the labor market reintegration of migrants into their origin communities. Mexican migrants are returning to a heterogeneous set of rural and urban communities with widely varying industrial profiles and disparate labor market opportunities.

The Mexican labor market is highly stratified and opportunities vary by geography. The majority of workers with fewer than twelve years of schooling consigned to work in the informal sector of the economy, a loose conglomeration of small firms that do not provide health insurance, pensions, severance pay, or written contracts, and generally employ fewer than five workers. Because of the precarious working conditions and low wages associated with the informal sector, self-employment represents the primary upward mobility pathway for individuals with low levels of formal education who face significant barriers to attaining formal

employment. Business formation offers an opportunity to maximize returns to social and technical skills that workers accumulate across years of informal sector work. This dissertation consists of three independent chapters that examine mechanisms related to economic mobility across different social and geographic groups of Mexican workers: U.S. migrants and non-migrants, women and men, and more and less educated workers.

The first chapter investigates how U.S. migration experience leads to self-employment among Mexican return migrants and how their self-employment affects economic mobility. To examine alternative labor market trajectories, I rely on *biographical narratives*, which I constructed from in-depth interviews conducted with return migrants five years apart (2010 and 2015). Using the biographical narratives, I explore the heterogeneity of self-employment among return migrants and associated variations in their reasons for traveling to the United States and economic mobility upon return to Mexico.

The second chapter assesses how the relationship between U.S.-migration experience and labor market mobility upon return varies by sending community context. To examine the relationship between international migration and labor market mobility by context, I draw on the biographical narratives used in Chapter 1 and additional interviews conducted in a number of rural communities. I conceptualize migration as a social process in which migrants plans and decisions evolve over time as they gain information and acquire resources across the migratory circuit: before, during, and after migration. My contextual analysis documents the ways in which migration behavior and preparation for economic activity upon return are shaped by economic opportunities in sending communities.

The third chapter explores the relationship between educational attainment and business survival among self-employed Mexican men and women. I argue that the well-documented

positive relationship between educational attainment and successful self-employment reflects a gradient in access to financial resources, rather than disparate human capital skills. To assess the impact of educational attainment on successful self-employment, I estimate a series of proportional hazards models of business survival using piece-wise exponential regression. To account for workers' access to financial resources, I adjust for possession of a designated business structure outside the home and receipt of formal or informal financial support to establish the business.

To my parents, Tom and Adey.
I couldn't have done it without you Mom and Dad

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I met Jackie Hagan in Fall, 2011, as an undergraduate intern at the Woodrow Wilson International Center in Washington D.C. On my first day, I told her that I was deciding whether to attend law school or pursue a Ph.D. Well, as the saying goes, the rest is history. Over the subsequent months, Jackie nurtured my budding passion for sociological research, specifically the study of international migration. After a semester in Washington, I was sold on a career as an academic researcher.

Since I began graduate school at UNC, in Fall of 2013, Jackie has been the best advisor and dissertation chair that I could hope for. Under her tutelage, I have steadily improved as a writer and communicator and gained confidence in my own intellectual potential. Even more, Jackie and her husband Joe have become dear friends to myself and my wife, Christina. From the *ranchitos* of Guanajuato, to the tapas bars of Barcelona, it has been a joy to have them in our

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INTRODUCTION

This dissertation consists of three independent chapters that examine mechanisms related to economic mobility across different groups of Mexican workers: U.S. migrants and non-migrants, women and men, and more and less educated workers. The first chapter investigates how U.S. migration experience contributes to various forms of self-employment among Mexican return migrants and how their self-employment affects economic mobility. The second chapter assesses how the relationship between migration experience in the United States and labor market mobility upon return varies by the local context in sending communities. The third chapter explores the relationship between educational attainment and business survival among self-employed Mexican men and women.

The Mexican labor market is highly stratified (Torche 2010, 2014; Villarreal 2010). A small, highly educated professional class dominates the top of Mexico's income bracket, while the majority of the workforce occupies the informal sector, a conglomeration of independent workers and small unregulated firms that offer low wages, no health or retirement benefits, and limited opportunities for occupational mobility (Huerta-Wong, Burak, and Grusky 2013; Perry et al. 2007). Movement into the upper-level professional class depends on inherited social class and attainment of higher education, which go largely hand in hand (Cortés and Latapí 2005; Parrado 2005; Torche 2015). Although extensive research explores patterns of stratification in Mexico and Latin America more generally (Hoffman and Centeno 2003; Martin Ravallion 2014; Torche 2014, 2015; Torche and Spilerman 2009), comparatively little work considers the mechanisms by which less educated workers pursue and, in some cases, achieve economic mobility.

To inform my analyses, I integrate the scholarships on international migration, work and self-employment, and inequality and economic mobility, with an emphasis on Mexico and the Latin American region. Extensive scholarship shows that the high rate of self-employment in Mexico stems from the lack of opportunities for occupational mobility. That is, those with little schooling become self-employed to avoid low-wage work in the informal sector and maximize the returns to their skills (Balán, Browning, and Jelin 1973; Jütting, Parlevliet, and Xenogiani 2008; Maloney 2004; Selby, Murphy, and Lorenzen 1990). More than 30 percent of Mexican workers are self-employed, with disproportionate representation among less educated workers (INEGI 2012). Similarly, migration to the United States allows Mexican workers to circumvent barriers to mobility encountered in local labor markets, such as limited access to credit, unstable employment, and low wages (Harris and Todaro 1970; Massey et al. 1999; Stark and Bloom 1985; Villarreal and Blanchard 2013a). Between 2005 and 2015, an estimated 2.4 million migrants returned to Mexico from the United States, as net Mexican migration fell below zero for the first time in more than a century (Gonzalez-Barrera 2015; Passell, Cohn, and Gonzalez-Barrera 2012). To explore patterns of migration, self-employment, and economic mobility among Mexican men and women, I use multiple data sources including 160 in-depth interviews conducted in the historic migrant sending of Guanajuato, worksite observations of small and midsized businesses, and nationally representative survey data from Mexico's National Survey of Occupation and Employment (ENOE) and National Survey of Microbusinesses (ENAMIN).

In Chapter 1, I investigate how international migration leads to self-employment and self-employment's implications for economic mobility among return migrants. Escalating return migration to Mexico has motivated considerable research on the labor market reintegration of migrants into their origin communities. Findings from this scholarship are mixed. Some studies

document an elevated rate of entrepreneurship and entry into skilled jobs (Hagan, Hernández-León, and Demonsant 2015; Hagan and Wassink 2016; Massey and Parrado 1998). Other studies show increased rates of downward occupational mobility and entry into marginal self-employment following a failed job search (Cobo, Giorguli, and Alba 2010; Lindstrom 2013; Sheehan and Riosmena 2013). To date, studies of return migration and self-employment in Mexico primarily use large datasets to examine labor market integration of return migrants. While important, these large-scale assessments mask considerable heterogeneity among returnees, which limits our ability to discern both self-employments' relationship to prior migration experience and its implications for future economic mobility.

The analysis in Chapter 1 draws on results from a longitudinal analysis of labor market trajectories among 52 Mexican return migrants who were self-employed at least once following return to examine the micro-level processes associated with return migrants' labor market reintegration and economic mobility. I view movement in and out of self-employment as simultaneously enabled by and parallel to international migration. In some cases, international migration and accumulated savings or skills may facilitate successful business formation upon return. But, in other cases, migration and self-employment may be two alternative responses to persistent economic marginalization. To examine these alternative labor market trajectories, I rely on *biographical narratives*, which I constructed from in-depth interviews conducted with return migrants five years apart (2010 and 2015). The narratives integrate migrants' work histories, family and social contexts, financial capital accumulation, human capital formation, and life course context at each stage of the migratory circuit (before migration, in the United States, and post-migration). Using the biographical narratives, I explore the heterogeneity of self-

employment among return migrants and associated variations in their reasons for traveling to the United States and economic mobility upon return to Mexico.

In Chapter 2, I expand my focus to examine variations in labor market mobility among self-employed and wage-earning return migrants across differing local contexts. Consideration of local context is critical to analyses of contemporary Mexican migrants who are returning to a heterogeneous set of rural and urban communities with widely varying industrial profiles and disparate labor market opportunities (Masferrer and Roberts 2012). Migration scholars have long recognized the ways in which local context influences both emigration from sending communities and incorporation into receiving ones (Massey et al. 1987; Lewis and Williams 1986; Portes and Rumbaut 2006). If travel abroad responds to local labor market opportunities and constraints at home, it stands to reason that return migrants' labor market reintegration will vary in systematic and important ways by local context. The theoretical implications of focusing on local context upon return are far-reaching. Migration scholars view international migration as a strategy to overcome entrenched labor market barriers that limit economic mobility in Mexico and other sending regions (Garip 2016; Massey et al. 1999, 1987; Stark 1991). A contextual analysis of labor market mobility among return migrants could elucidate the ways in which migration actually influences or disrupts systems of inequality in sending countries, potentially creating new mobility pathways in highly unequal sending regions.

To examine the relationship between international migration and labor market mobility by context, I draw on the longitudinal interview study used in Chapter 1 and 60 additional interviews conducted in several rural communities proximate to urban areas and two rural and isolated communities. Variance in rural communities' spatial contexts relative to urban areas allowed me to observe the impact of transportation infrastructure and access to extra-community

employment opportunities on labor market mobility. In contrast to existing theories that view international migration as one stage in well-defined economic strategies, I view migration as a social process in which migrants plans and decisions evolve over time as they gain information and acquire resources across the migratory circuit: before, during, and after migration. Similarly, I consider the ways in which individual and cohort-level life course factors (i.e., disparate educational attainment across generations and differing familial responsibilities between older and younger migrants) affect migrants' plans while they are in the United States. My contextual analysis documents the ways in which migration behavior and preparation for economic activity upon return are shaped by economic opportunities in sending communities.

In chapter 3, I investigate the relationship between educational attainment and self-employment in Mexico. Despite the frequent assertion that self-employment offers an important pathway to economic mobility among workers with little schooling, studies of Latin America and other developing regions consistently find that higher education is an important predictor of prosperous self-employment, while lower education is associated with marginal self-employment that masks unemployment (Fajnzlber, Maloney, and Rojas 2006; Gindling and Newhouse 2014; Grimm, Knorringa, and Lay 2012; Mandelman and Montes-Rojas 2009). This conclusion questions the utility of self-employment for less educated workers, indicating that they primarily turn to self-employment as a last resort in response to economic marginalization.

In the third chapter, I argue that the relationship between educational attainment and successful self-employment reflects an educational gradient in access to financial resources, rather than disparate entrepreneurial ability. Education reflects more than just human capital skills. Educational attainment is positively associated with inherited wealth, the affluence of one's social networks, and salary (Becker 2009; Torche 2014; Torche and Spilerman 2009), all

important mechanisms through which prospective entrepreneurs might finance their ventures. Establishing a stable enterprise is never easy (Bruderl and Schussler 1990), but challenges confronted by nascent entrepreneurs are particularly acute in largely informal economies such as Mexico, which are characterized by inefficient credit markets and limited access to financial capital (Levy 2008). In these instances, securing start-up funds presents a challenge even to the most skilled workers (Jütting et al. 2008).

To assess the impact of educational attainment on successful self-employment, I estimate a series of proportional hazards models of business survival using piece-wise exponential regression. Panel data with information on business exit come from the ENOE, which I merged with retrospective business histories from the ENAMIN. To assess the significance of workers access to financial resources, I adjusted for possession of a designated business structure outside the home and receipt of formal or informal financial support to establish the business. I also recognize the pervasiveness of marginal self-employment, which can become a trap for workers who are unable to secure steady jobs (Levy 2008). The ENAMIN asked respondents to select among 13 possible reasons why they became self-employed. With this information, I distinguished between opportunity, necessity, and flexibility/complementary, as competing selection mechanisms.

In the concluding chapter, I discuss implications of this study for research on international migration and economic mobility. Then, I note several key limitations of the present study and summarize my plans for future research.

CHAPTER ONE: SELF-EMPLOYMENT AND SOCIOECONOMIC MOBILITY AMONG MEXICAN RETURN MIGRANTS

Mexico is experiencing unprecedented levels of return migration. While circular migration has long been characteristic of the U.S.-Mexico migration system, improved economic conditions in Mexico, the U.S. recession, and increased interior and border enforcement by the U.S. Government have escalated return migration to Mexico. Between 2005 and 2014, 2.4 million Mexicans returned home from the United States, double the figure from the previous decade (Gonzalez-Barrera 2015). Mexican returnees are increasingly opting not to go back to the small rural hamlets from which they emigrated (Masferrer and Roberts 2012) and are instead settling in urban areas with diverse labor markets where they can apply skills and savings acquired working abroad (Garip 2016; Hagan et al. 2015; Hernández-León 2008).

Scholars have long documented a high rate of self-employment among return migrants, which is commonly attributed to the accumulation of financial and human capital while working abroad (Hagan and Wassink 2016; Massey and Parrado 1998).¹ Indeed, migration theories view international movement as a strategy through which potential entrepreneurs accumulate savings to overcome barriers in local labor markets, such as limited access to business loans (Lindstrom 1996; Lindstrom and Lauster 2001b; Parrado and Gutierrez 2016). Central to this scholarship is the assumption that self-employment upon return leads to economic mobility. Yet, labor market

¹ I use the term self-employment throughout to refer to self-employed workers with or without employees. In the analysis I examine variations in business size and sector and consider the implications of and explanations for these variations.

research on Mexico and other Latin American countries reveals that self-employment is a heterogeneous job status that includes both successful entrepreneurs and marginalized workers unable to find alternative jobs (Levy 2008; Perry et al. 2007). Studies document similar heterogeneity among international migrants, identifying those who migrate with a specific earnings target in mind, but also those who move because of low wages and blocked mobility in their local economies (Massey and Espinosa 1997; Villarreal and Blanchard 2013b).

To date, studies of return migration and self-employment in Mexico have relied primarily on large datasets like the Mexican Migration Project and the Mexican Census to examine the labor market integration of return migrants. They find that relative to non-migrants, return migrants exhibit a high rate of self-employment (Massey and Parrado 1998; Sheehan and Riosmena 2013). However, this scholarship tends to reduce complex processes of international migration and labor market reintegration down to simple dichotomous or linear relationships with straightforward interpretations – e.g., international migration facilitates the accumulation of financial capital, which return migrants use to start desired businesses upon return. While important, these large-scale assessments mask considerable heterogeneity among return migrants, thus limiting scholars' ability to discern both self-employments' relationship to prior migration experiences, as well as its implications for future economic mobility.

In this paper, I draw on results from a longitudinal analysis of the labor market trajectories of Mexican return migrants to examine the micro-level processes associated with return migrants' labor market reintegration and economic mobility. I focus on movement in and out of self-employment, which I view as simultaneously enabled by and parallel to international migration. In some cases, international migration and accumulated savings may facilitate

successful business formation upon return. But, in other cases, migration and self-employment may be two alternative responses to persistent economic marginalization.

To examine these alternative labor market trajectories, I rely on *biographical narratives*, which I constructed from in-depth interviews conducted with return migrants five years apart (2010 and 2015). The narratives integrate migrants' work histories, family and social contexts, financial capital accumulation, human capital formation, and life course context at each stage of the migratory circuit (before migration, in the United States, and post-migration). Using the biographical narratives, I explore the heterogeneity of self-employment among return migrants and associated variations in their reasons for traveling to the United States and economic mobility upon return to Mexico. My analysis is guided by four questions. 1) What are the dimensions of self-employment among return migrants? 2) How is returnees' self-employment related to upward or downward economic mobility? 3) What mechanisms explain these different mobility pathways? 4) What can return migrants' self-employment experiences tell us about existing economic theories of international migration?

This paper is organized into five sections. To frame the analysis, I first engage three bodies of research that have thus far had little cross-fertilization: the literature on work and self-employment in Latin America, the scholarship on return migration and self-employment, and developments in economic theories of international migration. I then describe the site selection and research design, with an emphasis on how I constructed the interviewees' biographical narratives. Next, in the results section, I use the respondents' biographical narratives to identify multiple self-employment types and to explain movement into and out of these different categories. Then, drawing on the longitudinal analyses, I develop a set of propositions to guide

future studies of return migrants. I conclude with a reflection on the implications of the results for theory and policy.

WORK AND SELF-EMPLOYMENT IN LATIN AMERICA

The informal economy, which is the largest economic sector in most Latin American countries, contains firms that are not formally registered, regulated, or taxed by the government. Firms in the informal economy do not provide health insurance, pensions or severance pay, or written contracts, and tend to employ fewer than five workers (Arias et al. 2010; Levy 2008; Perry et al. 2007). The small size of informal sector firms is explained as a function of inefficient credit markets and onerous costs of formal registration that limit growth potential among prospective entrepreneurs (Arias et al. 2010; Tornarolli et al. 2014). In Latin America, Mexico is on the high end of the informal economy spectrum, with 66 percent of its workforce employed in this sector (SEDLAC 2015). For the most part, within-firm opportunities for upward mobility are extremely limited among workers in the informal sector (Arias et al. 2010; Levy 2008).

Because of the precariousness and low wages associated with informal wage labor, self-employment represents the primary upward mobility pathway for individuals with low levels of formal education who face significant barriers to attaining formal sector employment (Bargain and Kwenda 2011; Perry et al. 2007).² In 2010, 28 percent of the economically active Mexican population was self-employed (INEGI 2011). Studies of Mexican workers who transitioned from

² My conceptualization of self-employment as a potential mobility strategy was informed by the work of others who have shown that mobility in the informal sector is generally achieved via the accumulation of skills learned informally in the workplace, which workers combine with savings to initiate new microenterprises in order to maximize the returns on their own abilities (e.g., Jütting, Parlevliet, and Xenogiani 2008).

informal wage work to self-employment find that they have higher job satisfaction than informal sector employees, stemming from higher average earnings and increased autonomy (Perry et al. 2007). Moreover, sociologists and economists have theorized that persons with little schooling often work in the informal sector to develop skills necessary to start their own businesses (Hagan et al. 2015; Jütting et al. 2008).

Self-employment, however, does not always lead to upward mobility (Cunningham and Maloney 2001; Perry et al. 2007). For example, based on their analysis of Latin American workers, Perry and colleagues (2007:6) found that although self-employed workers on average fare better than their informally employed counterparts “about one-third of the self-employed... appear to be so largely involuntarily; they would prefer formal jobs.” For these laborers, self-employment functions as a “last resort” following a failed job search (Levy 2008).

These opposing self-employment pathways have lead scholars to distinguish between “successful” and “unsuccessful” self-employment (Gindling and Newhouse 2014). Research on self-employment in Latin America finds that voluntary entry and the presence of employees indicate successful self-employment, while involuntary entry the absence of employees reflects unsuccessful self-employment (Cunningham and Maloney 2001; Levy 2008). Maloney (2004), for example, found that workers in Colombia and Mexico who voluntarily left wage labor to start businesses earned significantly higher wages than those who only became self-employed after a failed job search (See also Mandelman and Montes-Rojas 2009). In their analysis of self-employed workers in 74 developing countries, including Mexico, Gindling and Newhouse (2014) found that two thirds of employers reside in the top income tercile, relative to 40 percent

of self-employed workers without employees.³ Similarly, Grimm, Knorrinda, and Lay (2012) found that among self-employed workers in seven West African countries, only those in the top income quartile averaged at least one employee. Recent research on return migrants in Mexico also documents the importance of physically established businesses, distinguishing between in-home or ambulator businesses with low entry and exit costs and more established ventures with permanent locations outside the home (Hagan et al. 2015). Although assessments of business context for Mexico are not available, of the 28 percent of working Mexicans that were self-employed in 2010, one in five had employees (INEGI 2011) suggesting that most self-employed Mexicans, even those who derive personal satisfaction from their work, struggle to expand their businesses.

In Mexico, self-employment is often a temporary status, which highlights both the challenges faced by nascent entrepreneurs and the frequent use of self-employment as an alternative to unemployment. Indeed, a report from 2005 finds that more than a quarter of self-employed workers change employment statuses every year (Fajnzlber et al. 2006). Given the precarious nature of self-employment and low rate of business expansion, it is not surprising that there is considerable turnover among informal sector self-employed workers. Yet, the rapid failure of underperforming entrepreneurs may upwardly bias cross-sectional estimates of the relationship between self-employment and social mobility. That is to say, a cross-sectional sample of self-employed workers will overestimate the number of successfully self-employed workers with well-established firms, while underestimating unsuccessful self-employed who exit self-employment when salaried jobs become available. Moreover, cross-sectional analyses

³ This is a much lower threshold for success than the five employees or more, which is commonly used to identify formal sector businesses (Arias et al. 2010; Sheehan and Riosmena 2013).

obscure the use of self-employment as a “stepping-stone” for individuals actively engaged in job searches.

To date, the research on self-employment in low to middle-income countries has under-theorized self-employment as a mobility pathway by generally focusing on one dimension of self-employment, e.g., successful versus unsuccessful (Gindling and Newhouse 2014) or movement in and out of self-employment (Fajnzlber et al. 2006), but rarely both. I build upon these studies by conceptualizing self-employment along two dimensions: quality and temporality. Quality refers to personal and economic value of the work (i.e., job satisfaction, autonomy, earnings, presence of workers, and growth potential). Temporality captures workers’ propensity to move in and out of self-employment over time. Figure 1.1 depicts the proposed scheme. As the figure shows, self-employment classified in terms of quality and temporality can be low quality and temporary, low quality and permanent, high quality and temporary, and high quality and permanent. The dashed lines in Figure 1.1 illustrate the blurriness of these boundaries – both quality and temporality are fuzzy categories, which necessarily include wide variation, which may be difficult to assess in large, survey-based studies. Assessing return migrants’ self-employment along the lines of quality and temporality represents an essential contribution to research on return migrants’ labor market reintegration and social mobility.

RETURN MIGRATION AND SELF-EMPLOYMENT

Numerous studies identify high rates of self-employment among return migrants relative to non-migrants (Dustmann and Kirchkamp 2002; Lindstrom 2013; Massey and Parrado 1998). Some scholars explain return migrants’ concentration in self-employment as a function of foreign savings and remittances or “migradollars” that returnees use to fund new businesses

(Massey and Parrado 1998). According to the New Economics of Labor Migration (NELM), foreign savings are especially important for migrants returning to economically dynamic communities with ample opportunities for investment (Lindstrom 1996). Lindstrom and Lauster (2001b:1232), for example, argue that “in communities where credit is absent or prohibitively expensive, the presence of opportunities for small-scale investment encourages temporary migration as a means to acquire funds for investment purposes.” In this way, international migration allows prospective entrepreneurs to overcome a challenge inherent to informal markets – access to start-up funds.

Migrants also acquire non-financial capital while working abroad that they can mobilize upon return to launch new businesses. Several studies, for example, point to “language capital” acquired in destination countries facilitates returnees’ entry into new businesses catering to international tourists, business-people, and foreign retirees (Hagan and Wassink 2016; Williams and Baláz 2005; Dustmann

1999). Recent research in Mexico highlights the new technical skills and social competences that migrants acquire in foreign workplaces, (Hagan et al. 2015; Sanderson and Painter 2011), which are associated with greater odds of self-employment upon return (Hagan and Wassink 2016). Collectively, this scholarship, which borrows heavily with the NELM, shows that through the accumulation and transfer of financial and human capital, international migration can create an upward mobility pathway from informal wage labor into self-employment.

In contrast, neoclassical approaches to migration, which treat international migration as a response to wage differentials between origin and destination communities (Harris and Todaro 1970), view return as indicative of a failed migration. From the neoclassical perspective,

migration occurs when expected wages in the destination community exceed current wages. Individuals return home when they fail to secure work or earn lower than expected wages in the destination (Massey and Espinosa 1997). Whereas the NELM views return and entrepreneurship as the logical follow-up to a strategic migration trip, the neoclassical model posits that return indicates a failed migration and overall downward mobility.

Thus far, self-employment among return migrants has been studied primarily through the lens of the NELM. Yet, given the high rate of unsuccessful or marginal self-employment in migrant sending countries (Gindling and Newhouse 2014; Perry et al. 2007), it is entirely possible as suggested by neoclassical theory that returnees, having failed to achieve desired wages (both at home prior to migration and in the United States), turn to self-employment out of economic desperation. Moreover, given the high rate of turnover among self-employed workers in Mexico and elsewhere in Latin America, it is likely that many return migrants exit self-employment, either upon securing salaried work or following an inability to generate profit.

I identify three problems in the research on the relationship between international migration and self-employment that motivate the analysis contained below. First, is the problem of conceptualization and measurement of migration experience. Most studies investigating labor market reintegration among return migrants operationalize migration experience by dichotomously identifying return migrants (e.g., Sheehan and Riosmena 2013), or by linearly measuring years abroad (e.g., Massey and Parrado 1998). These measurements likely obscure substantial variations in the ways in which different migration experiences enable and constrain opportunities to accumulate financial and human capital, which in turn have implications for returnees' self-employment and social mobility (Hagan and Wassink 2016). Moreover, although accumulated capital can enable self-employment among return migrants (Hagan and Wassink

2016; Massey and Parrado 1998), not all migrants accumulate new capital while abroad.

Migrants who remain in low wage entry-level jobs in the U.S. labor market may lack the skills and funds necessary to initiate successful businesses, which could push them into survivalist self-employment upon return.

A second factor that limits understanding of the place of self-employment in economic reintegration is that research on self-employment among return migrants does not distinguish between successful and unsuccessful self-employment. As noted above, self-employment in Latin America is a complex and multi-dimensional category (Fajnzlber et al. 2006; Perry et al. 2007). For some return migrants, self-employment may represent a temporary economic status while they search for salaried work. For others, it may indicate a last resort after failed labor market reintegration. Yet, studies of return migration almost exclusively treat self-employment as a static, homogenous category expected to promote economic mobility (e.g., Hagan and Wassink 2016; Lindstrom 2013; Massey and Parrado 1998).

Finally, absent from studies of return migration and self-employment is a consideration of how life course stage affects return migrants' self-employment trajectories. The life course framework, which emphasizes the intersection of individual and historical context (Elder 1985), has been instrumental to conceptualizing and identifying trajectories of family formation, health, and work, as well as immigrant incorporation (e.g., Gonzales 2011). I borrow the concept of timing from the life course perspective to consider the role of age in return migrants' labor market reintegration. At a cohort level, timing reflects macro-structural changes that occur across generations. At an individual level, timing reflects the age at which a major event occurs.

At the cohort level, timing is important because structural opportunities change across generations. Historical improvements in the quality and availability of education in Mexico have

created significant educational disparities between successive Mexican cohorts (OECD 2012). The Mexican government implemented major educational reforms in the late 1980s to address educational deficiencies at the local level. Then, in 1992, Mexico passed an initiative to make lower secondary school (seventh through ninth grade) mandatory, with the goal of reducing educational inequalities. Given that educational attainment is critical to securing formal sector employment (Levy 2008; Perry et al. 2007), migrants returning in their forties and fifties, who were not beneficiaries of educational reforms, may encounter limited opportunities for salaried employment upon return from the United States, potentially directing them toward self-employment as a last resort. As a result of their greater formal education, I expect members of younger immigrant cohorts to achieve greater occupational mobility while in the United States, increasing their opportunities to acquire and transfer new skills to the Mexican labor market.

I also expect age to be associated with labor market marginalization at the individual level. Workers of different ages exhibit distinct entrepreneurial preferences, owing to divergent familial and economic pressures (Cunningham and Maloney 2001; Heinz 2003). Younger workers are more likely to be unmarried, affording them the opportunity to take greater financial risks. Cunningham and Maloney (2001) have shown that successful Mexican entrepreneurs tend to launch their businesses at younger ages. By contrast, entry into self-employment later in life is associated with a higher likelihood of prior job loss and the economic necessity to support one's family members: "being older appears to make finding alternate salaried employment more difficult" (Cunningham and Maloney 2001:143). Hence, migrants returning later in their working lives may encounter constrained employment opportunities, forcing them to consider survivalist self-employment as a last resort.

SITE SELECTION, RESEARCH DESIGN, AND SAMPLE PROFILE

Research Site

To capture the increasing return of Mexican migrants to the country's urban areas, I codirected a longitudinal study in Leon, a large city (1.3 million inhabitants) with a growing economy and diverse industrial base in the state of Guanajuato.⁴ With a dynamic manufacturing base and a thriving service sector, Leon is an ideal site to study economic mobility and self-employment. Figure 1.2 compares the industrial location of Leon's labor force with that of Mexico. As the figure shows, less than one percent of the labor force is in agriculture – the primary industry in many well-established rural migrant-sending communities. By contrast, 35 percent of Leon's workforce is in manufacturing, twice the national average.

Leather, shoemaking, and textiles manufacturing are the largest employers in Leon, comprising roughly 20 percent of the city's labor force (over half of those employed in manufacturing). In addition to the shoemaking and leather sector, Leon houses a cluster of automotive, chemical, and transportation industries, as well as a fast-growing retail, service, and hospitality sector, fueled by domestic tourism and international commerce. Leon's diverse industrial base provides ample opportunities for return migrants to invest remitted financial and human capital in new businesses.

Research Design

The data I present here is based on a longitudinal and multi-method study, which included two rounds of semi-structured interviews (5 years apart) with a sample of return

⁴ The study was codirected by Jacqueline Hagan from the University of North Carolina at Chapel Hill.

migrants in Leon, along with worksite observations of large and medium-sized factories and small family enterprises. In 2010, we conducted a survey with a sample of 200 return migrants.⁵ The interviews took place in return migrants' homes and worksites. The 2010 interviews, which were conducted in Spanish, averaged about one-and-a-half hours in length. The surveys included a combination of close- and open-ended questions, which captured migration histories, complete job histories, and migration motivations.

In 2015, we returned to Leon with a team of graduate students from Mexico and the United States and conducted follow-up interviews with the original sample of return migrants. Because of rapid growth and urban reconfiguration in Leon, we were unable to locate one quarter of our respondents' addresses. And among those whose addresses we did locate, not all respondents were available to interview.⁶ From family members, new residents, and neighbors, we learned that of the 150 return migrants', whose homes we relocated, two had died, eleven had moved away, and 37 were unreachable (neighbors and residents could not provide any information). This sample does not capture those migrants who return home but re-migrate to the United States. Yet, a benefit of this omission is that it restricts my analysis of labor market reintegration to migrants who have most likely completed their U.S. migratory careers and settled permanently in Mexico.

⁵ We used the 2010 Mexican Census to identify communities with high concentrations of return migrants. Then, our research team canvased neighborhoods to identify and interview return migrants. We visited a total of 77 *manzanas* to obtain a sample of 200 return migrants.

⁶ When no one answered the doors of respondent addresses, we marked the homes and returned on different days and at different times – e.g., during the week, on the weekend, in the morning, in the evening, etc. – to account for our respondents varied schedules.

In the end, we successfully located and re-interviewed half (100) of the original sample.⁷ The follow-up interviews conducted in 2015 included questions about the labor market and migration histories of the return migrants since the last survey in 2010. Because my interest in this paper is in transitions in and out of self-employment, the analyses are based on 52 of the 100 respondents interviewed in 2015 who reported being self-employed at some point following their most recent return to Mexico. When accessible, we also visited the worksites of these respondents, some of which were family-based enterprises located in or adjacent to their homes. The fact that 52/100 return migrants that we interviewed were currently or had previously been self-employed highlights the centrality of self-employment to the labor market reintegration of return migrants. The rate of self-employment (52 out of 100) is higher than the 35 percent reported by studies using the 2010 Mexican Census (Parrado and Gutierrez 2016) because the longitudinal approach captures both current and former self-employed returnees. The discrepancy points to the importance of examining movement in and out of self-employment over time rather than focusing on a particular moment.

Although my focus is not on gendered experiences per se, I report differences in the self-employment experiences of men and women because of the ways that gender permeates migration experiences (Hagan 1998; Hondagneu-Sotelo 1994). Female Mexican migrants often undergo role changes in the United States and can experience shifts in their household and economic roles, in many cases entering the workforce for the first time when they migrate abroad (Hondagneu-Sotelo 1994). Thus, it is probable that the U.S. migration experience may have

⁷ Table A1.1 in the appendix compares summary measures for the analytic sample against the 2010 respondents who we were unable to relocate in 2015. As the table shows, those we were unable to locate were on average slightly younger and more educated than those we re-interviewed. But, overall, their work and migration profiles are very similar.

distinct effects on the self-employment experiences of women who return to Mexico, where women's labor market opportunities are more limited relative to men.⁸

Sample Profile

Table 1.1 provides a summary profile of my respondents, including their demographic backgrounds, work histories, and migration experiences. As Table 1.1 shows, on average they possessed fairly low levels of formal human capital as measured by an average of seven years of formal education, a finding consistent with the other studies that report that Mexican migrants and return migrants have fewer years of schooling than non-migrants (Rendall and Parker 2014). Despite their limited schooling, respondents possessed considerable human capital as measured by work experience. All but four respondents worked in Mexico prior to migrating, averaging six years in the Leon labor market before traveling to the United States. On average, respondents returned to Mexico with 10 years of combined work experience, ample opportunity to develop new skills and abilities.

My respondents' migration experiences varied considerably. While, on average, they traveled to and returned from the United States as unmarried young adults, some migrated late in their working careers, after they had married and established families in Mexico. Once in the U.S. labor market, men and women entered distinct occupational niches. Most men found work in agriculture, construction, and manufacturing (63 percent). In contrast, five of the ten women initially entered live-in domestic work. Women respondents were much less likely than the men to successfully exit low-skilled "gateway" occupations. Isolated in their jobs as live-in domestic

⁸ To date, research on Mexican return migration and self-employment has focused almost exclusively on men (but see, Hagan and Wassink 2016; Parrado and Gutierrez 2016)

workers they were unable to transition out of this industry. These gendered jobs condition men and women's opportunities for occupational mobility, higher wages, and potential skills learning (Hagan 1998).

Despite the high rate of self-employment upon return, business formation was not a commonly cited reason for returning to Mexico. Respondents most commonly attributed their returns to Mexico to family reunification (56 percent), a finding consistent with other recent return migration studies (Sandoval 2013). Another 15 percent reported being deported by the U.S. government and 29 percent returned for other reasons, including discrimination, nostalgia, illness, or job loss. Indeed, despite the fact that all of the respondents became self-employed upon return, just six (13 percent) cited successful completion of their migration goals as the reason for their return.⁹ These responses are consistent with the reasons cited by the full sample including both self-employed and wage laborers when we interviewed them in 2010.

RESULTS

Identifying Types of Self-Employment

In contrast to the literature on return migration that generally treats self-employment as a single employment category, I propose a multi-dimensional typology that reflects variations in self-employment along two dimensions: quality (i.e., job satisfaction, autonomy, earnings, presence of workers, and growth potential) and temporality (i.e., the relative permanence of self-employment ventures). Although these two dimensions suggest four categories of self-employment, I only identified one respondent whose business could be classified as high quality

⁹ These different responses did not cluster in a significant way across the different types of self-employment that I identify below.

but temporary.¹⁰ In other words, respondents who started prosperous businesses tended to remain self-employed. Thus, I propose three types of self-employment: 1) survivalist self-employment (low level of job quality and permanent self-employment); 2) stepping-stone self-employment (low level of job quality and temporary self-employment); and 3) prosperous self-employment (high level of job quality and permanent self-employment).¹¹

Table 1.2 presents business profiles for each respondent by self-employment type. In terms of quality, survivalist self-employment resembles the unsuccessful self-employment that development scholars have documented among informal sector workers throughout the developing world (Gindling and Newhouse 2014). As the table shows, the activities of the survivalist self-employed ranged from vending from ambulatory food and beverage stands to appliance repair and reselling used clothing and other items in local flea markets. Most of the survivalist self-employed commented on the instability, low earnings, and lack of benefits associated with their informal ventures. Several older self-employed respondents in this category reported that they were unable to exit these marginal ventures because they lacked adequate savings and/or pension payments to retire. At the follow-up interview in 2015, none of those in the survivalist category had exited or expanded their businesses, reflecting the permanency of survivalist self-employment. Survivalist self-employment operates as a last resort used primarily by migrants unable to find work after returning to Mexico.

¹⁰ Eduardo, a college educated returnee initially opened a bar with a friend but left the business to pursue a career in government.

¹¹ I do not employ the language of successful and unsuccessful self-employment that has been employed by others as it assumes a normative definition of success. In many cases, the survivalist respondents viewed the ability to feed one's family as indicative of success. Prosperous reflects a more objective assessment of a self-employment venture's potential for growth and contribution to economic mobility.

Turning to the middle column of Table 2, roughly one third of the respondents were stepping-stone self-employed. Stepping-stone self-employment includes respondents who were self-employed in 2010 but transitioned to wage labor or re-migrated to the United States between 2010 and 2015. In terms of quality, with one exception, the business ventures of the stepping-stone self-employed resembled those of the survivalist self-employed. Ten of the 16 operated small in-home grocery stores (*abarrotas*), sold used clothes in a local flea market, or operated ambulatory food or beverage stands. Only three of the stepping-stone self-employed migrants reported hiring workers, and in two of those cases, the employees were family members. Yet, unlike the survivalists, these stepping-stone self-employed respondents later exited self-employment for wage work. The most important difference between survivalist and stepping-stone self-employed workers is not the quality of their self-employment, but whether or not they remain self-employed across time. Given the high rate of turnover among the self-employed in Mexico (Fajnzlber et al. 2006), stepping-stone self-employment likely includes a large proportion of self-employed return and non-migrants alike. However, cross-sectional assessments of self-employment conflate survivalist and stepping-stone self-employment (e.g., Gindling and Newhouse 2014).

Turning to the third column of Table 2, nearly half (44 percent) of the respondents launched self-employment ventures that facilitated economic stability, employed workers, and provided high levels of job satisfaction, reflecting high job quality and permanence. Several features distinguish the self-employment ventures of these respondents, whom I term prosperous self-employed. First, they launched a far more diverse set of businesses compared to the survivalist and stepping-stone self-employed. Their enterprises ranged from auto repair shops, restaurants, and taxi drivers in the service economy, to construction, to manufacturing leather

goods. Second, their businesses were located in establishments separate from their homes and often created new niches in the Leon economy. For example, several used advanced machinery acquired in the United States to improve and expand their businesses in construction, manufacturing, and auto repair. Finally, unlike the survivalist self-employed, their businesses expanded over time. In 2010, only seven of the 23 had employees. But, by 2015, 17 had hired workers.

Explaining Self-Employment Types

Through the biographical narratives, I consider two sets of mechanisms that contribute to different self-employment experiences among return migrants: life course stage and human capital formation. Respondents who became survivalist self-employed tended to be older and possessed little formal schooling, indicative of an earlier cohort. Multiple survivalist self-employed respondents cited a lack of education as a limiting factor when searching for work upon return. Returning to Mexico in their forties and fifties, multiple survivalist self-employed respondents attributed their inability to find wage work to age-based discrimination.

Moreover, the survivalist self-employed acquired limited human capital across the migratory circuit. This group experienced little or no occupational mobility in the United States, with most remaining in low-skill gateway jobs, such as farmworkers, low-wage service workers, and live-in domestics for the duration of their U.S. migrations. Because they were trapped in these gateway jobs, they encountered few opportunities to learn new skills, which have been shown to enable mobility among return migrants (Hagan and Wassink 2016). Indeed, only one of the 13 survivalist self-employed described applying skills learned in the United States to their

work in Mexico.¹² With limited skills to invest in productive enterprises, these returnees turned to the marginal ventures featured in Table 1.2 out of financial desperation. As of 2015, these respondents had been back in Mexico for an average of 17 years and none had managed to exit their marginal businesses. For many like Lorenzo, age and limited education precluded securing alternative work:

Lorenzo returned to Mexico in 2004 in his late 40s after working on a farm in Arizona for three years. Since returning, he has struggled. After holding low-paying jobs as a maintenance worker and an assistant to a plumber in Leon, he started selling tacos out of his home. Age limited Lorenzo's employment prospects upon return. As he put it, "nadie le dio trabajo con la edad" (No one gives you work because of your age). With few marketable skills and little formal education, Lorenzo struggles to make ends meet as an informal food vendor. His description of his motivations for remaining self-employed in 2015 accurately portrays the experiences of many of the older respondents who remain trapped in survivalist businesses, "cualquier trabajo es para dar el pan de cada día a la familia" (Whatever work to provide bread each day for my family).

Even those like Valentin, who accumulated savings while abroad, tended to invest in survivalist enterprises that provided little economic mobility:

Valentin was born in Leon in 1960. He left school at 11 to work for his father, a skilled mason. From his father he learned to lay tile and mold and lay brick. In 2004, 44-years-old, Valentin migrated to the United States in search of higher wages. He found work as a farmhand in California where he worked for six years. In 2010, Valentin returned to Leon to rejoin his family. Although Valentin told us that he did not develop any new skills in the United States that he could apply to the Leon labor market, he did manage to save some of his U.S. earnings, which he invested in a small business where he repairs old washing machines. Since 2010, his business has not grown and provides little profit. Now in his mid-50s, with only a primary education, Valentin has limited employment prospects.

In contrast, the stepping-stone self-employed, who returned at significantly younger ages and with some formal schooling, were able to transition from self-employment to wage labor.

The stepping-stone self-employed completed their migrations during their twenties, early in the

¹² Respondents were asked to describe any new skills that they learned in the United States that they were able to apply to their work back in Mexico. They then explained how they applied these skills to their current work.

life course, when age-based employment discrimination is not a concern. Moreover, as members of a younger cohort relative to the survivalist self-employed, these individuals benefitted from Mexico's enhanced educational opportunities. They achieved four times the secondary school completion rate as the survivalist self-employed. However, despite their youth and relatively high educational attainment, these respondents did not launch businesses that provided economic mobility or job satisfaction. Indeed, most engaged in relatively marginal self-employment as a source of temporary income while searching for stable work in the formal economy.

These respondents' post-self-employment occupational trajectories were quite heterogeneous. While half successfully landed formal sector jobs with steady pay and benefits, others returned to informal sector employment, in several cases resuming the same low-wage work that they did prior to migration. Take the case of Veronica:

Veronica worked in Leon for more than a decade, until in 1998, hoping for economic mobility, she migrated to North Carolina. Veronica initially worked as a janitor through an area firm. After several years, she took a slightly better paying job at a Taco Bell in Raleigh, where she worked as a cook. After six years, she returned to Leon to reunite with her family. When we interviewed her in 2010, Veronica had failed to secure steady employment, and was operating a small juice stand to support herself. She did not gain any new skills while in the United States and failed to achieve mobility upon return. In 2015, she had closed the juice stand, and was again cleaning houses, the same position she held prior to migration.

Of the eight returnees who secured stable formal sector jobs, five relied on skills that were either learned or improved while in the United States. Take the case of Jose.

After completing lower secondary school in 1975, Jose worked as an auto mechanic at a large BMW plant in Leon, where he achieved substantial mobility, recording and diagnosing major clients' automotive issues. In 2003, Jose was formally contracted by a U.S. employer and received a one-year visa to work at a BMW plant in California. While there, he was enrolled in a training program to work with electric motors. Returning after the expiration of his visa, Jose initially opened his own mechanic shop. But, unable to secure a loan, he closed the business. Drawing on his experience and formal training received in the United States, Jose found a job at one of several major automotive plants in Leon. When we interviewed him in 2015, he had been promoted to director of the electric motors line, a well-paying position where he receives health and retirement benefits.

For migrants like Jose and Veronica, labor market trajectories upon return were shaped by human capital accumulated before and during migration. In the United States, Jose improved upon his already impressive automotive repair and assembly skills, which enabled him to secure a well-paying formal sector job upon return. Veronica, by contrast, did not acquire any new skills in the United States, and after failing to find formal sector employment in Leon, she eventually returned to what she knew, low-wage domestic work in the informal sector.¹³

The prosperous self-employed return migrants benefitted directly from their labor market experiences in the United States, gaining new skills, ideas, and business strategies, which enabled and inspired their diverse array of entrepreneurial ventures upon return. About 40 percent of the prosperous self-employed returnees achieved occupational mobility while in the United States,¹⁴ and 19/23 applied skills learned abroad to their business ventures in Mexico. Perhaps more importantly, while the stepping-stone self-employed acquired technical and English language skills, which could be directly applied to salaried jobs, many of the prosperous self-employed returnees reported developing a set of social and organizational skills that motivated their entry into self-employment upon return.¹⁵ Indeed, in many cases, skills and

¹³ I found that women struggled more than men to escape survivalist self-employment. Of the seven survivalist self-employed women, only two later transitioned to wage work, compared to 14 out of 22 men. Moreover, neither of the stepping-stone self-employed women was able to secure steady employment. Veronica returned to the same low-wage work that she held prior to migration, and Alejandra was unemployed in 2015, after a brief stint as an informal factory worker. The interviews suggest that women, especially those returning later in life, are more likely to face discrimination in hiring, limiting their work prospects.

¹⁴ Of the 14 returnees who did not achieve occupational mobility in the United States, eleven initially entered medium or high skilled occupations upon arrival.

¹⁵ See Hagan et al. (2015) on the acquisition and transfer of soft skills across the Mexico-U.S. migratory circuit.

experiences gained in the United States led return migrants, like Jesus, to launch new businesses in industries with which they had no familiarity prior to migration:

Jesus began working in construction when he was 11 years old, after just six years of school. When he was 18 years old, Jesus migrated to California, in search of better wages. As he put it, “aquí [en Mexico] es muy difícil” (here in Mexico it is very difficult). Upon arrival, Jesus found work in a local restaurant. In 1988, he moved to Illinois, where he found a more skill intensive position in an auto manufacturing plant. Through his new job, Jesus enrolled in computer classes and studied automotive mechanics. In 2006, he decided to return to Leon. On arrival, Jesus invested his U.S. savings in an auto repair shop. He relies entirely on technical and organizational skills that he acquired working in the United States and uses a computer to track his accounts and diagnose automotive problems. When we interviewed Jesus in 2015, Jesus had two employees, earned a steady income, and took pride in his work.

Jesus’s experiences exemplify how some labor migrants who travel abroad in search of better wages and new opportunities, especially those like Jesus who migrate early in their careers, can accumulate unexpected human capital skills that create new opportunities for entrepreneurship upon return. For some of the women in the sample, migrating to the United States provided more than just new technical and organizational skills, it also emancipated them from the patriarchal society in which they originated (Hondagneu-Sotelo 1992). For Joanna, migrating to the United States demonstrated that she could rely on herself:

When she was just fifteen years old, having never worked in Mexico, Joanna left Leon to join family members in San Diego, California. She told us that she was fleeing an abusive boyfriend. Joanna explained to us how migrating by herself at such a young age created a powerful sense of self-trust and a desire for independence, which contributed to her decision to become self-employed upon return. In the United States, Joanna found work as an in-home domestic. After just six months, she was apprehended by Immigration and Customs Enforcement and deported back to Mexico. Since returning, she has actively invested in herself and her community. Drawing on her time spent in the United States, Joanna opened a clothing boutique that sells the latest U.S. styles. She also manages her husband’s carpentry business, which designs and installs U.S.-style cabinetry – Joanna researches designs, drawing from her work in American kitchens in California. Joanna and her husband have seven employees.

I found many of the prosperous self-employed to be selective individuals, ambitious and driven to succeed. But the interviews also revealed how their business ventures were enabled

and/or enhanced by their work experiences abroad. Some migrated to the United States with the goal of accumulating financial and human capital to invest in a desired business venture, but later incorporated skills and experiences gained in the United States into their organizational strategies. For others, like Jesus, exposure to new technologies resulted in the creation of new and unexpected labor market niches. For some, like Joanna, migration provided the independence and self-confidence necessary to launch a prosperous business. The finding that the mobilization of new skills is directly associated with prosperous but not survivalist or stepping-stone self-employment expands existing research that has documented the contributions of skill transfers to return migrants' self-employment (Hagan and Wassink 2016).

DISCUSSION

From my identification of three divergent self-employment types among return migrants, I extend three propositions, which can inform and perhaps direct future research on labor market mobility among return migrants. First, I propose that the quality of self-employment among return migrants, which includes job satisfaction, wages, innovation, and the presence of employees, depends primarily on new skills acquired or enhanced while laboring abroad. Scholars have long recognized that new skills enable prospective entrepreneurs to identify investment opportunities, which sometimes lead to the formation of new economic niches in local economies (Hagan et al. 2015; Jütting et al. 2008). I found that for migrants who traveled abroad in search of higher wages and new opportunities, skills learned abroad expand their labor market repertoire, creating new opportunities for entrepreneurship upon return. The results suggest that new skills specifically affect the quality of self-employment, because they enable returnees to improve upon existing practices or identify new opportunities, which provides an

advantage in informal sector labor markets, which are often saturated with many small firms performing similar tasks.

Second, I also found that the quality of self-employment is influenced by the timing of migration and return. My interviews suggested that those respondents who migrated in their forties and fifties were responding to decades of low wages and blocked mobility. Others have found that employers' preference for younger workers motivates the migration of older Mexicans to the United States (Hernández-León 2008). In other words, those who migrated later in life experienced labor market marginalization prior to migration, suggesting a greater likelihood of marginalization upon return. Indeed, it is reasonable to expect that individuals at later stages of their labor market careers who possess the skills to start prosperous businesses would do so rather than migrating to the United States.¹⁶ Upon return, limited levels of formal education and informal skills are compounded by employers' preference for younger more physically fit and attractive workers.¹⁷ Thus, old age pushes return migrants with limited skills into marginal self-employment as a survival strategy. Because their entry into self-employment is motivated by economic necessity, rather than opportunity or ability, the quality of their investments tends to be low in that they do not facilitate social mobility or create jobs in the local labor market.

Third, my results suggest that the temporality of survivalist self-employment depends primarily upon age at return and skill formation while abroad. Employers' preferences for younger workers made it easier for migrants who returned to Leon in their 20s and 30s to find salaried jobs, even if the work was low-paying and in the informal sector. The challenges of

¹⁶ The data do not permit a formal test of this proposition.

¹⁷ For other research on age discrimination in the Mexican labor market, see (Cunningham and Maloney 2001; Hagan et al. 2015).

older returnees were compounded by low levels of education due to cohort differences resulting from Mexico's educational expansion in the 1980s and 1990s, which all but prevented older returnees from obtaining work in the formal sector of Leon's economy.

CONCLUSION

As return migration has emerged as a major demographic phenomenon in the twenty-first century, a rapidly expanding literature considers the implications of this reverse flow for individual reintegration and local economic development in sending communities (Cobo et al. 2010; Hagan et al. 2015; Hagan and Wassink 2016, 2016; Lindstrom 2013; Mezger Kveder and Flahaux 2012; Ruben, Van Houte, and Davids 2009; Sheehan and Riosmena 2013; Wassink 2016). In general, these studies find that migration experience is associated with greater odds of upward or downward occupational mobility and entry into self-employment relative to non-migrants, who are more likely to remain in one labor market status (Cobo et al. 2010; Lindstrom 2013; Sheehan and Riosmena 2013). In other words, following return, most migrants experience some change in their labor market position. However, because research to date has relied on large cross-sectional surveys with limited measures of migration experience and self-employment, scholars have been limited in their ability to parse out the implications of these various mobility trajectories.

Drawing on the biographical narratives of current and former self-employed return migrants and guided by the extant scholarship on work and self-employment in Latin America, I have presented a framework to understand return migrants' transitions in and out of self-employment that challenges existing models of return migration. In contrast to research that views migration as one piece of a larger economic strategy (Lindstrom and Lauster 2001b; Massey and Parrado 1998), my results indicate that upward mobility among self-employed return

migrants was driven by cumulative human capital skills learned on- and off-the-job at all stages of the migratory circuit. New skills create new and often unexpected opportunities. Although informal skill learning is not unique to the migration experience, my analysis suggests that work in foreign countries exposes international migrants to new social and technical approaches to work, which can lead to the identification of new niches upon return.

My findings also challenge the view that self-employment among return migrants can be measured as a single category indicative of upward or downward mobility. I identified three distinct types of self-employment – survivalist, stepping-stone, and prosperous – which capture both the quality and temporality of returnees’ self-employment ventures. This typology, which draws on and extends the scholarship on work and self-employment in Latin America (Fajnzlber et al. 2006; Gindling and Newhouse 2014; Mandelman and Montes-Rojas 2009; Perry et al. 2007), can inform future studies of self-employment and mobility among return migrants in Mexico, Latin America, and beyond.

I recognize that this study, which focused on self-employed return migrants in a large industrial city, does not represent the experiences of all return migrants. Rural communities, with high rates of poverty and correspondingly small service and retail sectors offer more limited opportunities for skill transfer and investment (Hagan et al. 2015). Thus, migrants returning to rural areas may struggle to benefit from remitted human capital. Additionally, although I identified mechanisms that affect self-employed workers’ access to salaried jobs, I did not consider the experiences of return migrants who never enter self-employment upon return. To address these limitations, I expand my focus in Chapter 2 to consider labor market pathways among self-employed and salaried return migrants residing in rural and urban communities. That analysis allows me to extend and revise the findings reported here to reflect the impact of local

context in sending communities on labor market mobility across the U.S.-Mexico migratory circuit.

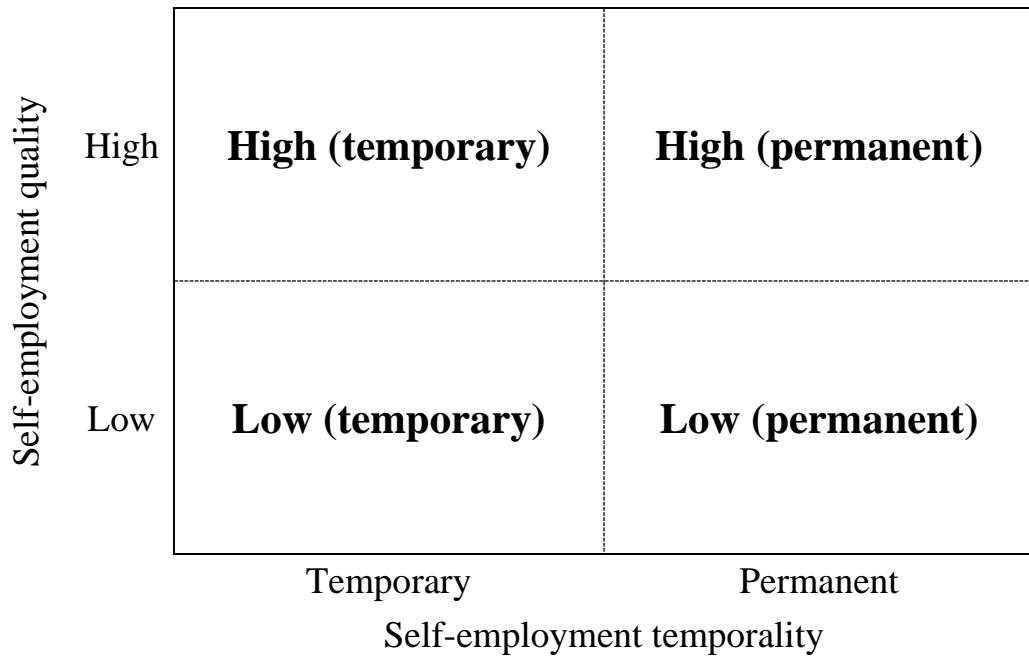


Figure 1.1 Classifying the Dimensions of Self-Employment

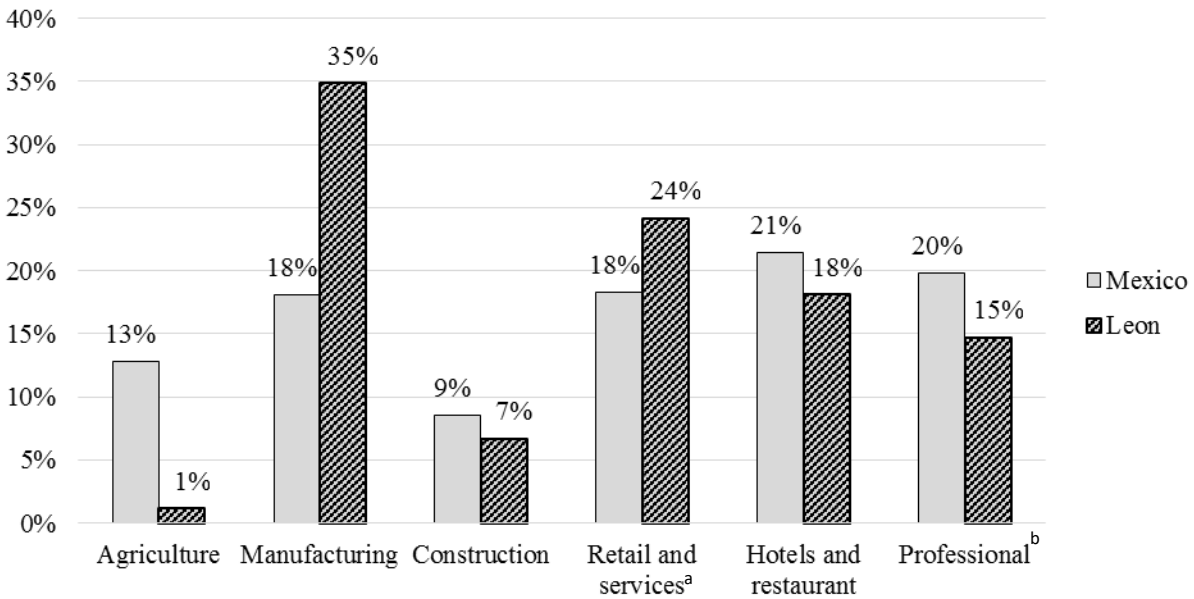


Figure 1.2 Industrial composition in Leon compared to the industrial composition in Mexico
Source: Authors' calculations based on data from the 2010 Mexican Census of Population and Housing. Estimates were weighted to adjust for the Census's complex design. All differences are statistically significant at the 0.01 level.

^a Includes hotel and restaurant, transportation services, private household services, and other services.

^b Includes financial services, public administration, real estate and business, education, health, and social work.

^c Less than 1% of Mexicans work in mining, electricity, gas, and other utilities.

Table 1.1. Respondents' demographic backgrounds, work histories, and migration experiences (n=52)

	Median/Percent	(Min/Max)	
Demographic background & pre-migration work history and educational attainment			
% male	81%	--	--
Mean age at 2015 interview (years)	42	(27	83)
<i>Marital status at 2015 interview</i>			
% Single (Never married)	10%	--	--
% Married	79%	--	--
% Divorced/widowed	12%	--	--
% Had children at 2015 interview	86%	--	--
Mean years of education	7	(0	17)
% in labor force prior to migration	92%	--	--
Mean years of work experience before first migration ^a	6.0	(0	31)
Context of departure, US work history, and migration history			
Median age at first migration	24	(2	54)
% in US labor force	98%	--	--
% Migrated multiple times	42%	--	--
Mean years of cumulative US work experience	4	(0	24)
Context of return & post-migration work history			
Mean age at most recent return	33	(15	66)
<i>Reason for return^d</i>			
% Family reunification	56%	--	--
% deported	15%	--	--
% Completed migration goal	13%	--	--
% Other reasons ^e	29%	--	--
% in labor force at 2015 interview	100%	--	--
Mean years in labor force since returning from US	14	(5	50)

^a I suspect that many respondents actually attained significantly greater work experience by helping in their parents' work as children and teenagers.

^b Percentages do not sum to 100 because respondents could list multiple reasons.

^c Includes: Arizona, Colorado, Florida, Georgia, Illinois, Louisiana, Nevada, North Carolina, Ohio, South Carolina, Wisconsin.

^d Refers to most recent trip among migrants who made multiple trips. Numbers do not sum to 100% as respondents could cite multiple reasons.

^e Other reasons for return included: boredom (3), end of work contract (2), loneliness (1), fear of deportation and racism (2), difficulty finding work (1), a medical operation (1), higher education (1), personal problems (1), and to start a business (1).

Table 1.2 Business activity and size in 2015 by self-employment type

Survivalist Self-employed (13)		Stepping-Stone Self-employed (16)		Prosperous Self-employed (23)	
Business activity	Business Has employees	Business activity	Business Has employees	Business activity	Business Has employees
Construction contractor	--	Abarrote	--	Auto repair	Yes
Domestic	--	Abarrote	--	Auto repair	--
Leather worker	--	Abarrote	--	Auto repair	Yes
Repair business	--	Abarrote	Yes	Carpentry	Yes
Second-hand shop	--	Auto mechanic	--	Carpentry	Yes
Sells clothes/shoes	--	Bar & restaurant	Yes	Carpentry	Yes
		Glasswork			
Sells clothing	--	business	--	Carpentry	Yes
Street food cart	--	Juice stand	--	Construction	Yes
		Manufactured			
Sells shoes	--	knapsacks	--	Construction	Yes
Sells used appliances	--	Shoemaker	--	Construction	Yes
Sells used clothes	--	Sold used clothes	--	Cyber café	Yes
Sells used clothes	--	Sold used clothes	--	Grocery/restaurant	Yes
Struggling artist	--	Sold used clothes		House cleaning	--
		Sold used clothes	--	Manufactures boots	Yes
				Manufactures drum covers	--
		Taco vendor	Yes	Manufactures purses	Yes
		Welder	--	Nutritionist	Yes
				Restaurant	Yes
				Restaurant	--
				Taxi driver	--
				Taxi driver	--
				Video arcade	Yes
				Water purification	Yes

CHAPTER TWO: A CONTEXTUAL MODEL OF INTERNATIONAL MIGRATION: LABOR MARKET STRATIFICATION, RESOURCE MOBILIZATION AND ECONOMIC MOBILITY AMONG MEXICAN RETURN MIGRANTS

Over the last two decades migration between Mexico and the United States has undergone a profound transformation. While circular migration has long been characteristic of the U.S.-Mexico system, the great recession and increased interior and border enforcement by the U.S. Government escalated return migration to Mexico (Passell et al. 2012). Moreover, returnees are increasingly opting to settle in Mexico rather than return to the United States (Martínez, Slack, and Martinez-Schuldt 2018; Schulthies and Ruiz Soto 2017). Between 2005 and 2014, 2.4 million Mexican immigrants returned home from the United States, resulting in a 10 percent decline in the U.S. Mexican-born population (Gonzalez-Barrera 2015). During the same period, annual Mexican migration to the United States fell by 70 percent (Chishti and Hipsman 2015; Villarreal 2014).

Escalating return migration to Mexico has motivated considerable research on the labor market reintegration of migrants into their origin communities. Findings from this scholarship are mixed. Some studies document upward mobility through entrepreneurship and entry into skilled jobs (Hagan et al. 2015; Hagan and Wassink 2016; Massey and Parrado 1998). Other studies show increased rates of downward occupational mobility and entry into marginal self-employment following a failed job search (Cobo et al. 2010; Lindstrom 2013; Sheehan and Riosmena 2013). Scholars explain these disparate trajectories as a result of the resources that migrants acquire abroad, most commonly human and financial capital (Dustmann 1999; Hagan et al. 2015; Massey and Parrado 1998; Mesnard and Ravallion 2006; Wassink and Hagan 2018;

Woodruff and Zenteno 2001). Largely absent from this research is a consideration of how the characteristics of origin communities structure return migrants' labor market opportunities. Consideration of local context is especially important today as Mexican migrants are returning to a heterogeneous set of rural and urban communities with widely varying industrial profiles and disparate labor market opportunities (Masferrer and Roberts 2012).

In the migration literature, local context refers to the economic, political, and social characteristics of specific localities that affect how migrants are incorporated into those places (Massey et al. 1987; Portes and Böröcz 1989; Portes and Rumbaut 2014). Migration scholars have long recognized the ways in which local context influences both emigration from sending communities and incorporation into receiving ones (Massey et al. 1987; Lewis and Williams 1986; Portes and Rumbaut 2006). Indeed, despite the importance of country level differences to the initiation of migration flows, theories of international migration posit that migrants' time abroad is organized around labor market opportunities specific to sending communities (Durand, Kandel, et al. 1996; Durand, Parrado, and Massey 1996; Garip 2016; Lindstrom 1996). If travel abroad responds to local labor market opportunities and constraints at home, it stands to reason that return migrants' labor market reintegration will vary in systematic and important ways by local context. The theoretical implications of focusing on local context upon return are far-reaching. Migration scholars view international migration as a strategy to overcome entrenched labor market barriers that limit economic mobility in Mexico and other sending regions (Garip 2016; Massey et al. 1999, 1987; Stark 1991). A contextual analysis of labor market mobility among return migrants could elucidate the ways in which migration actually influences or disrupts systems of inequality in sending countries, potentially creating new mobility pathways in highly unequal sending regions.

To examine the relationship between international migration and labor market mobility – the aim of this chapter – I draw on the results from a longitudinal and multisite interview study with 160 Mexican return migrants. To capture the impact of local context on labor market mobility among return migrants, I conducted interviews in one large urban area, several small rural communities proximate to urban areas, and two rural and isolated communities. Variance in rural communities’ spatial contexts relative to urban areas allowed me to observe the impact of transportation infrastructure and access to extra-community employment opportunities on labor market mobility. I treat international migrants as strategic agents responding to economic barriers and opportunities in sending communities. In contrast to existing theories that view international migration as one stage in well-defined economic strategies, I view migration as a social process in which migrants plans and decisions evolve over time as they gain information and acquire resources across the migratory circuit: before, during, and after migration. Similarly, I consider the ways in which individual and cohort-level life course factors (i.e., disparate educational attainment across generations and differing familial responsibilities between older and younger migrants) reshape migrants’ plans while they are in the United States.

My analysis is guided by three questions: 1) Does resource mobilization and economic mobility upon return vary by local context, e.g. sending community size, level of development, industrial profile, and spatial context? 2) How does life course stage affect the labor market reintegration of return migrants? 3) What can migrants’ various economic mobility pathways teach us about theories of international migration?

To frame the analysis, I first engage scholarship on inequality and economic mobility in Mexico with the extant research on labor market mobility among return migrants and theories of the life course. Throughout the analysis of previous literature, I highlight ways that local context

shapes mobility opportunities and affects international migration. Second, I describe the data collection process and profile the migrants in my sample. Third, I assess variations in return migrants' labor market mobility across disparate sending contexts. Fourth, I discuss the ways in which life course factors shape migration behavior and affect labor market reintegration across differing local contexts. Fifth, I consider the implications of this chapter for theory and research.

ECONOMIC STRATIFICATION, RETURN MIGRATION, AND LABOR MARKET MOBILITY IN LOCAL CONTEXT

Mexican Labor Market Stratification in Local Context

The Mexican labor market is highly stratified (Torche 2010, 2014; Villarreal 2010). A small, highly educated professional class dominates the top of Mexico's income bracket, while the majority of the workforce occupies the informal sector, a conglomeration of independent workers and small unregulated firms that offer low wages, no health or retirement benefits, and limited opportunities for occupational mobility (Huerta-Wong et al. 2013; Perry et al. 2007). Movement into the upper-level professional class depends on inherited social class and attainment of higher education, which go largely hand in hand (Cortés and Latapí 2005; Parrado 2005; Torche 2015). As a result, Mexican resources are concentrated in the hands of a few. For example, the wealthy/middle-class and middle-class/poor income ratios in Mexico are 3.0 and 2.9 respectively, compared to just 2.2 and 2.7 in the United States (Torche 2014). During the 1980s and 1990s, while the rest of Latin America saw increases in inter-class fluidity, inter and intra-generational mobility declined in Mexico, driven by economic restructuring, a move toward liberalization, declining worker protections, growth in informal work, and increasing economic integration with the United States (Cortés and Latapí 2005; Parrado 2005; Torche 2014).

Economic opportunities among workers with less than a college degree are limited. Those with a secondary or preferably a high school degree can qualify for work in one of the many large factories that dot the Mexican landscape, generally locating on the outskirts of major population centers (Rodriguez 2016). These positions provide formal sector health benefits and job stability, but at the cost of monotonous assembly line work and limited mobility opportunities (Heredia 1996; Rodriguez 2016). Mexicans with fewer than twelve years of schooling generally work in the informal sector of the economy, which is the largest economic sector in most Latin American countries and includes firms that are not formally registered, regulated, or taxed by the government (Levy 2008; Tornarolli et al. 2014). Firms in the informal economy do not provide health insurance, pensions, severance pay, or written contracts, and generally employ fewer than five workers (Arias 2004; Levy 2008; Perry et al. 2007). Because of the precarious working conditions and low or stagnant wages associated with informal sector labor, self-employment represents the primary upward mobility pathway for individuals with low levels of formal education who thus face significant barriers to attaining formal sector employment (Balán et al. 1973; Maloney 2004; Perry et al. 2007; Stark 1991). Business formation offers an opportunity to maximize returns to social and technical skills that workers accumulate across years of informal sector work (Hagan et al. 2015; Jütting et al. 2008).

Local context shapes opportunities for formal sector employment and business formation in Mexico. Despite significant overall development in recent decades, sizeable regional and local disparities in terms of poverty and economic development persist. For example, despite substantial national growth, GDP per capita in 2000 in the Federal District (i.e., Mexico City) remained six times higher than in the state of Oaxaca, the same ratio as in 1940 (Garcia-Verdu 2005). Estimates from Mexico's National Population Council (CONAPO 2010) reveal similarly

large disparities in terms of infrastructure, education, and poverty across regions and communities. These disparities are particularly pronounced between urban and rural areas.

Inter-community disparities have profound implications for labor market experiences and mobility opportunities. Figure 2.1 summarizes Mexico's workforce distribution among working-age adults by community size using data from Mexico's 2010 Census of Population and Housing (CPV).¹⁸ In areas with fewer than 2,500 inhabitants, which still account for nearly one quarter of Mexico's population, half of all workers are in agriculture and 25 percent are self-employed without employees, a marginal status that often masks unemployment (Levy 2008; Mandelman and Montes-Rojas 2009). By contrast, in the largest urban areas where more than half of the population now resides, agricultural employment is near zero, formal employment approaches 50 percent, and a small but growing proportion of workers operate non-agricultural businesses with employees, suggesting opportunities for occupational mobility and entrepreneurship for Mexican workers. These striking variations demonstrate the extent to which local context shapes labor market opportunities for Mexican workers.

Among rural communities, spatial context, which I operationalize as accessibility by major transportation networks and proximity to urban areas, also affects labor market mobility. As Saskia Sassen (1988) argued in *The Mobility of Labor and Capital*, economic development progresses unevenly across space and generally moves outward from urban areas. As a result, when countries develop, the first rural communities to be impacted are generally those adjacent to urban centers (Hamilton and Villarreal 2011).

¹⁸ The CPV is a 10 percent sample of Mexico's population. It is representative at national, state, and municipal levels. Additionally, rural communities are oversampled to provide precise population estimates by community size. I weighted the estimates to adjust for the survey's complex design. The data were obtained from the IPUMS (Minnesota Population Center 2015).

In the 1980s and 1990s, Mexican development was organized around a regional model featuring a number of large cities throughout the country (Bouillon, Legovini, and Lustig 2003; Portes and Roberts 2005). As such, a growing proportion of less developed rural Mexican communities are adjacent to rapidly developing urban centers. These communities, which are rural in terms of population size, but proximate to larger more developed areas are different from their rural and isolated counterparts in two important ways. First, proximity to urban areas expands employment opportunities through businesses and factories located in and around large cities. Second, although rural communities may remain internally undeveloped, proximity to urban centers creates shared infrastructure, including access to transportation networks. Transportation infrastructure is essential for small manufacturing businesses, which rely on the easy shipment of goods to factories and distribution centers (Durand, Parrado, et al. 1996; Tybout 2000). Thus, spatial context provides an important, if often overlooked aspect of rurality, which affects labor market opportunities.

Although variations in local context – community size, level of development, industrial profile, and spatial context – structure labor market opportunities and pathways to economic mobility, individuals are not without agency (Sewell 1992). In Mexico, one of the most prevalent responses to local economic marginalization is U.S.-migration. The Bracero program, which began in the 1940s, initiated a large-scale pattern of circular migration between Mexico and the United States as Mexicans (mostly men) traveled back and forth to work in seasonal agricultural jobs in the United States. These migrants came primarily from rural and agrarian communities in Mexico, responding to stark wage differentials between the two countries and limited opportunities for mobility in rural Mexico (Garip 2016). More recently, declining economic mobility and growth in Mexico's informal sector destabilized urban labor markets, contributing

to the rapid expansion of migration from urban communities and adjacent rural hamlets in Mexico to the United States during the 1990s (Hamilton and Villarreal 2011; Hernández-León 2008). In response to the surge in Mexican migration to the United States during the 1980s and 1990s and the more recent uptick in return migration to Mexico, a growing literature explores the implications of international migration for economic mobility in sending communities.

Theorizing Return Migration and Economic Mobility in Local Context

Research attempting to understand return migration and economic mobility relies on the two dominant theoretical perspectives developed to understand the origins and implications of international labor migration: the neoclassical economic model and the New Economics of Labor Migration (NELM). The neoclassical model views international migration as a response to wage differentials between sending and receiving communities (Harris and Todaro 1970; Todaro 1969). Thus, individuals migrate when expected wages in the destination community less the cost of migrating exceed current or expected wages in the community of origin. The neoclassical model, which emerged to explain internal migration from rural to urban areas (Fields 1990), remains an important tool for understanding movement from rural and primarily agrarian communities in Mexico to the United States (Garip 2016). Neoclassical theory suggests that migrants return home if they fail to achieve desired wages in the destination (Dustmann and Weiss 2007; Massey and Espinosa 1997). From the neoclassical perspective, although migration is viewed as a response to limited opportunities in sending communities, it is not expected to affect economic mobility opportunities or patterns of stratification upon return.

Yet, subsequent studies revealed that return migrants often mobilize resources accumulated abroad, such as financial capital, to achieve mobility upon return (Massey and

Parrado 1998; Mesnard and Ravallion 2006). As a result, scholars proposed the NELM, which contends that by migrating abroad, individuals overcome challenges embedded in their local labor markets (Stark 1991; Stark and Bloom 1985). These challenges include limited insurance programs, unstable employment, and unexpected macroeconomic and climate shocks, which collectively encourage international migration as a hedge against domestic uncertainty (Massey et al. 1999; Nawrotzki, Riosmena, and Hunter 2013; Villarreal and Blanchard 2013a). In particular, the NELM suggests that individuals who hope to achieve economic mobility through self-employment but lack access to capital due to inefficient credit markets migrate abroad to accumulate the necessary start-up funds (Lindstrom 1996; Lindstrom and Lauster 2001a). Numerous studies have found that accumulation of foreign savings or “migradollars” while abroad increases the odds of business formation upon return (Dustmann and Kirchkamp 2002; Massey and Parrado 1998; Mesnard and Ravallion 2006). The NELM suggests that some migrants travel abroad with pre-determined goals, the achievement of which creates new labor market opportunities upon return.

More recent research builds on the NELM to document the ways in which non-financial human capital skills that migrants acquire abroad affect their mobility upon return (Dustmann 1999; Hernández-León 2008). Hagan et al. (2015) identified four skill sets that migrants commonly apply to the labor market: formal education, technical skills, social and organizational skills, and language competence. They found that Mexican migrants commonly accumulate the latter three while working in the United States and apply them to their work upon return. The accumulation of new human capital skills while abroad increases the likelihood of transitioning to more highly-skilled occupations or initiating new businesses upon return (Cobo et al. 2010; Hagan and Wassink 2016; Lindstrom 2013). Consistent with the NELM, the scholarship on

migration and human capital formation suggests that migrants' mobility upon return results from their accumulation of new resources while working abroad. Yet, as I described in my analysis of international migration and self-employment in Chapter 1, unexpected human capital formation can also direct return migrants to new and often unexpected mobility pathways, demonstrating that economic mobility does not always reflect pre-meditation on the part of the migrant.

The neoclassical model and the NELM recognize the centrality of local context to the initiation and evolution of migration patterns (Garip 2016; Massey et al. 1999). Indeed, scholars observe systematic variation in the rate of departure and length of time spent abroad as a result of variations in labor market opportunities in sending communities (Lindstrom 1996; Lindstrom and Lauster 2001a; Massey and Espinosa 1997). For example, most migrants from rural and agrarian communities engage in regular short-term trips, indicative of economic dependence on migration and a lack of local mobility pathways in sending communities (Garip 2016). In contrast, migrants from economically dynamic urban communities tend to undertake one or two extended trips, indicative of resource accumulation strategies perhaps intended to enable business formation upon return (Lindstrom 1996). Thus, scholars contend that individuals organize their time abroad around contextual opportunities at home.

Scholars also recognize the ways in which social structures in sending communities affect migrants' long-term plans. In Mexico, the social pressure to migrate to the United States varies widely. In rural areas with limited local labor market opportunities outside of agriculture, U.S.-migration can gain a momentum of its own as residents – especially young men – come to view regular U.S.-work as their best chance at economic mobility and in some cases as a rite of passage (Kandel and Massey 2002; Massey 1990; Massey et al. 1987; Massey, Goldring, and Durand 1994; Mines and de Janvry 1982). By contrast, more recent urban migrants generally

travel abroad in search of adventure and opportunity, without clearly defined long-term goals (Fussell and Massey 2004; Hagan et al. 2015; Hernández-León 2008). Moreover, urban areas, and perhaps spatially proximate rural ones, provide migrants with imagination for more varied mobility pathways upon return (Hamilton and Villarreal 2011), given the diversity of skilled jobs and successful businesses there-in. Despite the scholarly consensus that origin context shapes international labor migration, missing from this broad scholarship is a consideration of the ways in which local opportunities in sending communities shape returnees' labor market reintegration.

To fill this gap, I investigate and contrast labor market outcomes and pathways to economic mobility among Mexican return migrants in three types of communities: urban, rural and proximate to urban areas, and rural and isolated. I pay particular attention to the intersection between resources that migrants acquire abroad and particular pathways to economic mobility in their sending communities. Research on labor market stratification in Mexico suggests that economic opportunities are contextually dependent. Moreover, disparate opportunities across sending communities clearly structure migrants' time abroad. It follows that investment of resources in sending communities similarly depends on available labor market pathways to upward economic mobility.

Scholarship on return migration and labor market integration also recognizes the ways in which migrants' plans respond to changing life course contexts (Massey et al. 1987). The life-course framework, which emphasizes the intersection of individual and historical context (Elder 1985), has been instrumental in conceptualizing trajectories of family formation, health, and work, as well as immigrant incorporation in the United States (Gonzales 2015). In this chapter, I consider how cohort membership and family context shape migrants' long-term plans.

Cohort membership matters because structural opportunities change across generations. Improvements in the quality and availability of education in Mexico over the past several decades have created significant educational disparities between successive cohorts (OECD 2012). The Mexican government implemented major educational reforms in the 1980s to address educational deficiencies at the local level. Then, in 1992, Mexico passed the National Agreement to Modernize Basic Education, which made lower secondary school (seventh through ninth grade) mandatory, with the goal of reducing educational inequalities. Mexicans who were born too early to benefit from educational reforms have more limited opportunities for salaried employment in Mexico, particularly in formal sector jobs (Jütting et al. 2008; Perry et al. 2007). Increased formal education creates an expanded set of labor market opportunities for younger Mexicans, in particular the possibility of securing formal sector employment in large businesses or returning to school to complete university degrees.

Despite anticipating more limited labor market opportunities, most middle-aged and older migrants are economically responsible for wives and children (Garip 2016; Kanaiaupuni 2000; Massey et al. 1987; Nobles 2013). The presence of dependents creates pressure for breadwinners to maintain long-term economic stability, which stands in stark contrast to young and unattached workers' flexibility to explore the labor market. Differences in labor market opportunities and household obligations across the life course create competing motivations that likely influence the ways in which migrants organize their time abroad and plan for return.

SITE SELECTION, RESEARCH DESIGN, AND SAMPLE PROFILE

Site Selection and Research Design

This analysis is based on a multi-stage and multi-site, data collection process that evolved over eight years, as each round of fieldwork raised new questions that suggested the need for additional interviews (Charmaz 2014). The study is based in Guanajuato, a historic migrant sending state with 5.5 million inhabitants, located in west-central Mexico. Guanajuato contains rural communities with long histories of out migration, along with a number of large, industrial urban areas with more recent migrant streams that emerged during Mexico's economic upheaval in the 1990s (Arias 2004; Hagan et al. 2015).

I draw on three rounds of data collection that varied by theoretical interest, methodology, and location.¹⁹ The first wave of data collection in 2010 was intended to capture human capital transfers across the migratory circuit, and their implications for labor market mobility in the United States and upon return to Mexico. Recognizing the greater opportunities to learn and apply new skills in urban areas relative to rural communities (Hernández-León 2008), the initial data was strategically collected in León, a large industrial city with 1.6 million inhabitants, located in the center of Guanajuato. Often referred to as the leather capitol of Mexico, León has a diverse industrial base that includes thriving construction, manufacturing, service, and international commerce sectors. In 2010, a team of investigators and research assistants administered a survey to a sample of 200 return migrants throughout Leon (Hagan et al. 2015). The 2010 surveys included a combination of close- and open-ended questions, which captured

¹⁹ The first two rounds of data collection come from a joint data collection project with Jacqueline Hagan, which builds on her analysis of Mexican migration and skill formation (Hagan et al. 2015).

migration histories, job histories, and the accumulation of human and financial capital across the migratory circuit.

Seeking to understand the long-term reintegration of the original sample of return migrants, we returned to Leon in 2015 with a team of graduate students from Mexico and the United States and conducted follow-up interviews with half of the original sample. The follow-up interviews included questions about the labor market and migration histories of the return migrants since 2010. Examining trajectories across time highlighted the role of temporal ordering across the migratory circuit in ways that challenged and extended prior research on migration, self-employment, and labor market mobility (Hagan, Wassink, and Castro 2018; Wassink and Hagan 2018).

To expand the study and compare how the labor market reintegration of return migrants was similar or different in rural areas and smaller cities, I returned to Guanajuato in 2017 and conducted 60 interviews in nine small to midsize communities in five municipalities throughout Guanajuato.²⁰ Whereas, in Leon, a city of 1.6 million, we used a survey approach and targeted particular neighborhoods, in rural communities, I adapted the methods to reflect smaller settings.

I applied the logic of saturation both within and across the rural communities (Small 2009). From this perspective, each individual and community is viewed as an independent case with the potential to provide new theoretical insights (Yin 2017). Saturation is reached when additional cases provide little new information. I approached rural communities in the same way to identify permutations in the ways that local context shapes international migration and labor market mobility. In each community, I began the investigation by assessing the local industrial context through observation and conversations with community leaders. Then I conducted in-

²⁰ For confidentiality, I use pseudonyms for all of the rural localities.

depth interviews with return migrants identified through door-to-door canvassing and snowball sampling until saturation was reached with regard to common labor market pathways. Next, I used targeted sampling to identify anomalous cases. Anomalous case analysis is a strategy to enrich theory-building by strategically investigating outliers (Pearce 2002). I worked closely with *delegados* – appointed community leaders – to identify important or distinctive local businesses operated by returnees.²¹ In this way, I identified both conventional and unusual ways in which migrants pursued labor market mobility upon return. Although the bulk of the interviews were conducted with return migrants themselves, in two small communities where more than half of the men work seasonally in the United States and were there at the time of our visit, I also interviewed the wives of current migrants to capture household and labor market dynamics surrounding circular migration.

Table 2.1 summarizes the ten communities, which I organized into three categories that integrate variations in rurality and spatial context. The measures of population size, educational attainment, and local development for each community come from an index of marginalization developed by CONAPO, which captures multiple dimensions of local development (CONAPO 2010). The information is provided at the locality level, which captures neighborhoods nested within municipalities. This level of precision provides an accurate depiction of local context within rural communities, which often differ substantially in terms of size and level of development from their encompassing municipalities. Because economic opportunities and international migration in rural communities are affected by proximity to urban areas (Hamilton and Villarreal 2011), I grouped the rural communities into two categories that capture spatial

²¹ My research assistant had pre-existing relationships with community leaders through outreach programs operated by the University of Guanajuato. These relationships proved invaluable when establishing a rapport with our respondents.

context: rural and proximate and rural and isolated. All of the rural and proximate communities were accessible by major paved roads and most were adjacent to major urban areas. In contrast, the two rural and isolated communities were 39 and 61 minutes from their respective city centers.²² About half of the trip in each case followed unpaved dirt roads.

As Table 2.1 shows, the rural and proximate communities varied significantly in terms of population size, educational attainment, and development, capturing a wide array of contextual factors that potentially affect return migrants labor market reintegration. Differences in population size and level of development, which offers a strong proxy for poverty (CONAPO 2010), affect residents' entrepreneurial opportunities. In the poorest areas with small populations, workers are usually limited to established manufacturing and agricultural niches or commuting to nearby cities or factories for work. In more developed areas, opportunities for commerce and service work are enhanced by larger populations and the presence of wealthy communities.

Sample Profile

Table 2.2 provides a profile of the respondents by community type, including their demographic backgrounds, pre-migration work histories, and migration experiences. At the time of the interview, most respondents across the three community types were middle-aged and married with children. I observed significant disparities in formal human capital formation as measured by the completion of secondary school, which is now mandatory in Mexico. Despite a similar age profile, only one quarter of residents in the rural and isolated areas completed secondary school, compared to about half in the urban and rural and proximate communities. The

²² I calculated distance from the municipal center using Google Maps. I corroborated the estimates and assessed accessibility based on my repeated visits to each community.

difference reflects high poverty rates and pressure to contribute to the household economy at younger ages that remain common in rural areas (Moreno-Brid and Ros 2009).²³ Most respondents in rural and isolated communities entered informal sector jobs as *ayudantes* (helper or general laborer), the lowest rung of the informal sector occupational ladder, or began contributing to a household enterprise between the ages of nine and thirteen – prior to or upon completion of primary school. Such early entry into low-wage and low-skilled jobs among workers with little formal education can undermine their long-term aspirations for achieving mobility in their local labor markets (Kandel and Massey 2002).

As Table 2.2 shows, although most of the respondents first migrated in their late teens and twenties, prior to family formation, their subsequent migration trajectories differed dramatically by sending context. More than half of the urban respondents only migrated once and most of the repeat migrants from urban areas only visited the United States two or three times. Almost all of the urban migrants traveled to the United States without legal authorization, reflecting the nascent urban stream connecting Leon to the United States, which emerged during the 1990s in the midst of Mexico’s “great migration” (Garip 2016; Hernández-León 2008). By contrast, 83 percent of those in rural and proximate communities and all but one of the rural and isolated respondents migrated multiple times, with most traveling back and forth regularly across many years. A much higher proportion of the rural migrants, especially in the two isolated communities traveled to the United States with legal authorization, reflecting mature migration flows at the community level, which are characterized by the presence of strong ties in the

²³ Early educational exit may also reflect the deeply entrenched migration traditions in Los Guajes and Lomas de San Isidro, which date back generations. Established migration traditions can reduce children’s educational aspirations as they anticipate relying on international migration for income, a career with limited returns to higher education (Massey et al. 1999).

United States that enhance access to visas for non-migrant relatives of US citizens and legal permanent residents (Hagan 1998; Massey et al. 1999). The high rate of legal authorization among migrants from rural and isolated communities is consistent with Mexico-U.S.-migration's roots in circular travel from agrarian communities, which was followed by the gradual incorporation of outlying communities adjacent to major cities (Fussell 2004; Garip 2016; Hamilton and Villarreal 2011). In recent years, temporary visas, like the H2 visa, have become important for circular migrants who have grown reticent to migrate without papers in response to heightened immigration enforcement (Martínez et al. 2018; Massey, Durand, and Pren 2015).

These disparate migration patterns are reflected in the various reasons respondents gave for migrating to the United States. As Table 2.2 shows economic factors and a desire for opportunity were the most commonly cited factors across all of the communities. At the same time, nearly a third of the urban respondents migrated to learn or in pursuit of self-improvement, reflecting the growth in urban migration among those seeking to recoup opportunities lost due to globalization and Mexico's shift toward export processing (Hagan et al. 2015; Hernández-León 2008). Another 21 percent of the urban migrants left in response to an invitation from a friend or family member living abroad. Note the minimal contribution of planned investments to departure. Although, as I discuss below, many of the respondents invested remitted financial capital in businesses upon return, very few attributed their initial departures to planned investments, even in hindsight.

There was also variation in reasons for returning home across the three community types. Consistent with other recent studies (Hagan et al. 2015; Sandoval 2013; Van Hook and Zhang 2011), family unity was the most commonly cited reason for returning home among both urban and rural and proximate respondents. Yet, among the rural and isolated respondents, visa

expiration was the most important factor. About half of these respondents migrated most recently as seasonal workers on H2-visas. Thus, their coming and going hinges not just on the competition between economic need and family ties, which were the primary determinants in urban and rural and proximate communities, but also on the success of their annual visa applications. I found a moderate rate of deportation, particularly among more recent returnees, reflecting the spike in deportations during the mid-2000s (DHS 2017). Despite recent evidence that the decline in Mexico-U.S. migration and increase in return migration was driven in large part by the Great Recession (Gonzalez-Barrera 2015; Villarreal 2014), only a handful of the respondents attributed their returns to U.S. job loss.

RESULTS

I present the results in three sections that explore patterns of labor market mobility and resource mobilization upon return to each of the community types: urban, rural and proximate, and rural and isolated. The analysis engages Table 2.3, which summarizes respondents' labor market statuses, industrial profiles, and resource mobilization by community type. Then, in the discussion, I explore the ways in which migrants' labor market plans upon return home respond to changing life course contexts.

Mobility Opportunities in a Dynamic Urban Context

Table 2.3 highlights a diverse array of mobility pathways among the urban respondents. With the exception of two returnees who lived in a rural hamlet on the edge of Leon, all of the Leon respondents entered the non-agricultural workforce. Many found jobs as entry-level workers, heavy machinery operators, and in a few instances supervisors in factories in and

around Leon. Others opened small businesses in manufacturing, construction, commerce, and services, producing goods for sale throughout Leon's many open-air flea markets, selling goods to wealthy residents in gated communities, and working in retail where they serve English-speaking tourists and business travelers. As table 2.3 shows, skill mobilization was critical to labor market mobility in Leon. More than half of the urban respondents invested human capital – social, technical, or English language skills – gained in the United States in their work upon return. Recent scholarship documents the process of skill learning and transfer across the migratory circuit (Hagan et al. 2015; Hagan and Wassink 2016; Hagan et al. 2018; Hernández-León 2008). Building on this emerging scholarship, I found that urban areas like Leon encourage human capital and language transfers because their dynamic industrial bases and large economically diverse populations provide a heterogeneous consumer base that encourages creative entrepreneurship outside traditional industry niches.

Some Leon return migrants drew on technical and social skills learned abroad to start businesses providing services to residents in their neighborhoods. Three urban returnees opened auto shops, using U.S.-machinery and techniques to improve the quality of their work. Others drew on their U.S. work experience to open restaurants that sold American and Tex-Mex food or stores that carried U.S. brands and styles. In these cases, new skills learned abroad enabled return migrants to differentiate themselves from local businesses or to branch out and establish new economic niches (Hagan and Wassink 2016). Yet, they also relied on sizeable communities and stable infrastructure to sustain businesses catering to local residents.

Take the case of Jose (678), a self-employed carpenter who migrated to the United States in 2000 in order to improve his family's economic situation and expand his business. In the U.S. labor market, Jose found work as a carpenter. In this job, he reskilled, learning to work with new

tools and technology. When Jose returned to settle in Leon in 2009 the city was experiencing an economic boom in its Building and Construction Trades. With new tools, techniques, and ideas, Jose carved a niche in the local economy producing U.S. style cabinetry, which separated him from local competitors. Jose initially struggled to sell his high-end wares to the residents of his working-class neighborhood, often going door-to-door to market his wares. But, over the next few years he changed his approach and strategically started selling his products to residents in upper-class gated communities. When I interviewed Jose for the second time in 2015, he had expanded his carpentry business and hired three employees.

Others, like Pablo, drew on English-language skills learned in the United States and started businesses to provide services to foreign business persons traveling to Leon to purchase or market shoe and leather products. Pablo migrated to the United States as a teenager, leaving behind his unfinished secondary education and long nights and weekends spent working in his family's in-home shoe factory. He attended a U.S. high school, where he became fluent in English. After working as a receptionist in a Mexican restaurant, Pablo decided to return to Leon for family reasons. Upon arrival, he invested his U.S.-savings in a taxi, with which he caters to English-speaking business people and tourists. Because of his English language skills, he can charge two or three times the rate of local drivers. Overall, respondents' successful skill mobilization was enabled by densely populated urban neighborhoods, international consumers, and proximity to wealthy communities where residents pay top dollar for quality work, attributes that are synonymous with urbanization and development.

Returns to social and technical skills acquired in the United States were largely limited to self-employment for two reasons. First, in many cases, skill transfers require the incorporation of new technology or work processes, which encourages entrepreneurship as return migrants can

most easily integrate new technologies into emerging ventures rather than attempting to alter existing work processes. Second, the unregulated structure of informal sector work in Mexico limits returns to skills in largely unregulated industries such as construction and small-scale manufacturing, which are common areas of skill formation among Mexicans in the United States (Hagan et al. 2015; Levy 2008; Perry et al. 2007).²⁴ English language skills proved to be more versatile, as they create opportunities for returnees to secure employment in restaurants, stores, hotels, and other businesses that cater to English-speaking tourists and business travelers.

Interestingly, and contrary to the literature, remittances generally played a supplemental role in urban returnees' self-employment ventures. Although accumulated savings and remittances often enable the initiation of new business ventures (Massey and Parrado 1998), skills learned abroad allow respondents to establish new industrial niches. By differentiating themselves from local competitors, entrepreneurs gain critical leverage in competitive urban markets. In this way, as I discussed in Chapter 1, new skills more often than savings, led to upward economic mobility through self-employment.

However, in several cases, remitted savings enabled substantial mobility via higher education. Several of the younger migrants in Leon, who finished *preparatoria* (equivalent to U.S. high school) prior to migration, used earnings acquired abroad to complete four-year college degrees upon return. Investments in higher education enabled entry into well paid professional jobs in government, business management, and engineering firms. Consider Pedro's experiences. After completing preparatory school in Leon, Pedro located a temporary job in a hotel laundry

²⁴ One respondent used technical skills gained in the United States to secure a position as a floor supervisor in a large car manufacturing plant. However, his experience was exceptional in that he participated in an accredited training program while in the United States. Thus, he was able to provide evidence of his expertise.

facility. With limited opportunity for mobility at the hotel and lacking resources to continue his education, Pedro migrated to the United States in 2008 with the goal of saving enough money to invest in college upon return. Pedro worked in construction in Ohio for 18-months before returning to Mexico. With his U.S.-savings, Pedro enrolled in a mechanical engineering program at a local university in Leon, upon completion of which he plans to find work in auto design.

The completion of higher education and entry into the professional sector not only signals economic mobility, it also affects workers' relative job satisfaction and self-image. Another migrant, Jesus, who also invested his U.S.-savings in a four-year degree and subsequently found work in the city's water management department, observed, migration "is an obvious option when you're desperate but not a long-term mobility strategy. I can make the same amount in my job now as I did in the United States. But, in Mexico, I am a professional, and in the United States, I am just a worker." In such instances, migration is not just a source of financial gain, it is an avenue to an otherwise inaccessible status as a white-collar professional, thus injecting a modicum of fluidity into Mexico's intransigent class structure. Scholars frequently point to the non-economic benefits of self-employment, such as autonomy and flexibility (Maloney 2004; Perry et al. 2007). It is similarly important to capture the value of professional status attainment among those with working-class origins. With numerous local and international businesses and more than ten universities and colleges, Leon offers ample opportunities for migrants to invest in financial capital into new degrees and channel it into upward occupational mobility.

Overall, the urban migrants most frequently achieved economic mobility upon return through the investment of human and financial capital accumulated in the United States. Social, technical, and English language skills led to mobility through entrepreneurship, while remitted language capital also enabled occupational mobility in businesses catering to international

travelers. In some cases, repatriated financial capital also contributed to business formation, but U.S.-savings contributed to economic mobility most directly through the attainment of higher education, which enables entry into professional jobs. Migrants who returned without new savings or skills generally returned to the jobs they held prior to migration or turned to marginal self-employment as an option of last resort.

Constrained Mobility in Rural and Proximate Communities

Like their urban counterparts, respondents in rural and proximate communities held a variety of labor market statuses. But, as Table 2.3 shows, they were more likely to be informal sector wage laborers or operate small businesses without employees. They also exhibited a varied industrial profile. Consistent with Mexico's national distribution depicted in Figure 1b, I interviewed a number of rural and proximate returnees working in commerce – most commonly owners of or employees in small convenience stores, which provide fresh produce, non-perishable goods, and other sundries to their local communities. But, I found very few service-oriented workers, reflecting small and impoverished populations unable to sustain taxi drivers, auto mechanics, and other service sector businesses, like those I encountered in Leon. Within this context, I found that remitted savings most often led to economic mobility upon return.

Migrants returning to rural and proximate communities with financial savings often achieved modest mobility via business formation. Out of 17 respondents in rural and proximate communities who started businesses upon return, 13 relied on financial savings amassed in the United States. Mobility opportunities are limited in rural Mexico, where most laborers work in or operate small informal manufacturing firms, raise crops and livestock, or find formal sector employment in area factories. Thus, for workers with less than a secondary education, who

generally lack access to factory positions, business formation is often the only pathway out of informal sector wage work (Balán et al. 1973; Jütting et al. 2008). Among the rural returnees, self-employment rarely involved the creation of new economic niches as was often the case in Leon. Rather, savings enabled respondents to transition from informal sector wage workers to small business owners, often in the same industry in which they labored prior to migration.

In Ojo de Agua and San José de San Isidro, for example, the dominant manufacturing industry is brickmaking. Adjacent to each town are about two dozen large ovens where residents mix, mold, and bake thousands of bricks every day. Most oven owners employ a handful of *ayudantes* (apprentices), who mix and shape the bricks using a proprietary mixture of straw, mud, and locally sourced manure. Self-employed brickmaking is not a lucrative career, but the owners of the ovens keep a significantly larger share of the profits than their *ayudantes* receive. Thus, the construction of an oven leads to modest wage growth. For *ayudantes*, it can take years to set aside the roughly \$500 needed to invest in a brick oven, even in the absence of unexpected health care costs or other economic shocks that frequently destabilize low-income households (González de la Rocha 1994). Migrants who return with financial savings can use them to bypass informal sector wage work and initiate their own brick-making businesses much more quickly than would be otherwise possible.

Consider Tomas, who began working in his uncle's tile-making business after just three years of primary school. After 19 years working for his uncle, Tomas first migrated to the United States in 2003 when he was 27-years-old, "por la necesidad." As he put it, "You earn more in a day there than in a week here." Tomas most recently worked in the United States from 2009 to 2016. But after seven years abroad, he felt the tug to rejoin his wife and three school-aged children in Mexico. Motivated by economic responsibility for his family and the limited

employment prospects for someone with his limited education, Tomas saved a portion of his U.S. earnings to start a brick-making business. Upon return, he invested 8,000 pesos (about \$500) in his own oven. Although his earnings do not approach his U.S. wages, Tomas brings home more than he did as his uncle's *ayudante* and is happily reunited with his family.

Other migrants, like Ruben, transitioned from construction or manufacturing into commerce. Ruben first went to the United States in 1985 at the age of 15. Over the next 30 years he migrated regularly, working mostly in construction jobs in the United States. Ruben first migrated as a young single man. But as he became entrenched in the U.S. migration system, he also established a family in Mexico, building a house and marrying a woman from his hometown. Throughout his migration career, Ruben regularly sent home remittances which subsidized household expenses. But in 2005, as a 35-year-old husband and father, he began to prepare for a permanent return. Ruben initially sent back 50,000 pesos, which his wife used to purchase a property along the highway that runs through their small town. Over the next ten years, they invested an additional 200,000 pesos (about 10,000 US\$) to outfit and stock a hardware store. In 2015, Ruben returned permanently. Thanks to their hardware store, Ruben's family is economically stable and no longer relies on migration for income.

Proximity to urban areas is central to self-employment in rural communities. accessibility via major transportation corridors enables Tomas and other manufacturers to sell their bricks and other products by the truckload to distributors in nearby cities. Meanwhile, Ruben and others working in commerce benefit from highways running through their towns, which expand their clients to include residents in surrounding communities. Neither of these nuances are captured by measures of population size, poverty, or development, which omit the significance of spatial context for international migration and labor market mobility (Hamilton and Villarreal 2011).

Despite the benefits of proximity to urban areas, few of the residents in rural and proximate communities I visited successfully invested human capital skills acquired abroad in their work upon return. Rural and proximate communities' small and largely impoverished communities without international commerce limit opportunities to launch businesses outside of established agricultural, manufacturing, and commercial niches that rely on well-established work processes and offer little room for innovation. Only five of the 17 self-employed respondents in rural and proximate communities described applying U.S. technical or social skills to their business ventures. Of those five, four invested U.S. skills in side businesses that supplemented their primary income. Consider Juan and Leopoldo who both worked in Chinese restaurants while in the United States, where they developed extensive cooking skills. Each returned to San Jacinto with several hundred dollars' worth of cooking equipment: woks, spatulas, and other essential tools for preparing American-style Chinese food.

Today, both Juan and Leopoldo independently prepare and sell Chinese food in their communities every weekend. Yet, when I asked each of them if they planned to open a full-time restaurant, they responded in kind: San Jacinto is too small and too poor. Shortly after his return, Leopoldo went so far as to invest a portion of his U.S. savings in a storefront property, which he began to up-fit as a restaurant. But he later abandoned the project, determining that his community could not sustain a full-time Chinese restaurant. Both Leopoldo and Juan eventually invested their U.S. savings in heavy machinery, which they use to till local cropland on a contractual basis. But on the weekends, they can each be found dishing out heaping plates of lo mein and General Tso's chicken to their neighbors.

Because rural proximate areas offer limited opportunities to invest skills learned abroad into entrepreneurship, migrants who returned to these communities without having accumulated

target savings in anticipation of business formation often opted for entry-level jobs on factory assembly lines, despite extensive technical skills gained in the United States. These jobs offer written contracts, health benefits, and better wages than most informal sector jobs. But, as Victor's (8) case illustrates, factory jobs often left highly skilled migrants frustrated with their mobility prospects in Mexico.

Victor migrated when he was 18-years-old after completing preparatory school. In the United States, Victor discovered a knack for carpentry. He began as an unskilled apprentice but achieved remarkable mobility during his twelve years in the United States, eventually becoming the foreman of his team: reading plans, ordering materials, and communicating with clients. Over time, Victor's salary increased to \$35/hour. In 2012, Victor returned home because of his mother's failing health. Despite his substantial skills, he opted not to go into carpentry, a decision he attributed to a lack of community residents who could afford his high-quality craftsmanship and the low wages and lack of benefits afforded to most informal sector construction workers. Instead, he found a job through the classifieds working on an assembly line at a General Motors factory. The job, which provides few opportunities for mobility, left Victor frustrated as his skills lie dormant. When I asked him to compare his experience working in Mexico with the United States, Victor told me, "the experience was much better in the United States ... More than anything, over there, I had the opportunity to grow. To grow as a worker. You have to know people here. If you don't have connections, you don't advance." Victor's experience highlights the limits to mobility among workers with less than a college degree, even when they possess substantial technical skills.

Thirteen of the 41 rural and proximate respondents found formal sector jobs that offer stable work and benefits not available in the informal sector, mostly in factories that increasingly

dot Guanajuato's landscape. Large factories are generally located on the outskirts of urban areas or off major highways (Rodriguez 2016), and are thus easily accessible to residents in rural communities that share transportation infrastructure with large cities. Yet, many of the returnees working in factories echoed Victor's frustration with the lack of opportunities available to less educated Mexican workers. In the United States, ambitious and capable migrants can leverage new skills into occupational mobility, thus improving their craftsmanship, responsibility, and earnings (Hagan, Lowe, and Quingla 2011; Hagan and Wassink 2016; Sanderson and Painter 2011). With stagnant wages and a vast informal sector, similar opportunities are rarely encountered upon return (Passell et al. 2012; Tornarolli et al. 2014). For migrants like Victor, the acquisition of new skills and occupational mobility abroad somewhat paradoxically led to an apathetic labor market orientation upon return to communities dominated by low-wage informal sector jobs and assembly line positions in factories, where small and poor populations limit the returns to skills learned abroad.

In many ways, Lilo, the most successful rural entrepreneur that I interviewed, best illustrates the challenges that constrain most rural business owners. In other words, he is the exception that proves the rule. Lilo initially migrated to the United States to save money for a painting business. But, working with a master carpenter in Georgia, he developed a predilection for carpentry and became highly skilled with advanced machinery more commonly used in the United States. In 2005, Lilo returned to San Jacinto with a truckload of tools and invested several thousand U.S. dollars in workspace to start his own business manufacturing high-end U.S.-style cabinetry and furniture. Since then, he has achieved remarkable success. In 2010, Lilo had three employees and his business primarily served residents of San Jacinto and other nearby communities, especially return migrants with remitted savings to invest in their homes, which

they wanted to resemble those found in the United States. But, when I visited him in 2017, Lilo had 11 employees and more than 250 clients spread throughout Guanajuato and its neighboring states Michoacán, Querétaro, and Jalisco. To expand his business, Lilo strategically expanded his network through multiple trade organizations and participation in fútbol clubs in large cities across the state. He also advertises his business on Facebook. Lilo was the only rural respondent who said that his current income in Mexico exceeds what he earned in the United States. In July, 2017, he opened a *muebleria* (furniture store) off the town square in a mid-size city, about 30 minutes from San Jacinto, which will provide further visibility for his original designs.

According to subsequent correspondence, he will open a second location in 2018. Lilo's efforts illustrate the challenges that constrain entrepreneurially-minded returnees in rural areas. Small and impoverished communities limit the expansion of businesses that cater to local residents. His experience also demonstrates the importance of investigating labor market reintegration as a process that unfolds over time. This is particularly the case for migrants investing skills learned abroad in novel enterprises, which often require years to pick up steam (Hagan et al. 2015; Wassink and Hagan 2018). It took Lilo years of networking and marketing, as well as substantial financial savings, to develop an extensive base of clients who can afford his high-quality work.

Overall, the migrants that I interviewed in rural and proximate communities most commonly achieved economic mobility upon return through the investment of financial capital accumulated in the United States into small businesses in their sending communities. As Lilo's exceptional experience shows, small and poor communities limit opportunities to invest Social, technical, and English language skills in non-traditional business ventures. Some migrants who returned without new savings found formal sector jobs in large factories, which they obtained

through education acquired in Mexico prior to migration. Others returned to the same informal sector jobs in agriculture, construction, and manufacturing that they had before migration.

Isolation and Dependence

As Table 2.3 shows, agriculture was the dominant industry in the rural and isolated communities I visited. At the aggregate level, the most rural Mexican communities exhibit a modest amount of industrial variation, with about 40 percent of the workforce laboring in non-agricultural industries (see Figure 2.1). However, as I found, isolation combined with rurality severely constricts industrial diversification and economic mobility (see also, Hamilton and Villarreal 2011). Los Guajes's 211 inhabitants sit high in the hills of western Guanajuato. Although only 10 miles from the highway, it takes at least 45-minutes to reach via a heavily rutted dirt road that winds its way up to a small community of about 30 households. Lomas de San Isidro, a community with 193 residents, is at the end of a similar dirt road, this one winding down to a river that snakes across the arid countryside, about 45-minutes from San Miguel de Allende, a major tourist destination for both Mexicans and Americans. Houses in each town are surrounded by family farms, where their occupants grow corn and beans, which provide the bulk of their subsistence. Within each town, the only respondents who work outside of agriculture drive 30-60 minutes to the nearest cities where they find work as *jornaleros*, informal day laborers in construction. Non-migrant women also commute into nearby cities, such as San Miguel de Allende and Irapuato, earning a meager income as domestics in wealthy households.

Beyond geographic separation from urban labor markets, spatial isolation also leads to relatively closed social networks, which limit access to formal sector factory jobs. Among the urban and rural and proximate respondents, social contacts were critical to finding work in

factories and other local businesses. Seventeen out of 31 respondents who found formal sector work were recommended for those jobs by friends or family members. Most of the others had pre-existing relationships with local employers or found out about the work through advertisements in community newspapers. Spatial isolation results in relatively closed social networks and limited knowledge of regional employment opportunities (González de la Rocha 1994; Hagan 1994; Roberts 1978).

Spatial context also dissuaded prospective entrepreneurs from investing in even modest manufacturing enterprises like the small brickmaking businesses I encountered in Ojo de Agua and San José de Ornelas. Such manufacturing operations are infeasible in communities that cannot be accessed by delivery trucks. The only business I observed were a single in-home convenience store in each community, which provided supplemental income to the proprietary households. Without any pass-through traffic, neither community could sustain restaurants or other service sector businesses, even on weekends. Overall, I found no pathways through which resources acquired in the United States contributed to economic mobility in rural and isolated communities. Respondents invested U.S. savings in home construction, the purchase of automobiles, and household consumption, all of which enhance living standards, but none of which provide long-term financial security or economic mobility upon return to Mexico.

As Table 2.3 shows, nearly half of the rural and isolated returnees opted not to enter the local labor market upon return, preferring to live off of their U.S.-savings. In such destitute settings, U.S. migration assumes a primacy in the labor market that is distinct from urban and even rural and proximate areas. Without attractive alternatives, most of my respondents followed parents and grandparents to the United States in their teens and twenties, settling into long-term patterns of circular migration early in life. The lack of access via highways and an absence of

pass-through traffic deterred the long-term planning for business formation that I observed in small communities adjacent to major cities. Thus, unlike those from rural and proximate areas, migrants from Los Guajes and Lomas de San Isidro tended to maintain circular migration patterns throughout childbearing and childrearing years.

In recent years, heightened U.S. immigration enforcement has disrupted this equilibrium and placed a premium on temporary visas, which facilitate safe annual travel to and from the United States. Consistent with other recent studies (Garip 2016; Martínez et al. 2018; Massey et al. 2015), almost all of my respondents regardless of local context expressed a reticence to migrate without legal authorization. As a result, they increasingly depend on temporary work visas to return to the United States. In Los Guajes, for example, fifteen men pile into a van every March and drive eight hours to Monterrey, where they apply for H2-visas to work in the United States.²⁵ The recipients can work in the United States for 6-8 months, earning ten times or more than they would at home, while those who are denied confront the poverty of subsistence farming and informal sector day labor with little recourse. The result is a fragile ecosystem in which household economies hinge on a capricious application process, which has increasingly relied on lotteries rather than established migrant-employer relationships (Dance 2018; Hernandez-Leon and Hernandez 2017).

²⁵ H2-visas are temporary work visas that allow entry into the United States for less than one year, conditional on sustained employment in low-skill occupations (H1-visas are available for high-skill occupations). H2-visas fall into two categories, H2a (agricultural) and H2b (non-agricultural). Massey (2012) documents a steep increase in receipt of H2-visas among Mexicans, from about 20,000 in 1995 to more than 200,000 in 2010. This trend mirrors the decline in undocumented migration over the same period (Massey, Durand, and Pren 2015), illustrating the importance of work visas in response to elevated border enforcement. The Department of Homeland Security issued 15,000 extra H2b visas each of the last two years in response to persistent labor shortages (Miroff 2018).

Consider, Raul, who first migrated in 1995 when he was 22-years-old, after seven years of hard physical labor on his father's land. Raul first migrated to the United States without documentation at 22-years-old in 1995 to save enough money to build a home. In 2004, he returned to the United States on an H2a visa. With the earnings from his second trip, Raul bought a pickup truck and installed gas appliances in his family's kitchen in Los Guajes. Since 2004, despite repeated applications, Raul has been unable to obtain another visa. Because he is unwilling to risk an undocumented migration, he now commutes to San Jacinto, the nearest town, where Raul can earn about 750 pesos (\$40) a week in construction, precious little to support his wife, Gloria, and their four children. As Gloria explained to us: "Since he last returned from the United States, we haven't been able to do anything. The house leaks during the rainy season but we don't have enough to fix it. We can't afford the children's school supplies or medicine when they are sick. Last year he went to the office [in Monterrey] to see if they would contract him but he didn't have any luck. More than anything he wants to go because of his children... It's just that there isn't anything else. The people in the ranchos work in construction. There aren't other options."

Other current migrants were not immune to the annual uncertainty of visa applications. When we asked Josefina, whose husband was in the United States on an H2-visa, if he planned to migrate again the following year, she recalled a three-year period when his visa applications were denied after his first U.S. employer's business closed. "Well yes, if they request him. Because, there are times when he returns [to Los Guajes] and they [U.S. employers] don't request him and he has to stay here and work. When he's here, the only thing he can do is work our land for corn and beans to make the tortillas." Without opportunities to invest remitted financial or human capital, migrants returning to Lomas de San Isidro and Los Guajes have

essentially no means of achieving economic mobility in their sending communities. Thus, unlike returnees to urban or rural and proximate communities, who explore opportunities to invest remitted savings or new skills in a diverse array of economic mobility strategies, most migrants continue to apply for visas every spring, placing their families' livelihoods at the caprice of a migration industry comprised of U.S. employers, for profit labor recruiters, immigration attorneys, and current temporary visa holders who often connect former undocumented migrants with potential U.S. employers/visa sponsors (Hernandez-Leon and Hernandez 2017).

DISCUSSION: THEORIZING MIGRATION AND MOBILITY ACROSS THE LIFE COURSE

Most of the migrants that I interviewed traveled abroad in pursuit of higher wages, but without clearly defined long-term plans. Their initial departures reflected a largely neoclassical orientation toward migration, rooted in the prospect of higher wages in destination communities. At the same time, I observed considerable mobility upon return to both urban and rural and proximate communities, especially among return migrants who successfully mobilized human and financial capital acquired abroad, a pattern consistent with the predictions of the NELM. In this section, I discuss the ways in which migrants reoriented their labor market plans away from wage-maximization in the United States toward opportunities in Mexico. I focus on variations across the life course and sending community contexts and discuss their implications for migration theory.

Different life course stages affect the ways in which migrants reorient themselves toward opportunities in sending communities while still working abroad. Respondents who migrated in their late teens and twenties, most often maintained a neoclassical approach toward migration for

the duration of their time spent abroad. Young migrants' emphasis on costs and benefits reflects labor market flexibility associated with more education and fewer family constraints than their middle-aged and older peers. While living abroad, few of the younger migrants I interviewed actively saved money or made other arrangements in support of their work upon return.²⁶ Rather, they most commonly returned when the costs of migration – homesickness, job loss, lower than anticipated wages – outweighed the benefits or via deportation. Thus, their migrations largely reflected the cost-benefit analysis suggested by the neoclassical model, which argues that individuals migrate when expected wages abroad exceed current wages at home (Harris and Todaro 1970).

However, while the neoclassical model views return migration as a sign of failure, I found that younger return migrants frequently achieved labor market mobility through the mobilization of human capital gained in the United States. Migrants commonly acquire new skills informally while on-the-job in the United States (Hagan et al. 2015; Hagan and Wassink 2016). As I reported in Chapter 1, among younger migrants who traveled abroad in search of new opportunities, but without specific goals in mind, the acquisition of new skills can create mobility opportunities in sending communities, particularly through entrepreneurship. The contextual analysis in this chapter suggests that these opportunities are most pronounced in dynamic and industrially diverse urban areas conducive to entrepreneurship. On the other hand, most younger migrants returning to rural Mexico returned to the same jobs they held prior to migration or found formal sector work in factories, relying on their Mexican education and social networks, rather than resources acquired in the United States.

²⁶ The handful of young migrants who traveled abroad with the intention of saving money for college offer an important exception to this pattern.

In contrast to their younger counterparts, middle-aged migrants tended to adopt long-term approaches to migration and mobility. The majority of migrants who travel abroad in their 30s, 40s, and 50s leave behind spouses and children (Massey et al. 1987). Dependents in sending communities create conflicting pressures. On the one hand, separation from family members in sending communities incentivizes migrants to return home (Massey et al. 2015; Sandoval 2013; Van Hook and Zhang 2011). On the other hand, responsibility to provide for dependent family members is often what encourages middle-aged and older migrants to depart in the first place (Massey et al. 1987). To complicate matters, as the cohort that preceded Mexico's educational reforms of the 1980s and 1990s, older migrants generally have fewer years of education than their younger counterparts and encounter limited opportunities in the informal sector, where employers prefer younger workers for physically demanding jobs (Cunningham and Maloney 2001; Hagan et al. 2015; Parker et al. 2007).

Older respondents, feeling the tug of family, but aware of their limited employment prospects in Mexico, were the most likely to begin preparing for work upon return while still living abroad. Preparation began with an assessment of labor market opportunities in sending communities. Subsequently, migrants identified target savings, most commonly to enable business formation in their home communities. Target savings were particularly common among middle-aged migrants in rural and proximate communities, where more than 85 percent (11/13) of migrants who saved money to invest in a business were 33 years or older at the time of return, compared to just 60 percent (18/29) of those who returned without a particular labor market plan. This strategic approach reflects the predictions of the NELM (Durand, Kandel, et al. 1996; Lindstrom and Lauster 2001a) and is consistent with Lindstrom's (1996) finding that migrants from communities with opportunities for investment extend their trips to reach target savings.

But my interviews suggest that most migrants do not orient their migrations toward opportunities in sending communities until they are in the United States, when the cost of familial separation begins to offset the benefits of higher wages and encourages migrants with strong ties to sending communities to explore potential labor market opportunities therein.

The timing and implementation of such strategies varied widely. Some, like Ruben, whose wife invested the remittances in their hardware store while he continued working abroad, began sending back money years before returning home. Others, like Tomas, who only required a few hundred U.S. dollars to start his brickmaking business, began saving a target sum just months before returning home and opened their new businesses immediately. In several instances, like Lilo's carpentry business and Leopoldo and Juan's Chinese restaurants, returnees who planned to open novel businesses inspired by new human capital, first tested their ideas on a contingent basis before investing their full resources.

Collectively, these patterns among middle-aged and older Mexicans can be understood as a hybrid of the neoclassical model and the NELM. Nearly all of the respondents first migrated in their late teens and 20s, motivated the prospect of higher wages, but over time, family formation in Mexico encouraged migrants to identify and plan for labor market careers in their sending communities. This sort of planning was most important for migrants returning to rural and proximate communities, where the remission of even a modest sum can enable the transition out of informal sector wage work and into small business ownership. Yet, even in urban areas, income from a marginal business venture is better than unemployment. Across urban and rural and proximate communities, life course contexts shape the ways in which migrants organize their time abroad around possible labor market opportunities at home.

In contrast, in rural and isolated communities, where spatial context deters investment in new businesses and limits access to formal sector employment, circular migration emerges as the de facto mobility pathway at all stages of the working life course (Massey et al. 1994; Mines 1981; Mines and de Janvry 1982). Whereas residents in urban and rural and proximate areas plan for permanent returns, migrants in more isolated communities set aside money each year for the few months when they will be at home, usually opting to await their next trip rather than enter the local labor market. The result is an extreme version of the neoclassical model in which economic prospects at home are so poor that most return migrants remain oriented toward work in the United States, even as family and community ties root them in sending areas. As migrants from large cities and adjacent ranchos reoriented away from U.S. earnings toward potential careers in sending communities, those from small isolated hamlets focused their energies on forming ties with U.S.-employers and laying other plans to ensure the success of their annual applications for temporary work visas.

CONCLUSION

In response to the increase in Mexican return migration, a growing literature considers labor market re-entry among former migrants (Cobo et al. 2010; Hagan et al. 2015; Hagan and Wassink 2016; Hagan et al. 2018; Lindstrom 2013; Sheehan and Riosmena 2013). Yet, despite the ways that sending community contexts shape international migration (Garip 2016; Massey et al. 1999, 1987; Stark 1991), research on labor market mobility among return migrants largely ignores the role of local context. As a result, not only do extant studies provide an undertheorized assessment of the contributions of international migration to long-term mobility, they also fail to

connect it to broader systems of stratification that shape labor market opportunities in sending communities (De Haas 2010; Martin Ravallion 2014; Torche 2014).

I found that the relationship between time spent abroad and labor market mobility upon return varies significantly by economic, spatial, and social characteristics of sending communities and across migrants' life course contexts. Economically dynamic and industrially diverse urban areas facilitate the investment of human capital acquired abroad into new and often unplanned entrepreneurial ventures upon return. Younger well-educated migrants returning to urban areas can also invest their savings in college and vocational degrees, which open up the possibility of entering the privileged professional class. In contrast, small and impoverished rural areas limit opportunities to invest new skills. But, the presence of major transportation routes and proximity to urban areas create opportunities for returnees to invest savings in small manufacturing and commercial enterprises catering to regional distributors and nearby residents. Spatially isolated rural communities with constrained labor markets and social traditions of circular migration encourage return migrants to remain oriented toward work abroad. Such dependency can be deeply destabilizing when changes to immigration enforcement limit access to work in the receiving context, as has occurred between Mexico and the United States in recent years (Martínez et al. 2018; Massey et al. 2015).

My results challenge and extend classic economic theories of international migration. Empirical research on migration emphasizes key events such as departure and return or analyzes labor market mobility at a particular stage of the migratory circuit (Hagan and Wassink 2016; Lindstrom 1996, 2013; Lindstrom and Lauster 2001a; Massey 1986; Massey et al. 2015; Massey and Espinosa 1997). But, each action is informed by those preceding and oriented toward those to come (Emirbayer and Mische 1998). For migrants, this is certainly the case. I found that initial

departures are largely oriented toward past experiences, as laborers relying on a neoclassical calculus migrate abroad in response to low wages and limited mobility inherent to informal sector work in sending communities (Villarreal and Blanchard 2013a). But, overtime, the tug of left-behind family and community encourages some migrants to reorient toward possible future labor market opportunities in sending communities, particularly entrepreneurial opportunities, resulting in a shift toward migration behavior that more closely resembles the expectations of the NELM. As migrants begin to plan for a return home, they strategically assess labor market opportunities in their sending communities and identify corresponding goals to complete prior to return. For those from spatially isolated areas, such plans often revolve around enabling future migrations via temporary visas.

At a broad level, Mexican migration to the United States is deeply intertwined with patterns of stratification and immobility that characterize work for most Mexicans with less than a college degree. The NELM and related scholarship offers the optimistic perspective that international migration creates access to human and financial capital, which can expand migrants' labor market opportunities in sending communities (Hagan et al. 2015; Massey et al. 1999; Massey and Parrado 1998). My analysis corroborates this account, providing evidence of the ways that workers with little schooling rely on international migration to overcome local labor market barriers to achieve economic survival and mobility, especially in urban areas and proximate rural ranchos (Lindstrom and Lauster 2001a; Massey and Espinosa 1997). At the same time, widespread reliance on U.S.-migration as a source of income and capital highlights the challenges that confront Mexican workers with little schooling and the economically marginalized households in which they too often reside (González de la Rocha 1994, 2007; de la Rocha 2001; Selby et al. 1990). The persistent significance of U.S.-migration for economic

mobility in Mexico reflects the vestiges of stagnant wages and declining mobility opportunities in Mexico over the last several decades (Bouillon et al. 2003; Parrado 2005; Passell et al. 2012; Torche 2014). Put simply, movement abroad provides a critical source of economic mobility, but it also signals the absence of domestic alternatives.

This study, which drew on interviews conducted with return migrants in Mexican sending communities, suggests three particular areas for future research. First, my contextual analysis raises the possibility that return migrants relocate internally in response to constrained origin labor markets. Specifically, internal migration may respond to a mismatch between capital accumulated abroad and labor market opportunities at home. Although numerous studies explore internal migration prior to U.S.-migration, or “step migration” (Fussell 2004), and repeat international migration (Massey et al. 2015; Massey and Espinosa 1997), little is known about the internal migration behavior of return migrants. I suspect that some returnees, especially young men and women without established households who return to more isolated areas, will relocate internally to maximize the returns to human and financial capital accumulated abroad. Moreover, internal migration may have increased in recent years as heightened U.S. border enforcement deters a growing number of returnees from re-migrating to the United States (Martínez et al. 2018). Second, my analysis suggests that the consequences of deportation for labor market mobility upon return may vary contextually. Theories of return migration suggest that deportation may hinder economic reintegration because it prevents migrants from planning their returns (Cassarino 2004). Yet, a recent analysis of reintegration among forced and voluntary Mexican return migrants in a large urban area found that deportees tended to struggle initially, but achieved considerable economic mobility over time, largely through the investment of human capital gained abroad in entrepreneurship at home (Hagan et al. 2018). My finding that

planning prior to return was most important in rural and proximate sending communities where human capital transfers are more limited suggests that deportation may have more significant consequences for returnees to these communities, where the inability to save target sums before return could prevent or at least delay desired business formation. My hope is that this chapter, which investigated the intersection of international migration and economic mobility in sending communities, might guide future research on the reintegration and repeat migrations of return migrants in Mexico and other sending countries.

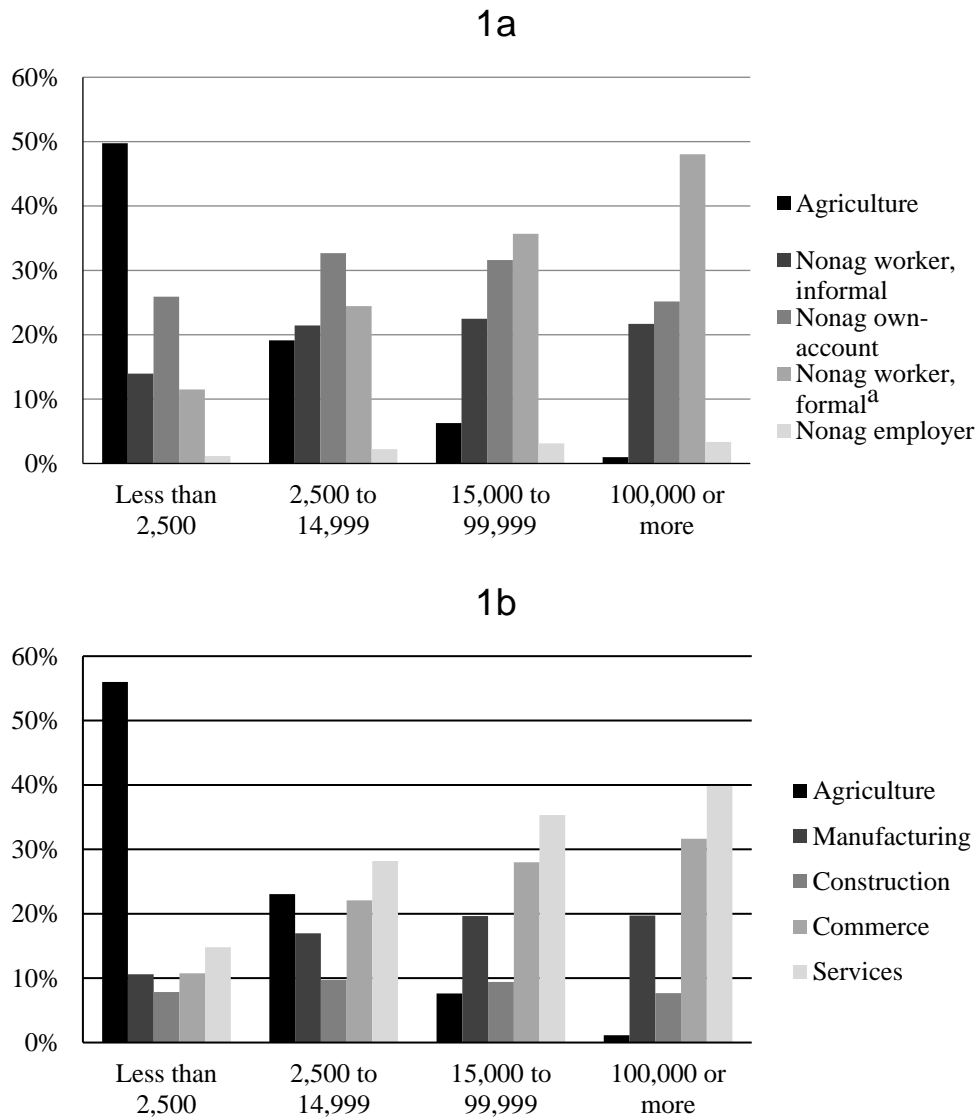


Figure 2.1 Mexican workforce distribution (1a) and industrial profile (1b) by community size. Source, 2010 Mexican Census of Population and Housing, n=7,638,288

Nonag = non-agricultural

^a Formal sector employment is measured using the legal definition - receipt of health insurance through employment (Tornarolli et al. 2014)

Table 2.1 Community characteristics by rural/urban and level of marginalization

	Interviews	Inhabitants	%Pop 15+ without primary complete	%Homes with dirt floors	%Homes without refrigerators	Accessible via paved roads	KM from municipal center	Time to municipal center (Minutes)
Urban Community								
Leon	93	1,238,962	16%	2%	7%	Yes	NA	NA
Rural Communities								
<i>Rural and proximate</i>	42	2,119	37%	8%	30%	Yes	11	21
Casa Blanca	7	4,058	39%	4%	16%	Yes	19.8	29
San Miguel Zapotitlán	12	153	18%	0%	6%	Yes	12.3	26
Cuesta de Mezcala	2	4,439	32%	3%	34%	Yes	14.8	28
San Jacinto	5	2,896	34%	12%	24%	Yes	13.1	27
Mezcala	7	1,462	39%	4%	24%	Yes	9.5	20
Ojo de Agua	5	1,186	52%	13%	57%	Yes	3.7	9
San José de Ornelas	4	637	43%	19%	48%	Yes	5.2	10
<i>Rural and isolated</i>	17	202	39%	5%	39%	No	23	50
Los Guajes	13	211	33%	2%	49%	No	21.7	61
Lomas de San Isidro	4	193	45%	8%	28%	No	24.3	39

Table 2.2 Respondents' demographic backgrounds, work histories, and migration experiences

	Urban (n=93)			Rural and proximate (n=43)			Rural and isolated (n=17)		
	Mean/Percent	(Min/Max)		Mean/Percent	(Min/Max)		Mean/Percent	(Min/Max)	
Demographic background & pre-migration work history and educational attainment									
% male	83%	--	--	100%	--	--	100%	--	--
Mean age at 2015 interview (years)	45	(26	83)	46	(22	88)	46	(28	71)
<i>Marital status at 2015 interview</i>									
% Single (Never married)	6%	--	--	10%	--	--	0%	--	--
% Married	84%	--	--	83%	--	--	100%	--	--
% Divorced/widowed	10%	--	--	7%	--	--	0%	--	--
% Had children at 2015 interview	86%	--	--	71%	--	--	88%	--	--
% Completed secondary school (9-years of schooling)	46%	--	--	46%	--	--	25%	--	--
% in labor force prior to migration	99%	--	--	100%	--	--	100%	--	--
Context of departure, US work history, and migration history									
Mean age at first migration	25	(2	54)	24	(8	62)	26	(15	44)
% in US labor force	100%	--	--	100%	--	--	100%	--	--
% Migrated multiple times	47%	--	--	83%	--	--	94%	--	--
% Documented on most recent trip	5%	--	--	24%	--	--	65%	--	--
<i>Reason for most recent trip^a</i>									
% Economy need/lack of opportunity	70%	--	--	82%	--	--	100%	--	--
% Learn/improve	29%	--	--	3%	--	--	0%	--	--
% To invest in a business	4%	--	--	2%	--	--	0%	--	--
% Invitation from Family/friend	21%	--	--	6%	--	--	6%	--	--
% Other ^b	13%	--	--	9%	--	--	13%	--	--
Context of return & post-migration work history									
Mean age at most recent return (years)	33	(15	66)	38	(17	73)	40	(18	56)
<i>Reason for most recent return^a</i>									
% Family reunification	56%	--	--	51%	--	--	41%	--	--
% Visa expired	2%	--	--	15%	--	--	59%	--	--
% deported	15%	--	--	17%	--	--	0%	--	--
% Other reasons ^c	42%	--	--	30%	--	--	36%	--	--

^a Responses do not sum to 100 because respondents could cite multiple reasons.

^b Other included health, divorce, education, religion, and tourism

^c Other reasons for return included: boredom, loneliness, fear of deportation and racism, difficulty finding work, a medical operation, higher education, personal problems, health, completed migration goal, and to start a business.

^d Almost all of our respondents remitted money to support household consumption. Thus, we highlight those who remitted money to support particular investments. The proportions here include personal investments (most often houses) and labor market investments (most often businesses and occasionally higher education).

Table 2.3 Labor market status, industrial profile, and resource mobilization upon return

	Urban	Rural and proximate	Rural and isolated
Primary labor market status upon return			
% Peasant farmer	2%	5%	35%
% Non-agricultural worker, informal	22%	33%	18%
% Non-agricultural own-account	17%	9%	0%
% Non-agricultural worker, formal	28%	23%	0%
% Non-agricultural employer	19%	16%	0%
% Not economically active	12%	14%	47%
Industrial profile upon return			
Agriculture	2%	11%	67%
Commerce	18%	18%	0%
Construction	15%	29%	33%
Manufacturing	36%	29%	0%
Services	29%	13%	0%
Resource mobilization upon return			
% Remitted money for investment ^d	21%	72%	47%
% Applied skills learned in the US to work in Mexico	54%	21%	6%

^d Almost all of our respondents remitted money to support household consumption. Thus, we highlight those who remitted money to support particular investments. The proportions here include personal investments (most often houses) and labor market investments (most often businesses and occasionally higher education).

CHAPTER 3: WORK, SELF-EMPLOYMENT, AND MOBILITY IN A STRATIFIED LABOR MARKET: MEASURING SUCCESSFUL SELF-EMPLOYMENT IN MEXICO

INTRODUCTION

Most low to middle income countries (LMICs) are characterized by a high degree of socioeconomic stratification and low levels of intra- and intergenerational mobility (Ravallion 2014; Underwood 2014). Even relative to other LMICs, inequality is especially pronounced throughout Latin America and the Caribbean (Hoffman and Centeno 2003; Ravallion 2014; Torche 2014). A defining feature of inequality in Latin America is the divide between highly educated workers, who comprise an insular professional class, and those with less than a high school degree, who are concentrated in the informal sector with limited opportunities for occupational mobility (Huerta-Wong et al. 2013). Scholarship on labor market mobility in LMICs commonly views self-employment as a critical mobility pathway for less-educated workers, positing that as small business owners, workers can avoid the instability of informal sector jobs, while maximizing the returns to their skills (Balán et al. 1973; Maloney 2004; Perry et al. 2007). This perspective has influenced development scholarship, inspiring studies of micro-lending, conditional cash transfers, local development policies, migrant remittances, and human capital formation as potential contributors to entrepreneurship among workers with little schooling (De Mel, McKenzie, and Woodruff 2012; Hagan and Wassink 2016; Massey and Parrado 1998; McKenzie and Woodruff 2008).

At the same time, studies of Latin America and other developing regions consistently find that more education is an important predictor of prosperous self-employment, while less

education is associated with marginal self-employment that masks unemployment (Fajnzlber et al. 2006; Gindling and Newhouse 2014; Grimm et al. 2012; Mandelman and Montes-Rojas 2009). This finding suggests that education confers valuable human capital skills on prospective entrepreneurs, which contribute directly to the success of their ventures. Such a conclusion questions the utility of self-employment for less educated workers, indicating that they primarily treat self-employment as a labor market status of last resort in response to labor market marginalization. To interrogate this contradiction, I pose the broad question: How does education affect the success of self-employment ventures in LMICs?

I argue that the well-documented relationship between educational attainment and successful self-employment reflects disparate access to resources associated with education, rather than disparate human capital endowments. Education reflects more than just acquired knowledge. High levels of education are positively associated with inherited wealth, the affluence of one's social networks, and salary, all important mechanisms through which prospective entrepreneurs might finance their businesses (Becker 2009; Torche 2014; Torche and Spilerman 2009). Establishing a stable enterprise is never easy (Bruderl and Schussler 1990), but challenges confronted by nascent entrepreneurs are particularly acute in largely informal market economies such as Mexico, which are characterized by inefficient credit markets and limited access to financial capital (Levy 2008). In these instances, securing start-up funds can present a sizeable challenge even to the most skilled workers (Jütting et al. 2008). Indeed, experimental evidence from Mexico and Sri Lanka documents substantial returns to modest cash grants and in-kind transfers made to low-income own-account workers with little schooling and low levels of capital invested in their enterprises (De Mel et al. 2012; McKenzie and Woodruff 2008).

Assessment of mobility via self-employment requires a valid measure of success, which I identify as business survival. In my analysis, I challenge scholarship that views self-employment among workers with little schooling in LMICs as an opportunistic attempt to maximize returns to one's skills. This perspective has led scholars to measure the success of self-employment in terms of business earnings, growth, and returns to capital (e.g., Gindling and Newhouse 2014; Grimm et al. 2012; Mandelman and Montes-Rojas 2009). These measures, which are informed by research in more developed contexts where greater access to salaried employment discourages risk-averse residents from starting new businesses (Aldrich 2007; Goldthorpe 1980; Halaby 2007), neglect the instability inherent to low-wage work in LMICs (Levy 2008). Guided by survey and ethnographic research that documents a desire for economic independence among informal sector workers as well as a desire to remain self-employed, even should similarly well-paid work in the formal sector become available (Balán et al. 1973; González de la Rocha 1994; Maloney 2004), I treat business survival as an indication of successful self-employment. For less educated workers, who confront the volatility of informal sector jobs without formal contracts or other guarantees of regular income, business formation can provide long-run labor market stability and autonomy (Jütting et al. 2008; Perry et al. 2007).

To assess the impact of educational attainment on business survival, I estimated a series of proportional hazards models of business survival using piece-wise exponential regression. Longitudinal data with information on business exit come from Mexico's National Survey of Occupation and Employment (ENOE), which I merged with retrospective business histories from Mexico's National Survey of Microenterprises (ENAMIN). To assess the significance of workers access to financial resources, I adjusted for possession of a designated business structure outside the home and receipt of formal or informal financial support to establish the business. Yet, I also

recognize the pervasiveness of marginal self-employment, which, as I show in Chapter 1, can become a trap for some groups of workers, like older return migrants who are unable to secure steady jobs (Levy 2008). The ENAMIN asked respondents to select among 13 possible reasons why they became self-employed. With this information, I distinguished between opportunistic, necessity, flexibility/complementary, as competing selection mechanisms.

Beyond understanding the relationship between educational attainment and successful self-employment, it is also valuable to identify the prevalence and correlates of successful and marginal self-employment throughout LMICs. Building on the results from my survival analysis, I evaluate two potential indicators of successful self-employment: the presence of paid employees and the possession of a designated physical structure that houses the entrepreneurship activity. Scholars most commonly use the presence of paid employees, which is positively correlated with earnings and growth, to identify successful businesses (Gindling and Newhouse 2014; Mandelman and Montes-Rojas 2009). But employees may be endogenous to profitability, particularly in small businesses in informal market settings where proprietors can hire and fire workers with relative ease. Alternatively, possession of a permanent location outside the home reflects a substantial investment of financial capital into a permanent economic presence, particularly among less educated workers without easy access to capital. Thus, such investments likely reflect positive selection and potential stability. Such information could be easily incorporated into future data collection projects.

Throughout the analysis, I consider divergent labor market experiences among men and women. Mexican women's labor force participation and rate of self-employment have risen steadily in recent decades, driven by educational parity and shifting gender norms (Barro and Lee 2013). Despite these shifts, women face persistent barriers in the workforce, earning less pay

than men for the same work and receiving more limited social and financial support upon initiation of entrepreneurial ventures (Camou and Maubrigades 2017; Novta and Wong 2017). In light of these patterns, I consider how educational attainment differentially effects business survival among Mexican men and women.

SELF-EMPLOYMENT AND MOBILITY IN MEXICO

The Mexican labor market is highly stratified (Torche 2010, 2014; Villarreal 2010). Movement into the upper-level professional classes hinges on the receipt of higher education (Cortés and Latapí 2005). Over the last several decades, economic restructuring, a move toward liberalization, and declining worker protections have resulted in growth in informal sector employment and declining intra-generational class mobility (Parrado 2005; Torche 2014; Tornarolli et al. 2014). At the same time, educational expansion, beginning in the late 1980s and culminating in 1992, with the passage of the National Agreement to Modernize Basic Education (NAMBE), made lower secondary school (seventh through ninth grade) mandatory. NAMBE's goal—reducing educational inequalities—has paradoxically lessened the returns associated with completion of secondary school (years 7-9) (Cortés and Latapí 2005; Parrado 2005). Most formal sector businesses now expect employees to have completed preparatory school (years 10-12).

The majority of economically active Mexicans with less than 12 years of schooling work in the informal economy, which is an unregulated sector characterized by a lack of benefits, poor working conditions, and limited job security (Arias et al. 2010; Levy 2008; SEDLAC 2015; Tornarolli et al. 2014). Because they are unregulated, informal sector jobs tend to offer low wages and limited opportunities for occupational mobility, even as workers accumulate technical and organizational skills over their working careers (Jütting et al. 2008; Levy 2008; Maloney

2004; Perry et al. 2007). As a result, scholars generally view self-employment as the primary mobility pathway available to less educated workers (Bargain and Kwenda 2011; Fields 2013; Jütting et al. 2008; Perry et al. 2007; de Soto 1989; Tornarolli et al. 2014). Through business formation, workers without access to professional jobs can maximize the returns to their informal skills learned on the job (Balán et al. 1973; Hagan et al. 2015). Moreover, successful business formation can alleviate the insecurity of informal sector wage work, which lacks written contracts and often involves moving from job to job as day laborers (Levy 2008).

To conceptualize mobility via self-employment among Mexicans with little schooling, the sociologists Balán and colleagues (1973) proposed a life cycle model. According to the model, less educated Mexicans who work in the informal sector gradually develop technical skills and accumulate financial savings, with the goal of eventually launching their own businesses. For these workers, self-employment is not a strategic response to economic cycles, but rather the culmination of years of skill formation and financial savings (Jütting et al. 2008). In many such cases the transition to self-employment signifies only a modest change in wages. But, as I explained in the findings section in chapter 1, which focused on self-employment among return migrants, other factors including autonomy and freedom from the turbulence of informal sector wage work are highly desirable among Mexicans with little schooling in the informal sector (Hagan et al. 2015; Maloney 2004).

These motivating factors are documented in studies of the self-employed Mexican workforce. In 2013, 33 percent of the economically active Mexican population was self-employed (World Bank 2016). Studies of Mexicans who transitioned from informal wage jobs to self-employment document higher job satisfaction and earnings than informal sector employees (Bargain and Kwenda 2011; Perry et al. 2007). Moreover, surveys find that about 30 percent of

Mexicans working in informal sector jobs would prefer self-employment to wage labor (Maloney 2004). For workers who lack the credentials to secure formal sector work, self-employment offers an opportunity to exit unstable, low-wage jobs that offer limited rewards for skills.

However, despite these observed levels of satisfaction and autonomy, self-employment does not always indicate economic mobility (Cunningham and Maloney 2001; Fields 1990; Levy 2008; Maloney 2004; Perry et al. 2007). Self-employment in LMICs often results from economic marginalization among informal sector laborers unable to secure steady work (Hirschman 1970; de Soto 1989). In these cases, self-employment offers a source of temporary income as workers navigate unstable labor markets or respond to sudden job loss (Fields 1990). Owing to their fluid and reactionary nature, these marginal ventures generally operate out of workers' homes, or are intermittent enterprises in local flea markets, or are ambulatory in nature, relying on pushcarts or motorized scooters (Hagan et al. 2015; Levy 2008). The cost of entry into these marginal ventures, which lack designated workspaces or substantial equipment, is minimal, reflecting their temporary nature. Proprietors of these marginal enterprises frequently move between informal sector wage jobs and self-employment (Cunningham and Maloney 2001; González de la Rocha 1994; Levy 2008; Selby et al. 1990).

Recognizing these divergent self-employment pathways, scholars distinguish between “successful” and “unsuccessful” self-employment (Gindling and Newhouse 2014; Mandelman and Montes-Rojas 2009). Research on LMICs suggests that the presence of employees is indicative of prosperous business ventures, while own-account work reflects marginal self-employment (Cunningham and Maloney 2001; Grimm et al. 2012; Levy 2008). In their analysis of self-employed workers in 74 LMICs, including Mexico, Gindling and Newhouse (2014) found, for example, that two-thirds of employers reside in the top income tercile, relative to just

40 percent of self-employed workers without employees. Similarly, Grimm et al. (2012) found that the presence of employees is associated with significantly higher capital endowments. In an assessment of Argentina's workforce, Mandelman and Montes-Rojas (2009) show an increase in employer self-employment during periods of economic growth, while the rate of own-account work goes up during economic contractions, indicating that employer self-employment captures opportunistic behavior among self-employed workers. These studies lead scholars to rely on the presence of paid employees as an indicator of "successful" self-employment, which is contrasted against "unsuccessful" or survivalist own-account work (Gindling and Newhouse 2014).

When scholars distinguish between employers and own-account workers, they consistently find that higher education predicts lower odds of own-account work and higher odds of employer self-employment (Fajnzlber et al. 2006; Gindling and Newhouse 2014; Grimm et al. 2012; Mandelman and Montes-Rojas 2009). This finding leads to the conclusion that marginal self-employment among less-educated workers is a response to a lack of labor market alternatives, while more opportunistic forms of entrepreneurship emerge among highly educated workers capitalizing on favorable economic conditions (Gindling and Newhouse 2014; Grimm et al. 2012; Tornarolli et al. 2014). Such a conclusion undermines the view of self-employment as an economic mobility pathway for less educated workers.

However, this conclusion ignores fundamentally distinct labor market opportunity structures and access to financial resources by educational level. The strong association between less education and entry into marginal self-employment in part captures less educated workers' limited access to formal sector jobs, which leads to unstable employment in the informal sector and more frequent entry into self-employment as a last resort (Fields 1990). By contrast, the positive association between educational attainment and entry into more prosperous self-

employment is indicative of more educated workers access to formal sector jobs, which should result in more selective entry into self-employment. Moreover, analyses that relate educational attainment to self-employment outcomes in LMICs rarely consider differential access to economic resources by social class. Research documents substantial educational gradients in wealth both within and across generations in Mexico (Torche 2015; Torche and Spilerman 2009). Moreover, highly educated workers tend to have wealthier social networks and greater access to bank loans via their formal human capital (Becker 2009).

An effective test of the relationship between educational attainment and prosperous self-employment should delineate between the direct contribution of human capital and the indirect effect of access to financial resources. These two possibilities are depicted in Figure 1. Path A reflects the effect of human capital accumulated via formal education on the success of entrepreneurial ventures. If Path A holds, then education and associated human capital formation should be seen as an important independent contributor to self-employment. In that case, policies to support self-employment among less educated workers might be redirected to toward ameliorating educational disparities or other poverty reduction strategies.

And yet, studies document extensive skill formation among less educated workers in the informal sector, which can be invested profitably in small businesses (Balán et al. 1973; Hagan et al. 2015; Hagan and Wassink 2016). Despite often substantial skill formation, however, self-employment prospects are limited by inefficient credit markets that hinder investment in new businesses. Indeed, wealth disparities are such that many workers with little schooling resort to strategies such as international migration in order to accumulate money to invest in a desired business (Lindstrom and Lauster 2001b; Stark and Bloom 1985). If Path B holds, it would suggest the presence of a large class of workers who possess the capabilities necessary to launch

stable enterprises but lack adequate financial resources to fund their businesses and establish independent structures to house them. Such a result would lend strong support to expanded programs to finance self-employment ventures among workers with little schooling.

To delineate between the two paths requires a valid indicator of successful self-employment that reflects the goals held by entrepreneurs. The most commonly cited reasons that Mexican workers enter self-employment are economic stability and autonomy (Hagan et al. 2015; Maloney 2004; Perry et al. 2007). Neither earnings nor business growth capture the stability of autonomous business ventures. Indeed, both measures reflect more volatile aspects of self-employment. Earnings, in particular, raise significant concerns. Few informal sector workers keep detailed earnings receipts and self-employment earnings generally fluctuate from month-to-month and even day-to-day due to changes in the availability of work (Levy 2008; de Mel, McKenzie, and Woodruff 2009). One direct measure would distinguish between workers who remain self-employed over time and those that exit self-employment, i.e., business survival. Survival indicates the success of concerted strategies to achieve economic stability, while exit captures the return of marginally self-employed workers to wage jobs, as well as the inability of some entrepreneurs to sustain their businesses (Balán et al. 1973; González de la Rocha 1994; Perry et al. 2007).

A second requirement for the proposed test is an indicator of capital investments. In a market context where most workers rely on personal or household resources, and often invest in their businesses gradually over time, such an indicator should provide a straightforward indication of resource investment. Two related indicators are the source of funding upon business formation and the possession of a separate building outside the home designated to the business. Mexico's informal sector is characterized by inefficient credit markets, which limit access to

start-up capital, particularly among less educated workers (Arias et al. 2010; Levy 2008). Even modest start-up costs can necessitate years of painstaking savings in an informal labor market where minimum wage laws are poorly enforced and many households live day-to-day (Balán et al. 1973; Levy 2008). As I explained in on page 25 of Chapter 1, the prosperously self-employed are generally “located in establishments separate from their homes.” In contrast, marginal self-employment ventures tend to be ambulatory food and beverage operations or small in-home stores or manufacturing operations (Hagan et al. 2015), businesses with very minimal barriers to entry. A designated workspace outside the home signals the voluntary investment of accumulated savings, regardless of their source, in a business venture. Possession of a designated location also provides a valuable complement to funding at business initiation, as it captures workers who initiate businesses with limited financial capital, but over time accumulate enough savings to expand their ventures and establish them permanently outside the home. To the extent that business survival is predicted by possession of a separate building or receipt of financial support from formal or informal sources, then the association between educational attainment and business stability may reflect class gradients associated with disparate access to financial resources. If such is the case, then adjustment for possession of an independent structure and receipt of funding should significantly attenuate the association between educational attainment and business survival.

The proposed analysis has implications for the identification of self-employment in large cross-sectional datasets that lack detailed information about motivations for entry into self-employment, sources of funding, or survival over time. As noted above, scholars most commonly differentiate between self-employed workers with and without employees, to assess the prevalence and correlates of marginal and successful self-employment. Yet, in an informal

market context, business owners can hire employees when their own efforts are insufficient to meet demand, and subsequently release them during an economic lull or downturn. Consider a construction worker who shifts back and forth between working as a day laborer and an independent contractor. He might hire *ayudantes* one week to help with a large construction project but then return to revert to being an informal sector wage worker when he joins another construction team the following week. In such instances, the presence of employees would not only provide an unstable marker of successful self-employment, it would also be endogenous to earnings, not the other way around. An effective indicator of prosperous self-employment should distinguish workers who move in and out of self-employment in response to job loss from those who intentionally initiate new businesses after careful planning and preparation. Following the survival analysis described above, I assess possession of a designated workspace located outside the home as an indicator of successful self-employment that could be used more widely to identify successful self-employment throughout LMICs.

Research on self-employment and economic mobility requires attention to gendered patterns of work (Novta and Wong 2017). Historically, work in Mexico and other Latin American countries has varied widely between men and women, with most men assuming a traditional breadwinner role and women being more likely to adopt homemaker status following marriage (Balán et al. 1973; Cunningham 2001). Indeed, surveys with self-employed Mexicans conducted just 20 years ago found that 46 percent of self-employed women left their previous jobs due to marriage, compared to less than one percent of men (Maloney 2004). In her classic analysis of survival strategies among poor Mexican households, Gonzalez de la Rocha (1994) found that married women often engaged in short-term in-home operations to support the household economy, while maintaining their primary status as homemakers. This strategy is

appealing because it provides a financial boost without the cost of establishing a formal venue (Cunningham 2001; Hagan et al. 2015).²⁷

But, consistent with labor market trends throughout Latin America, women's labor force participation (LFP) has risen steadily in Mexico, jumping from 35 percent in 1990 to 45 percent today in response to increasing parity in education and shifting gender norms (Barro and Lee 2013; Novta and Wong 2017). As a result of overall growth in their LFP, women's entrepreneurial activities have also increased by about 10 percent (Kelley et al. 2017). However, despite persistent growth in their LFP, more than half of women remain outside the labor force, compared to just 20 percent of men (Novta and Wong 2017). Moreover, women entrepreneurs commonly attribute their self-employment to necessity and experience a higher rate of exit than their male counterparts (Kelley et al. 2017).

These disparities reflect the patriarchal structure of society – the different work activities of men and women and the discrimination women too often encounter in the labor market (Firebaugh 2009; González de la Rocha 1994; Novta and Wong 2017; Torche 2015).

Econometric analyses document a persistent gender gap in earnings in Mexico (Camou and Maubrigades 2017). Moreover, Camou and Maubrigades show that as the gender gap in education has declined, the gender wage gap among more educated workers has increased. Put simply, as women gain formal credentials, their returns to those credentials tend to fall.

²⁷ Gendered labor market patterns and inequality in work are not unique to Mexico or LMICs. Rather they reflect patriarchal structures throughout the globe (Dorius and Firebaugh 2010). I highlight gendered aspects of the Mexican labor market, which are germane to the current study. The discussion is not intended to set Mexico apart as more or less gendered than other regions, but rather to identify ways in which gender affects work and self-employment in Mexico, which are essential to the analysis below.

Disparate labor market opportunities contribute to entry into self-employment among women. Multiple studies cite gender-based discrimination in the labor market as a factor that motivates women to become self-employed (Cunningham and Maloney 2001; Hagan et al. 2015). At the same time, women who are either self-employed or considering entrepreneurship report lower access to loans, social support, and other important resources for business formation (Bruhn and Love 2011; Novta and Wong 2017). Evidence also suggests that advantaged Mexican households transmit fewer resources to daughters than sons (Torche 2015), indicating that highly educated women have a more limited advantage than men in terms of inherited assets. Overall, the research on gender and work in Mexico suggests that women face greater pressure to enter self-employment – either as an intentional mobility strategy or as an alternative to unemployment – but that self-employed women operate with more limited resources than men. Additionally, educated women do not experience the same labor market opportunities as their advantaged male peers, suggesting that entry into self-employment may be less selective among highly educated women relative to men. Thus, to the extent that access to resources contributes to prosperous self-employment, self-employed women likely experience a higher overall rate of business failure and receive fewer returns to education than men.

DATA AND MEASURES

To model business survival among Mexican workers, I used data from the ENOE merged with the two most recent waves of the ENAMIN, which were collected in 2010 and 2012. The ENOE is a stratified random sample of the Mexican population that is representative nationally, regionally, and across levels of community size and development (INEGI 2012). It employs a

rotating panel structure in which individuals are surveyed for five successive quarters (every three months). The panels are staggered. Every quarter 20 percent of the sample is replaced.

At each interview, respondents indicate whether or not they have a boss or supervisor in their primary job. Those who do not indicate if they dedicate themselves to a business or activity on their own-account. I classified each respondent that answered no to the first question and yes to the second as self-employed. With this information, it is possible to prospectively assess the relative effects of business characteristics and other factors on the probability of failure within a one-year time period. Exit was coded dichotomously, with respondents who were self-employed at the first and last interview given a value of 0 and respondents who were self-employed at the first interview and not self-employed at the last interview given a value of 1. With this information, the ENOE provides an ideal dataset with which to assess patterns of entry into and exit from self-employment throughout the Mexican population. However, the ENOE does not collect detailed retrospective information about the initial business formation, such as respondents' reasons for becoming self-employed, how they financed their businesses, or the year in which they first became self-employed. I drew this information from the ENAMIN.

The ENAMIN is a probabilistic, nationally representative survey of small business owners. Small business owners are sampled from the ENOE, which enables analysis of a merged dataset containing detailed information about small businesses from the ENAMIN as well as a longitudinal assessment of survival from the ENOE (Fajnzlber et al. 2006).²⁸ Of interest to the current analysis, the ENAMIN collects detailed retrospective reports on respondents' reasons for becoming self-employed and their funding sources at the moment of business formation. Like the

²⁸ To confirm the quality of the merge, I estimated correlation coefficients for sex, state of residence, and age. All of the correlations were 1.0 indicating a perfect match between the two datasets.

ENOE, the ENAMIN is stratified to be representative by state and community size. The ENAMIN solicits year of business formation, which enables estimation of hazard models adjusted for differences in the risk of exit by business age. The ENAMIN purposively samples non-agricultural small businesses with 0-15 employees, which covers the vast majority of small businesses in Mexico – both successful and marginal – (Hagan et al. 2015; Perry et al. 2007).

I restricted the sample to working-age respondents between 24 and 65 years old. This age range includes workers who have finished their education and had a few years to develop skills and acquire some financial capital, but not reached retirement age. All analyses exclude agricultural workers. Agricultural self-employment is indicative of marginal subsistence, most commonly found in less developed, rural communities that lack the labor market diversity necessary to capture competing processes of marginal and intentional self-employment, which are of interest here (Fajnzlber et al. 2006; Gindling and Newhouse 2014). I also excluded owners of public sector businesses (less than 0.1% of the total) and major corporations (less than 1% of the total), which are almost entirely operated by highly educated workers with vast amounts of capital. Finally, because of my interest in the role of financial resources at the time of business founding, I omitted 8,879 respondents who inherited their businesses or were part of joint founding teams. The ENOE-ENAMIN merged sample contained 37,191 observations. I excluded 3,497 respondents who were outside the specified age range and 87 observations (0.5%) with missing information on study variables, leaving an analytic sample with 33,607 observations including a similar number of men and women, 16,610 and 16,997 respectively. I applied sampling weights to adjust for the surveys' complex design. Thus, my analysis reflects patterns of non-agricultural self-employment among working-age Mexican men and women who started their own businesses.

My key independent variables were a set of business characteristics that include the presence of paid employees, source of business funding, possession of a designated business location external to the home, and motivation for becoming self-employed. I also adjusted for respondents who had a business partner, a salaried second job, or an unsalaried second job. To match previous research on the topic, I dichotomously identified those with at least one paid worker as having paid employees (Gindling and Newhouse 2014; Grimm et al. 2012; Hagan et al. 2015; Mandelman and Montes-Rojas 2009). Self-employed workers were also asked to describe where their businesses were located. I identified those with permanent physical structures outside the home as having a designated location. ENAMIN respondents were asked how they funded their businesses and why they initiated their businesses. They were given thirteen funding options including other, which I classified as: formal support (bank government or government program), informal support (friend, relative, informal lender, other source), personal savings/assets, and none. Respondents were similarly asked why they became self-employed. I classified the thirteen possible responses into four categories: in response to an opportunity/to maximize returns to their skills, as a flexible source of income/to complement family income, or following job loss/out of necessity, and other. Table A3.1 in Appendix 2 presents the classifications for business funding and motivation for becoming self-employed.

I created a three-category variable to measure educational attainment as primary incomplete (0-5 years), primary complete (6-11 years), and preparatory complete (12+ years). These categories correspond to tiers of educational advantage in Mexico, which in turn shape Mexicans' labor market opportunities (Cortés and Latapí 2005; Huerta-Wong et al. 2013; Torche 2010). Primary incomplete captures the most disadvantaged workers, those who left school well before completing the mandatory 9 years. The majority of those in this category leave school

before the age of ten to begin contributing to family enterprises or working low-wage informal sector jobs to support household consumption (Parker et al. 2007). Without a primary degree, workers are generally consigned to informal sector jobs and self-employment for economic mobility. Primary complete includes those who completed their primary educations, but left school before the end of high school. Completion of primary and potentially middle school improves access to formal sector jobs in factories or as janitors, security guards, and clerks in large businesses. These jobs provide health benefits, written contracts, offering relief from the uncertainty of informal sector work.²⁹ Thus, those in the middle category likely have a lower rate of marginal self-employment than workers who lack a completed primary education. Finally, those who complete preparatory school, grades 10-12, are the most advantaged. Completion of a preparatory degree provides access to a broad array of formal sector jobs, while also opening the door to a university education and entry into the professional class. Previous research also suggests that those with more educational attainment will have a lower risk of exit from self-employment (Fajnzlber et al. 2006; Mandelman and Montes-Rojas 2009).

To account for demographic characteristics, all models were adjusted for age, age-squared, marital status (never married, married, widowed/divorced), the number of working-age household members, and the number of children. Age accounts for life cycle factors. Marital status and household composition are necessary because low-income families generally adopt holistic labor market strategies that involve the strategic deployment of household members into various economic activities that mitigate risks associated with unstable employment in the informal sector (Chant 1991; Stark and Bloom 1985). Household dynamics are gendered

²⁹ I initially treated primary complete (6-8) and secondary complete (9-11) as distinct categories, but the two groups were statistically and substantively identical.

(Cerrutti and Massey 2001; González de la Rocha 1994). Marriage and the presence of children pressure men to maintain income, potentially reducing their risk of exit from self-employment. By contrast, married Mexican women frequently devote considerable attention to non-remunerated domestic tasks, while moving in and out of self-employment as a flexible source of money to complement other household income sources during periods of financial strain (González de la Rocha 1994; Selby et al. 1990).

I also adjusted for the local economic context using information from Mexico's National Population Council's index of marginalization (CONAPO 2010). I created an index of local development using principal component analysis (PCA) to capture variance across education, housing quality, access to utilities, rurality, and poverty. The composite indicator had an eigenvalue of 4.89 and captured 70% of the variance across the items. All of the components were weighted in the same direction, indicating that they reflect distinct aspects of a common outcome. I standardized and reverse-coded the index. Higher scores reflect improvement in terms of community development. I also included state and year fixed effects in all models to capture regional variations in economic and political conditions and fluctuations in the business cycle.

ANALYTIC STRATEGY

I conducted the analysis in two stages. First, I used data from the ENAMIN-ENOE merged file to assess patterns of business funding and motivation by educational attainment and then estimated proportional hazards models of business survival using piece-wise exponential regression. Second, I used the full ENOE datafile to investigate business characteristics, rates of entry and exit by educational attainment, and the probability of exit from self-employment within

a calendar year among self-employed workers with and without paid employees and with and without a designated business location outside the home.

A primary concern in survival models is that respondents may be selective on unobserved characteristics associated with survival up to the window of observation. This problem is typically referred to as left-censoring. If unobserved characteristics associated with selection into the sample are associated with other observed factors that are incorporated into the model, then naïve models will yield biased estimates (Allison 1984). It is quite likely that business characteristics such as the possession of a designated location, presence of paid employees, motivation for becoming self-employed, and source of funding are related to businesses' duration. Thus, ignoring left-censoring is inadvisable.

I adjusted for left-censoring by using the information on year of business founding available in the ENAMIN to fit proportional hazards models using piece-wise exponential regression. The model takes the form shown in equation 3.1:

$$\lambda_{ij} = \lambda_j(t)e^{\beta_1x_{1i} \dots \beta_nx_{ni}} \quad (3.1)$$

In Equation 3.1, λ_{ij} is the hazard of business failure for individual i in interval j , λ_j is the baseline hazard in interval j , and $e^{\beta_1x_{1i} \dots \beta_nx_{ni}}$ indicates the effect of a bundle of covariates on individual i 's hazard (Clayton and Cuzick 1985). To obtain the actual coefficient estimates, the model is rewritten as the natural logarithm of the hazard, as shown in Equation 2:

$$\ln(\lambda_{ij}) = \ln(\lambda_j(t)) + \beta_1x_1 \dots \beta_nx_n \quad (3.2)$$

Using Equation 2, the model can be estimated with the Poisson operator. Piece-wise exponential regression codes individuals' observations into different intervals (e.g., first six months, seven-twenty-four months, etc.). Within each period, I adjusted for exposure in months to precisely account for cumulative risk duration. This formulation is essential given evidence of a declining hazard rate as firms that fail to become profitable drop out early, creating an increasingly selective pool of long-surviving businesses (Bruderl and Schussler 1990; Freeman, Carroll, and Hannan 1983).

To assess Paths A and B shown in Figure 3.1, I estimated a series of nested hazard models. Model 1 identifies the association between educational attainment and business survival (Path A), adjusted for control variables. In subsequent models, I incorporated the measures of motivations for becoming self-employed (Model 2), presence of paid employees (model 3), and access to funding and possession of a designated business location (Model 4). This modeling strategy provides two pieces of information. First, it determines whether access to financial resources has a direct effect on business survival that is independent of educational attainment and motivations behind entry into self-employment. Second, it determines whether adjustment for funding and possession of a designated location attenuates the effect of education on business survival, as suggested by Path B.

Because coefficients from binary regressions are affected by the magnitude of unobserved heterogeneity, it is inadvisable to directly compare them across nested or stratified models (Mood 2010). In order to assess differences in the effect of educational attainment between models, I computed average marginal effects (AME) of independent variables on the probability of exit. AMEs take each observation's logit coefficient, multiply it by their X-value, and then average across the entire sample to generate predicted probabilities and measures of

change (Williams 2012). In simple terms, AMEs report the average difference in the probability that $Y=1$ associated with a 1-unit change in X . Hence, AMEs report the average effect of key independent variables on the probability of exiting self-employment – business failure.

In the second analytical stage, which assess the validity of paid employees and possession of a designated business location as indicators of successful self-employment, I used the full ENOE sample. Within the full sample, I identified the proportion of self-employed workers who had either paid employees or a designated location at the first interview, who exhibited those same characteristics at the last interview, one year later. Next, I computed predicted probabilities of exit with and without paid employees or a permanent location outside the home based on logistic regression models of exit. The predicted probabilities document the utility of each variable as a predictor of business stability within a large nationally representative cross-section of the Mexican workforce. Stage 2 also provides a valuable extension of Stage 1. The ENAMIN purposively samples microenterprises, while omitting a majority of ambulatory and in-home businesses. As a result, it likely oversamples intentional and prosperous self-employment relative to more marginal survivalist ventures. For example, the ratio of employers to own-account workers in the ENAMIN was just $1/3$, compared to $1/5$ in the ENOE.

RESULTS

Stage 1: Business Resources, Motivations, and Patterns of Survival

Table 3.1 shows motivations for business formation and sources of start-up capital among self-employed Mexicans. Despite the high rate of own-account work among less-educated Mexican men, which scholars attribute to unemployment, the rate of opportunistic entry into self-employment was comparable across educational levels. The high rate of opportunistic entry

among less educated Mexican men is consistent with the widely reported view that self-employment can lead to long-term economic stability (Maloney 2004; Perry et al. 2007), not just provide short-term reprieve in the face of unemployment.

Consistent with research on gendered labor market patterns and household survival strategies in Mexico (Cunningham 2001; González de la Rocha 1994), women most commonly became self-employed to complement household income. However, there were important variations by education. Women who had completed high school were much less likely to become self-employed as complementary source of income, perhaps reflecting greater wealth in more educated households. Thus, despite the persistent importance of self-employment as a short-term source of cash among female homemakers, educational expansion has contributed to a growing class of female entrepreneurs who rely on self-employment as their primary source of income, some in response to perceived labor market opportunities, and others in response to discrimination or exclusion from the wage labor market. So, how do Mexican men and women finance their businesses in a country with inefficient credit markets and limited access to loans?

As Panel B shows, less than 5 percent of self-employed men and between 5 and 7 percent of women secured formal support from the government for their businesses. A modest proportion, about 20 percent of men and 30 percent of women received support from friends and relatives. But, the vast majority (more than 60 percent of men and 50 percent of women, regardless of educational attainment) relied on personal savings or other assets to fund their businesses. About 15 percent reported that they did not need any start-up funds. Less educated men were the most likely (24 percent) to report no start-up funds. Their lack of funding likely reflects a higher rate of marginal self-employment paired with contemporaneous job searches, but it could also indicate limited resources, comparable rates of opportunistic entrepreneurship

despite disparate patterns of funding. The most striking takeaway, however, was the general reliance on personal assets and informal networks to support businesses. Reliance on personal and in-network financial capital advantages educated workers, who have more inherited assets to liquidate and are embedded in more affluent social networks (Torche and Spilerman 2009).

Table 3.2 presents results from the models of business survival among Mexican men. Model 1 reveals a clear educational gradient in business survival. Completion of high school was associated with 27 percent ($p < 0.001$) lower odds of business failure. Thus, consistent with Path A in Figure 3.1, educational attainment was associated with greater stability among self-employed Mexican men. The non-significance of completion of primary school (6-11 years) points to the declining value of middle school following Mexico's educational expansion (Parrado 2005). Other characteristics in Model 1 operated as expected. The rate of failure declined with business age, likely reflecting more rapid exit as marginally self-employed workers find other jobs and stabilization over time among opportunistic entrepreneurs. The rate of failure exhibits a U-shaped curve across the life course, gradually declining into middle age and then accelerating late in life, reflecting labor market careers which stabilize late in life before retirement. Marriage and additional household members were associated with lower odds of exit, indicative of the responsibility to provide among Mexican husbands and fathers.

Model 2, incorporated the measures of motivation for entry into self-employment. Entry into self-employment as a flexible source of income was associated with higher odds of exit. There was no significant effect of entry as a last resort. The lack of association between entry out of necessity and business survival may reflect the inability of survivalist self-employed workers to find alternative work. Adjustment for motivations had no effect on the coefficients on educational attainment, suggesting that the relationship between education and business survival

does not operate through differential selectivity. Model 3 adjusted for paid employees. Having paid employees was also associated with significantly lower odds of exit, indicating that the presence of employees is associated with more successful self-employment, as found by previous scholarship (Gindling and Newhouse 2014; Mandelman and Montes-Rojas 2009). Yet, the educational gradient was only marginally attenuated and remained statistically significant.

Model 4 adjusted for financial support upon founding and a permanent business location outside of the family home. Two observations emerge. First, receipt of funding from a bank or lender had no effect on business failure, but support from friends and relatives and investment of personal savings/assets reduced the odds of failure by 17 percent ($p < 0.01$) and 20 percent ($p < 0.001$) respectively. Possession of a designated business location was associated with a large (30 percent, $p < 0.001$) reduction in the odds of business failure. Thus, capital investment and access to funding through social support networks were strongly and positively associated with business stability among Mexican men. Second, the association between high school completion and business survival fell by 50 percent became non-significant. In contrast, the coefficients on motivation for becoming self-employed were unchanged. The declining association between educational attainment and the odds of business failure after adjustment for funding and possession of a designated location indicates that higher education benefits self-employed Mexican men through enhanced access to financial resources associated with wealthier parents, higher paying jobs, and more affluent networks, which alleviate the capital constraints imposed by inefficient credit markets. This pattern is consistent with Path B in Figure 3.1.

To assess the robustness of the coefficient changes across models, Figure 3.2 presents AMEs of educational attainment, business motivation, paid employees, funding source, and possession of a designated location based on Models 1-4 in Table 3.2. There was only a slight

attenuation in the AMEs for education across the first three models. But, from Model 3 to Model 4, the AME on completion of high school fell by 47 percent and became statistically indistinguishable from zero. In contrast, the AMEs on business motivation were unchanged. The marginal effects analysis confirms the results from the nested regression models, suggesting that differences in business survival across levels of education are driven largely by disparate financial resources, rather than a direct effect of human capital skills.

Table 3.3 presents results from the proportional hazard models of business survival among Mexican women. In stark contrast to men, there was no educational gradient in business survival among Mexican women. The lack of an educational advantage supports the expectation that gender discrimination in hiring and limited access to financial resources among women offset the advantages incurred by formal education (Camou and Maubrigades 2017). Other household and demographic characteristics operated similarly among women as among men, consistent with expectations. Importantly, note that in contrast to men, marriage was associated with higher odds of exit among women, reflecting movement in and out of self-employment as a flexible way to support the household economy. In Model 2, becoming self-employed as a flexible income source was associated with a greater risk of exit, consistent with gender expectations. However, as was the case among men, entry into self-employment as a last resort was not significantly associated with higher odds of exit, likely highlighting the prevalence of survivalist self-employment, similar to that identified among return migrants in Chapter 1. Model 3 shows that paid employees were associated with more stable enterprises among women.

As was the case among men, Model 4 reveals that possession of a designated business location had by far the strongest impact on the odds of women remaining self-employed, reducing the odds of exit by 38 percent. All three sources of funding were also associated with

significantly lower odds of exit among women. Yet, the strongest protective effect was receipt of formal financial support from a bank or government program, which was associated with 29 percent lower odds of exit ($p < 0.01$). Whereas all three types of funding had similar effect-sizes among men, the impact of formal support was more than twice as large as either informal loans or personal resources among women. The strong protective effect of formal financing points to more limited familial and social support available to Mexican women relative to men (Novta and Wong 2017; Torche 2015). In particular, the weaker relative effect of personal savings is consistent with studies that document lower intergenerational wealth transfers to female children relative to their male counterparts (Torche 2015).

Figure 3.3 presents AMEs of key variables from Models 1-4 among women. Throughout the models, the AMEs on education remained non-significant. Note, however, that from Model 3 to Model 4, the AME on high school completion shifted considerably to the right, a movement consistent with Path B in Figure 3.1. In contrast, the coefficients on business motivations again remained largely unchanged. The AMEs on possession of a designated business location and receipt of funding demonstrate the importance of capital to self-employment ventures among women. Possession of a business located outside the home and receipt of start-up funds from a formal source were associated with 15 percent and 10 percent lower probabilities of failure respectively, more than double any of the other predictors. Among both men and women, possession of a designated business location outside the home provided a much stronger predictor of business survival than the more commonly used indicator, paid employees.

Collectively, the models of business survival demonstrate that financing during business formation and possession of a permanent business location provide critical sources of stability among self-employed Mexican men and women, over and above educational attainment and

selection into self-employment. Moreover, after adjusting for disparate access to resources and selection into self-employment, educational attainment had no discernible effect on business survival, challenging the well-established literature that argues that human capital skills attained via formal educational are essential to prosperous self-employment. Rather, the survival analysis suggests that higher education is associated with greater access to financial resources, which can be used to invest in business facilities and other capital inputs with which entrepreneurs stabilize and grow their ventures.

Stage 2: Identifying Prosperous Self-Employment without Business History

Table 3.4 characterizes the business activities and rates of entry and exit among working-age Mexican men and women using the full sample in the ENOE. Panel A characterizes the business activities of self-employed Mexican men within each educational category. Consistent with their high rate of informal sector employment, limited access to formal sector jobs, and reliance on their own limited resources, less educated men were much more likely to operate marginal in-home businesses without paid employees. As the table shows, men who did not complete primary school were more than twice as likely as their more educated counterparts to operate these marginal businesses. There was less of a disparity by education in the rate of more prosperous self-employment both in terms of paid employees and possession of a designated location. Indeed, overall there was only a modest difference in the rate of self-employment with employees, which ranged from 5.5 percent among those with primary complete to 6.7 percent among men who had completed high school. But, those without a completed primary education were only half as likely as their highly educated counterparts to be self-employed with a permanent location outside the home, suggesting potentially significant barriers to the

establishment of stable enterprises with designated facilities by less educated workers. Finally, note that summaries of only self-employed workers exaggerate the disparity in prosperous self-employment because of the high rate of marginal self-employment among workers with little schooling. Put simply, despite a high rate of marginal self-employment, a non-trivial proportion of less educated workers operate businesses that exhibit indicators of prosperity and stability.

Turning to Panel B, note that men with little schooling experienced much higher rates of entry into marginal self-employment. Less educated workers are also more likely to become self-employed with employees, questioning the contention that entry into self-employment with employees reflects an entrepreneurial move characteristic of highly educated workers (Mandelman and Montes-Rojas 2009). In contrast, more highly educated workers are significantly more likely to enter self-employment with established physical locations outside of the home. The disparate rates of entry into self-employment with independent businesses external to the family home is suggestive of the impact that inefficient credit markets have on less educated workers who lack the personal resources to finance their independent ventures. Given the high rate of opportunistic entry into self-employment across levels of education (Table 3.1), the high rate of entry into marginal self-employment among men with little schooling could reflect the initiation of new businesses among resource strapped workers who hope to expand and stabilize their enterprises over time.

Panel C reveals a similar distribution of female self-employment to that among men but with several important differences. First, a much lower overall proportion of women were self-employed in each category, which reflects in large part the high rate of labor market inactivity among women (50 percent, compared to just 9 percent among men). The educational gradient of marginal self-employment among women mirrored that among men, but within each educational

group, women were about 10 percentage points more likely to be self-employed without employees or a business located outside of the home. Women were also much less likely to be self-employed with employees, particularly among the least educated. The lack of employees may stem from women's tendency to engage in in-home care work or to operate small short-term businesses to supplement household income (González de la Rocha 1994; Hagan et al. 2015). However, the proportion of self-employed women in each educational category with a business location outside the home was quite similar to that among men, indicating a comparable rate of resource investment in business ventures among economically active women and men.

Panel D reveals an educational gradient in entry into marginal self-employment among women. However, there was little difference in the rate of entry between women with 0-5 years of schooling and those with 6-11 years of schooling. The similar rate of entry into marginal self-employment may reflect movement in and out of self-employment among female homemakers with less than a high school degree who frequently rely on marginal ventures (e.g., cooking and selling tamales at flea markets or working as independent contractors providing domestic service to wealthy families) to contribute to the household economy, as shown in Table 3.1 (Chant 1991; González de la Rocha 1994; Selby, Murphy, and Lorenzen 1990). As among men, more educated women were more likely to launch enterprises outside the home, pointing to a consistent educational gradient in financial resources.

About 45 percent of self-employed women change jobs every year, about a third higher than the rate of exit among men. Women's high rate of exit could reflect movement in and out of self-employment among mothers seeking a flexible source of income as well as life cycle changes such as marriage and childbearing, which encourage women to adopt homemaker status (González de la Rocha 1994; Maloney 2004). But, it could also reflect gender discrimination and

limited support for female entrepreneurship (Cunningham 2001; Cunningham and Maloney 2001), especially among highly educated women. Indeed, highly educated women exit self-employment at the same rate as their less educated counterparts, despite a higher rate of opportunistic entry.³⁰ The similar patterns of exit by educational attainment are consistent with the expectation that gender discrimination in the wage labor market reduces the selectivity of highly educated women into self-employment. Their lack of stability also likely reflects more limited financial capital among women, regardless of education (Novta and Wong 2017).

Table 3.5 reports the stability of the two competing indicators of prosperous self-employment: the presence of paid employees and possession of a designated business location outside the home. Among workers who were self-employed with employees or businesses located outside their homes at the first interview, I calculated the percentage who were still self-employed with employees or locations respectively at the final interview – up to 12 months later. Previous research emphasizes the association between paid employees and business earnings and productivity (Gindling and Newhouse 2014; Grimm et al. 2012) but pays insufficient attention to the stability of paid employees over time.

Table 3.5 reveals that possession of a designated business location is much more stable across time for every educational group among both men and women. Indeed, about half of all men and women with less than 12 years of education who had employees at the first interview did not report any employees at the last interview. Even among the most educated workers, more than a third of Wave 1 employers reported no employees at the final interview. The high degree

³⁰ Another possibility was that exit was higher among women due to movement in and out of self-employment among women engaged in joint spousal ventures. However, this could have only accounted for a modest proportion of the higher overall rate of exit as just 3 percent of self-employed women in the ENOE reported having one or more business associates.

of volatility among employers supports the concern that employees may be endogenous to rather than predictive of ups and downs in self-employed workers' businesses. At the very least, it is clear that the presence of paid employees provides an unreliable indicator of successful self-employment as nearly half of employers either shift to own-account work or exit self-employment every 12 months.

In contrast, more than 70 percent of workers who had a permanent location at the first interview reported a business structure independent of the household again at the final follow-up, regardless of education. Additionally, there was less variation in the stability of a permanent business location across educational levels, with only about a 10 percent gap between the least educated and the most educated. Moreover, within each education-gender group, a designated business structure external to the home outperformed the presence of paid employees by about 20 percentage points. Physical business locations capture previous capital investments, a sign of intentional and planned self-employment, and provide future stability in the form of a permanent workspace. Workers who make significant investments in businesses tend to achieve stability and appear to remain committed to their businesses. Even the gender gap in stability flips from greater volatility among women employers to lower volatility among self-employed women with businesses located outside the home. Despite highly gendered labor market patterns in Mexico, there is a subset of stably self-employed men and women with established business locations. This finding has broad implications given the extensive reliance on employees to quantify and predict prosperous self-employment in studies on development and mobility throughout LMICs (e.g., Gindling and Newhouse 2014; Mandelman and Montes-Rojas 2009).

To illustrate the significance of a separate business structure as an indicator of business stability, I computed the predicted probability of exit from self-employment by the presence of

employees and a designated business location among workers in each education-gender category while holding other variables constant.³¹ Figure 3.4 presents the estimates. With the exception of men with a high school degree, the probability of exit did not differ significantly depending on the presence of paid employees. In other words, in five of the six education-gender groups, the presence of paid employees had no discernible impact on the probability of exiting self-employment. However, among men, there was a significant educational gradient in business survival among those with and without paid employees. Thus, not only do paid employees not predict business exit within educational groups, they also fail to explain variation in the probability of exit by education.

In contrast, the predicted probabilities of exit among both men and women were much lower with a designated business location versus without one. Moreover, the difference in the probability of exit with and without a business location dwarfed small educational gradients that remained within each category. The predicted probabilities illustrate the significance of a designated business location as an indicator of self-employment stability among Mexican men and women. Moreover, they provide further evidence that the majority of the disparity in stable self-employment associated with educational attainment is driven by disparate access to financial resources and an elevated rate of marginal self-employment among less educated workers.

³¹ The probabilities are based on logistic regression models of the odds of exit regressed on all of the variables in Model 4 of Tables 3.2 and 3.3 except business motivation and funding source, which are not available in the ENOE.

CONCLUSION

In this chapter, I investigated mobility through self-employment among Mexican workers. My results contribute to the debate around self-employment as an economic mobility strategy among workers with little schooling in LMICs. Because less-educated workers have limited access to well-paying professional jobs in the formal sector of the economy (Huerta-Wong et al. 2013), scholars generally view self-employment as the primary avenue to economic stability open to workers with little schooling (Balán et al. 1973; Bargain and Kwenda 2011; Perry et al. 2007; Selby et al. 1990). At the same time, studies of self-employment consistently find that education is a key predictor of entrepreneurial success, indicative of more rapid growth, higher earnings, and longer survival (Fajnzlber et al. 2006; Gindling and Newhouse 2014; Grimm et al. 2012; Mandelman and Montes-Rojas 2009). These results lead scholars to view education as conferring valuable human capital, which self-employed workers invest in the stability and growth of their businesses.

In my analysis, I delineated between the prevailing perspective that workers receive a benefit from formal human capital skills accumulated via education (Path A in Figure 3.1) and an alternative explanation that education provides an indirect benefit through access to critical economic resources that can be invested in businesses (Path B in Figure 3.2). I found that, among men, after adjusting for opportunistic versus necessity or complementary reasons for entry into self-employment, possession of a designated business location and receipt of financial support from friends and relatives were strongly associated with business survival. Adjustment for these resources explained nearly half of the association between educational attainment and business survival, reducing it to statistical non-significance. These results provide strong support for Path B, indicating that the often-observed association between educational attainment and

prosperous self-employment largely reflects greater access to formal and informal sources of financial support among workers with high levels of education.

There were important differences in survival patterns by gender. Overall, women had a much higher rate of exit from self-employment than men, a result that is consistent with women's movement in and out of self-employment as a flexible source of income (Chant 1991; González de la Rocha 1994; Selby et al. 1990) and a response to the balancing of family time and work time (Cunningham 2001; Maloney 2004). However, despite a lower rate of entry into self-employment to supplement household income, highly educated women had about the same rate of exit from self-employment as their less educated counterparts, even in the baseline models that did not adjust for differential access to resources. Despite gains in educational attainment and labor force participation, recent studies show that women in Mexico and throughout Latin America earn less money for the same work done by men and have more limited access to resources including loans, social support, and intergenerational wealth transmissions (Camou and Maubrigades 2017; Kelley et al. 2017; Novta and Wong 2017; Torche 2015). My findings extend this research, showing that education does not confer added stability to women's business ventures, in contrast to a significant benefit among men.

My analysis also calls into question the widely used strategy of identifying self-employed workers with paid employees as successful (e.g., Gindling and Newhouse 2014; Grimm et al. 2012; Hagan and Wassink 2016; Mandelman and Montes-Rojas 2009). Indeed, more than 40 percent of self-employed Mexican men and women with employees revert to own-account work or leave self-employment every twelve months. But, I identified the presence of a similarly sized subset of stable self-employed workers using possession of a permanent business location outside the home. Substantively, possession of a permanent location outside the home signals the

intentional investment of financial resources in a business, thereby eliminating short-term necessity entrepreneurs engaged in in-home or ambulatory ventures with low barriers to entry and exit (Hagan et al. 2015; Levy 2008). Quantitatively, between 75 and 80 percent of self-employed workers with designated workspaces remain in that status across a 12-month period, a significant improvement over self-employment with employees. Indeed, after adjustment for demographic and contextual factors, the difference in the probability of exit from self-employment was far greater between self-employed workers with and without a designated business location relative to the disparity by level of educational attainment. The same cannot be said of the distinction between employers and own-account workers. This analysis indicates that in cross-sectional datasets with limited retrospective information on the history of self-employment, possession of a designated business location provides a strong indicator of self-employment, while the presence of paid employees is limited even in its ability to predict the likelihood of remaining self-employed over a short one-year period.

More broadly, and from a policy perspective, my results point to the importance of providing financial support to emerging businesses, which are often hindered by a lack of start-up capital, especially among workers with little schooling. According to a recent survey, 30 percent of Mexicans who aspire to entrepreneurship report that they have not yet started businesses because they are afraid they will fail (GEM Mexico 2016). Much of this trepidation likely stems from a lack of financial capital with which to get nascent enterprises off the ground. Analyses of conditional cash transfer programs in informal market settings, including but not limited to Mexico, repeatedly show that one-time grants as small as \$100 or \$200 significantly increase the odds of business survival and growth across extended time periods (De Mel et al. 2012; Dodlova et al. 2015). Indeed, an experimental study of small Mexican firms found that

returns to one-time cash transfers and in-kind grants were greatest among the most capitally constrained firms (McKenzie and Woodruff 2008). My analysis suggests that the broader implementation of such programs would disproportionately benefit self-employed workers with little schooling. Moreover, micro-lending programs have the potential to reduce gender disparities in entrepreneurship, which are driven in large part by women's limited access to capital via social and familial networks. Indeed, my results indicate that women benefitted disproportionately from the receipt of formal bank loans and government funding at the moment of business formation, highlighting the potential for government intervention to reduce gender disparities in entrepreneurship, especially given comparable rates of business survival among self-employed men and women who possess permanent business locations outside of the home.

It goes without saying that long-term responses to social inequality should involve ameliorating educational disparities, yet such policies will primarily affect future generations. Short-term solutions are required to address the needs of hundreds of millions of working-age adults throughout LMICs who lack the educational credentials to secure salaried professional jobs. Between 30 and 50 percent of these workers operate marginal businesses on the fringe of the informal economy, unable to achieve economic success as laborers or entrepreneurs. According to a United Nations development report, a critical component of the post-2015 development agenda is to "increase the returns for workers who remain self-employed... and promote the graduation of the self-employed from one segment to another, higher-earning form of employment" (Fields 2013:1). My analysis suggests that access to financial capital promotes the formation of prosperous enterprises that enable economic stability, particularly among less educated workers in LMICs such as Mexico, where stagnant wages and falling returns to

education have dampened prospects for occupational mobility in recent decades (Bouillon et al. 2003; Parrado 2005; Passell et al. 2012).

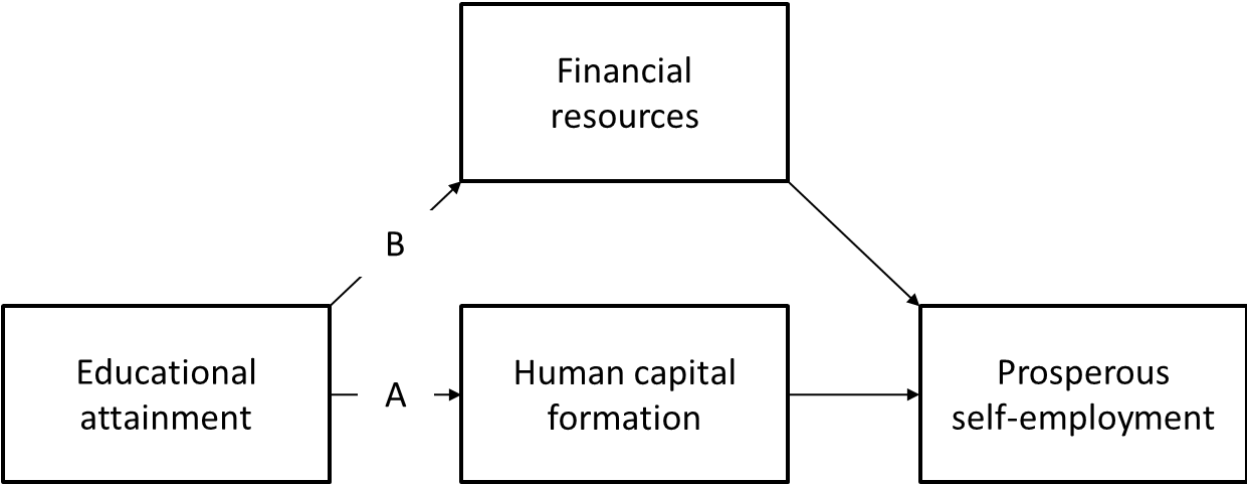


Figure 3.1 Theoretical model of the relationship between educational attainment and prosperous self-employment

Table 3.1 Sources of funding and motivations for becoming self-employed among working-age Mexican men and women by level of education

	Men			Women		
	0-5 years	6-11 years	12+ years	0-5 years	6-11 years	12+ years
Panel A. Motivation						
Opportunistic	51%	53%	50%	22%	24%	32%
Complementary	15%	12%	10%	58%	54%	40%
Necessity	30%	30%	33%	16%	17%	22%
Other	4%	5%	6%	4%	5%	7%
Panel B. Funding source						
Formal	2%	3%	4%	5%	7%	6%
Informal	15%	16%	18%	27%	31%	30%
Personal	59%	63%	66%	53%	50%	53%
None	24%	17%	12%	15%	12%	12%
Observations	3,419	9,345	4,255	2,451	8,579	5,598

Source: Author calculations based on the 2010 and 2012 ENAMIN surveys

Table 3.2 Piecewise-exponential models of business survival among working-age Mexican men

	Model 1	Model 2	Model 3	Model 4
Educational attainment (ref: 0-5 years)				
6-11 years	-0.106 (0.083)	-0.103 (0.082)	-0.100 (0.082)	-0.050 (0.083)
12+ years	-0.309 *** (0.093)	-0.305 *** (0.093)	-0.277 ** (0.094)	-0.140 (0.097)
Business characteristics				
<i>Motivation for becoming self-employed (ref: opportunistic/income maximizing)</i>				
Flexible source of income		0.240 ** (0.083)	0.227 ** (0.084)	0.219 ** (0.084)
Last resort		0.067 (0.066)	0.059 (0.066)	0.055 (0.066)
Other motivation		-0.072 (0.118)	-0.064 (0.120)	-0.032 (0.123)
Paid employees			-0.258 *** (0.074)	-0.187 * (0.074)
Designated location outside the home				-0.367 *** (0.075)
<i>Funding source (ref: no funding)</i>				
Formal bank or lender				-0.247 (0.220)
Friends and relatives				-0.245 ** (0.093)
Personal savings/assets				-0.223 *** (0.066)
Has business partner	-0.163 (0.193)	-0.139 (0.189)	-0.156 (0.193)	-0.157 (0.207)
<i>Second job (ref: none)</i>				
Salaried second job	0.590 *** (0.138)	0.592 *** (0.136)	0.603 *** (0.142)	0.569 *** (0.154)
Unsalaries second job	-0.025 (0.128)	-0.044 (0.126)	-0.052 (0.125)	-0.070 (0.127)
Business duration (ref: 0-6 months)				
6 months - 2 years	-0.346 * (0.146)	-0.353 * (0.148)	-0.357 * (0.151)	-0.384 * (0.163)
2-5 years	-1.175 *** (0.143)	-1.173 *** (0.146)	-1.183 *** (0.149)	-1.201 *** (0.160)
5+ years	-3.100 *** (0.147)	-3.087 *** (0.148)	-3.074 *** (0.151)	-3.109 *** (0.160)
Demographic characteristics				
Age	-0.117 ***	-0.117 ***	-0.117 ***	-0.117 ***

	(0.019)		(0.019)		(0.019)		(0.019)
Age-squared	0.001 ***		0.001 ***		0.001 ***		0.001 ***
	(0.000)		(0.000)		(0.000)		(0.000)
Born out of state	-0.050		-0.049		-0.050		-0.060
	(0.069)		(0.069)		(0.070)		(0.070)
<i>Marital status (ref: never married)</i>							
Married	-0.178 *		-0.179 *		-0.164 *		-0.133
	(0.083)		(0.083)		(0.083)		(0.083)
Widowed/divorced	-0.043		-0.042		-0.046		-0.025
	(0.122)		(0.122)		(0.122)		(0.122)
<i>Household composition</i>							
Number of working-age family members	-0.073 ***		-0.073 ***		-0.071 ***		-0.060 **
	(0.022)		(0.021)		(0.021)		(0.021)
Number of children	-0.058 *		-0.058		-0.059 *		-0.060 *
	(0.029)		(0.030)		(0.030)		(0.029)
Local context							
Economic development	-0.018		-0.016		-0.016		-0.026
	(0.033)		(0.033)		(0.033)		(0.033)
Constant	2.884 ***		2.797 ***		2.844 ***		3.121 ***
	(0.478)		(0.481)		(0.485)		(0.489)
Observations	16,610		16,610		16,610		16,610

Standard errors in parentheses

* p<0.05, ** p<0.01, *** p<0.001

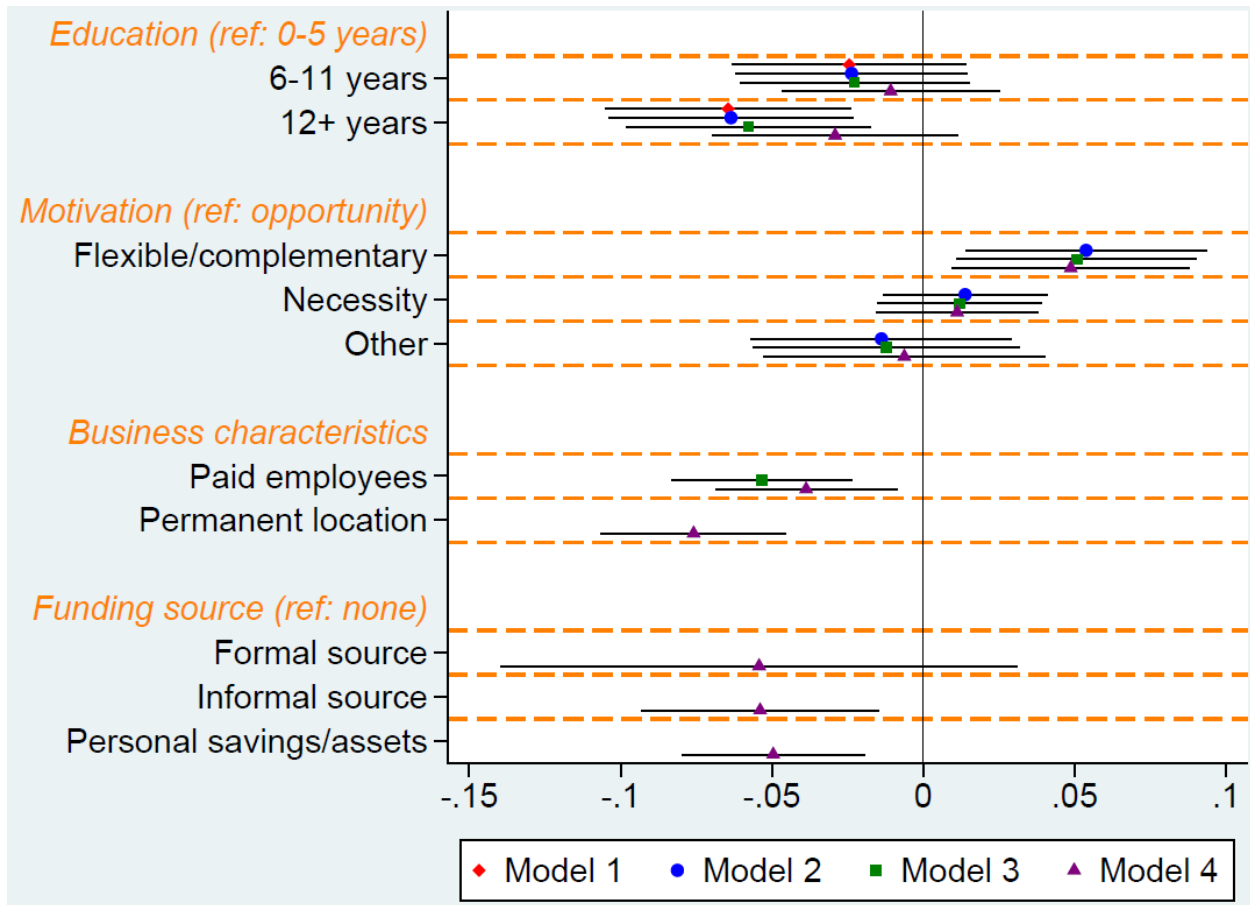


Figure 3.2 Average marginal effects of key personal and business characteristics on the probability of business failure among Mexican men.

Table 3.3 Piecewise-exponential models of business survival among working-age Mexican women

	Model 1	Model 2	Model 3	Model 4
Educational attainment (ref: 0-5 years)				
6-11 years	-0.089 (0.059)	-0.086 (0.059)	-0.079 (0.059)	-0.034 (0.059)
12+ years	-0.128 (0.074)	-0.107 (0.074)	-0.092 (0.074)	-0.007 (0.075)
Business characteristics				
<i>Motivation for becoming self-employed (ref: opportunistic/income maximizing)</i>				
Flexible source of income		0.144 ** (0.054)	0.137 * (0.053)	0.106 * (0.053)
Last resort		0.026 (0.069)	0.025 (0.069)	0.023 (0.069)
Other motivation		0.023 (0.122)	0.033 (0.122)	0.009 (0.121)
Paid employees			-0.297 ** (0.111)	-0.154 (0.112)
Designated location outside the home				-0.476 *** (0.063)
<i>Funding source (ref: no funding)</i>				
Formal bank or lender				-0.340 ** (0.115)
Informal lender				-0.160 * (0.063)
Personal savings/assets				-0.158 ** (0.060)
Has business partner	-0.327 (0.240)	-0.308 (0.241)	-0.265 (0.234)	-0.160 (0.238)
<i>Second job (ref: none)</i>				
Salaried second job	0.381 * (0.158)	0.389 * (0.157)	0.382 * (0.157)	0.347 * (0.153)
Unsalaries second job	-0.068 (0.097)	-0.062 (0.098)	-0.058 (0.096)	-0.064 (0.097)
Business duration (ref: 0-6 months)				
6 months - 2 years	-0.019 (0.087)	-0.012 (0.087)	-0.006 (0.087)	-0.001 (0.086)
2-5 years	-0.891 *** (0.087)	-0.880 *** (0.088)	-0.878 *** (0.088)	-0.878 *** (0.086)
5+ years	-2.715 *** (0.092)	-2.695 *** (0.092)	-2.687 *** (0.091)	-2.709 *** (0.090)
Demographic characteristics				
Age	-0.047 **	-0.048 **	-0.047 **	-0.046 **

	(0.016)	(0.016)	(0.016)	(0.016)
Age-squared	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Born out of state	-0.056	-0.053	-0.055	-0.066
	(0.059)	(0.059)	(0.059)	(0.060)
<i>Marital status (ref: never married)</i>				
Married	0.182 **	0.152 *	0.155 *	0.147 *
	(0.070)	(0.071)	(0.071)	(0.071)
Widowed/divorced	-0.107	-0.117	-0.114	-0.135
	(0.085)	(0.085)	(0.085)	(0.085)
<i>Household composition</i>				
Number of working-age family members	-0.074 ***	-0.074 ***	-0.072 ***	-0.060 ***
	(0.016)	(0.016)	(0.016)	(0.015)
Number of children	-0.027	-0.028	-0.029	-0.026
	(0.022)	(0.022)	(0.022)	(0.021)
Local context				
Economic development	0.058 **	0.058 **	0.058 **	0.056 *
	(0.022)	(0.022)	(0.022)	(0.022)
Constant	0.415	0.368	0.347	0.547
	(0.377)	(0.375)	(0.374)	(0.381)
Observations	16,997	16,997	16,997	16,997

Standard errors in parentheses

* p<0.05, ** p<0.01, *** p<0.001

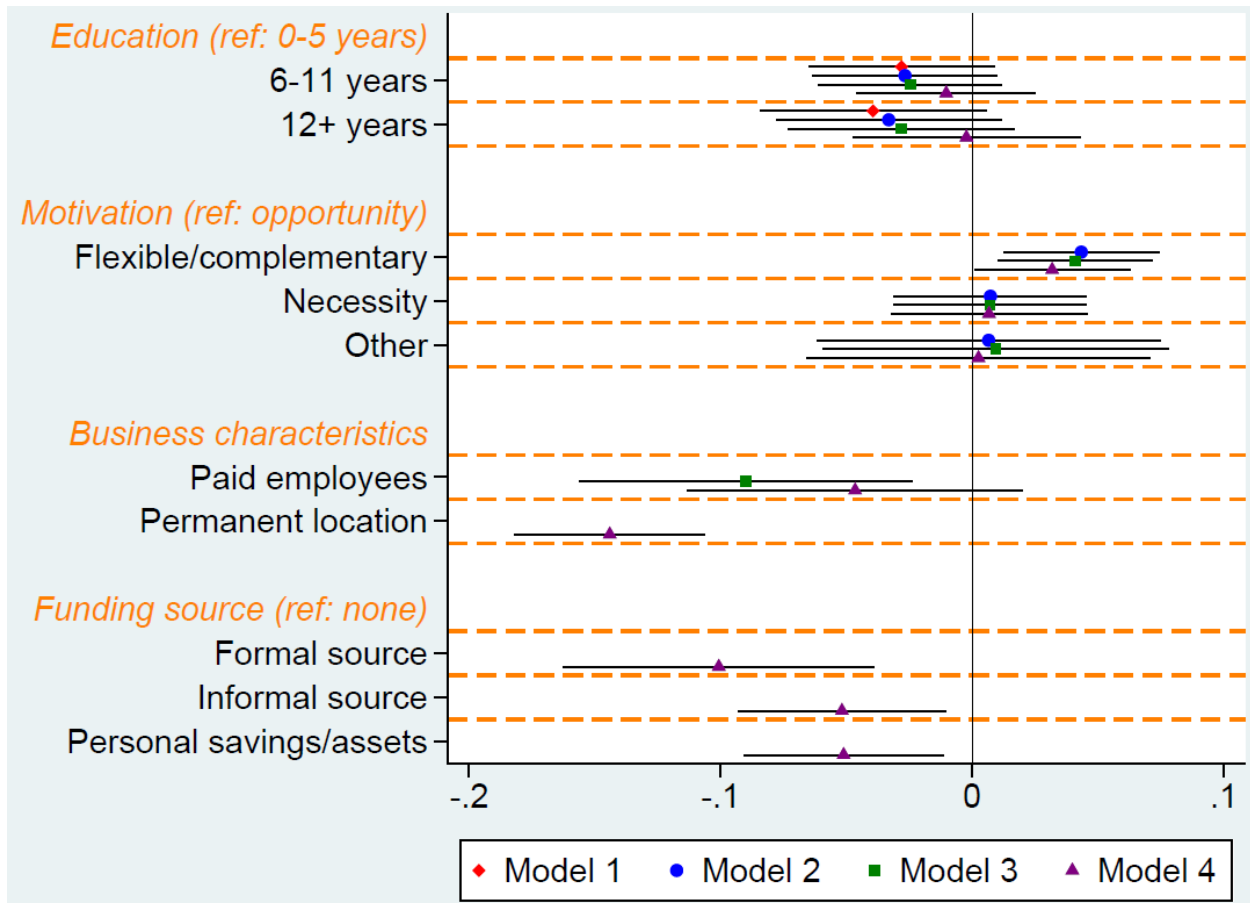


Figure 3.3 Average marginal effects of key personal and business characteristics on the probability of business failure among Mexican women

Table 3.4 Summary of non-agricultural business characteristics and patterns of entry and exit among working-age Mexican men and women by educational attainment

	Educational attainment					
	0-5 years		6-11 years		12+ years	
MEN						
Panel A. Business characteristics	All men employed		All men employed		All men employed	
% Business without employees or location	18.3%	66.2%	13.6%	57.2%	7.7%	39.2%
% Business has paid employees	5.8%	20.9%	5.5%	23.1%	6.7%	34.1%
% Business has a permanent location	5.0%	18.0%	7.2%	30.2%	10.5%	53.5%
Panel B. Entry and exit	All men		All men		All men	
% became self-employed without employees or a location	11.1%		6.0%		3.0%	
% became self-employed with employees	2.6%		1.9%		1.8%	
% became self-employed with a location	1.4%		2.0%		3.0%	
% Self-employed at first interview who were not self-employed at last interview	34%		32%		30%	
WOMEN						
Panel C. Business characteristics	All women	Self-employed	All women	Self-employed	All women	Self-employed
% Business without employees or location	10.9%	75.0%	9.2%	66.2%	5.5%	51.6%
% Business has paid employees	0.7%	4.6%	1.2%	8.3%	1.9%	17.6%
% Business has a permanent location	3.3%	22.9%	4.3%	31.1%	4.9%	46.0%
Panel D. Entry and exit	All women		All women		All women	
% became self-employed without employees or a location	5.7%		6.0%		2.6%	
% became self-employed with employees	0.3%		0.5%		0.7%	
% became self-employed with a location	1.3%		1.7%		2.0%	
% Self-employed at first interview who were not self-employed at last interview	43%		45%		44%	
Observations						

Source: Author calculations based on the ENOE 2005-2017

Table 3.5. Stability of paid employees and designated business location among self-employed Mexican men and women of working-age by educational attainment

Men	Educational attainment		
	<u>0-5 years</u>	<u>6-11 years</u>	<u>12+ years</u>
% with paid employees at first interview who had no employees at last interview	50.7%	56.0%	65.2%
% with a designated location at first interview who had no location at last interview	72.5%	78.2%	82.7%

Women	Educational attainment		
	<u>0-5 years</u>	<u>6-11 years</u>	<u>12+ years</u>
% with paid employees at first interview who had no employees at last interview	43.0%	50.3%	59.1%
% with a designated location at first interview who had no location at last interview	76.2%	82.0%	85.0%

Source ENOE, 2005-2017

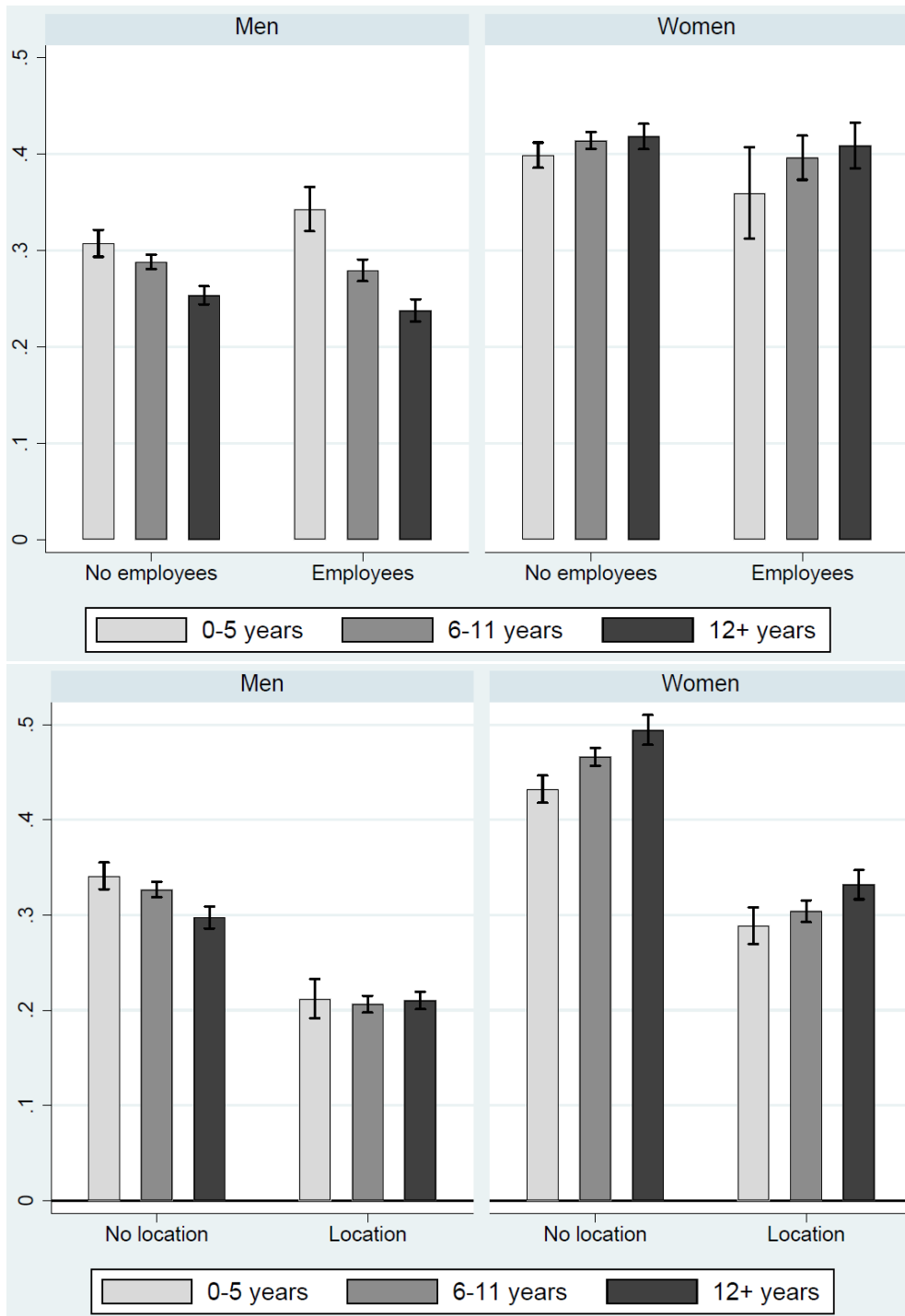


Figure 3.4 Predicted probability of exit by selected business characteristics and years of education among self-employed working-age Mexican women with and without paid employees or permanent locations. Models were adjusted for business partner, second job, age, age-squared, marital status, household composition, local development, state, and year.

CONCLUSION

High levels of stratification and limited intra-generational class mobility encourage workers with limited schooling throughout LMICs to engage in multiple challenging and creative strategies in the hopes of attaining economic stability and mobility (Balán et al. 1973; Gindling and Newhouse 2014; González de la Rocha 1994; Maloney 2004; Parrado 2005; Stark 1991). In this dissertation, I explored two such strategies commonly employed by Mexican workers: migration to the United States and self-employment. My micro-level analyses of return migrants' labor market pathways illustrate ways in which workers with little schooling harness financial and human capital acquired at home and in the United States to achieve in some cases significant mobility upon return. At the same time, labor market experiences are complex and vary in systematic ways by life course stage, educational level, and local context. My dissertation research provides an in-depth investigation the heterogeneous trajectories found among return migrants and self-employed workers navigating the informal labor market and, in some cases, attempting to break into the professional class.

My findings challenge the view that self-employment among return migrants can be measured as a single category indicative of upward or downward mobility. In Chapter 1, I identified three distinct types of self-employment – survivalist, stepping-stone, and prosperous – which capture both the quality and temporality of returnees' self-employment ventures. This typology, which draws on and extends the scholarship on work and self-employment in Latin America (Fajnzlber et al. 2006; Gindling and Newhouse 2014; Mandelman and Montes-Rojas 2009; Perry et al. 2007), can inform future studies of self-employment and mobility among

return migrants in Mexico, Latin America, and beyond. Among the urban respondents that I analyzed in Chapter 1, those who returned early in the life course with new human capital skills were most likely to initiate prosperous businesses. In contrast, older returnees with fewer years of schooling and more limited labor market prospects often became self-employed as a means of survival, when confronted by the prospect of unemployment.

In Chapter 2, I showed how the relationship between time spent in the United States and labor market mobility upon return vary by economic, spatial, and social characteristics of sending communities. As I documented in Chapter 1, economically dynamic and industrially diverse urban areas facilitate the investment of human capital acquired abroad into new entrepreneurial ventures upon return. Younger well-educated migrants returning to urban areas can also invest their savings in college and vocational degrees, which open up the possibility of entering the privileged professional class. In contrast, poor rural areas limit opportunities to invest new skills. But, the major transportation routes and proximity to urban areas create opportunities for returnees to invest savings in small manufacturing and commercial enterprises catering to regional distributors and nearby residents. Opportunities in the sending context interact with life course stages. Middle-aged and older migrants returning to urban or rural and proximate communities often amassed target savings while abroad in order to start new businesses upon return to enable long-term family reunification. In contrast, isolated rural communities with constrained labor markets and social traditions of circular migration encourage return migrants to remain oriented toward work abroad regardless of migrants' life course stages.

At a broad level, Mexican migration to the United States is deeply intertwined with patterns of stratification and immobility that characterize work for most Mexicans with less than a college degree. The NELM and related scholarship offer the optimistic perspective that

international migration creates access to human and financial capital, which can expand migrants' labor market opportunities in sending communities (Hagan et al. 2015; Massey et al. 1999; Massey and Parrado 1998). My analysis corroborates this account, providing evidence of the ways that workers with little schooling rely on international migration to overcome local labor market barriers and achieve economic survival and mobility, especially in urban areas and proximate rural communities (Lindstrom and Lauster 2001a; Massey and Espinosa 1997). At the same time, widespread reliance on U.S.-migration as a source of income and capital highlights the challenges that confront Mexican workers with little schooling and the economically marginalized households in which they too often reside (González de la Rocha 1994, 2007; de la Rocha 2001; Selby et al. 1990). One particularly acute challenge that confronts poor households in Mexico and throughout most LMICs is a lack of start-up funds with which to finance new business ventures (Fields 2013; Lindstrom and Lauster 2001a).

In Chapter 3, I investigated mobility through self-employment among Mexican workers. Less-educated workers have limited access to well-paying professional jobs in the formal sector of the economy (Huerta-Wong et al. 2013). Therefore, scholars generally view self-employment as the primary avenue to upward mobility open to workers with little schooling (Balán et al. 1973; Bargain and Kwenda 2011; Perry et al. 2007; Selby et al. 1990). At the same time, studies of self-employment consistently find that education is a key predictor of entrepreneurial success, indicative of more rapid growth, higher earnings, and longer business survival (Fajnzlber et al. 2006; Gindling and Newhouse 2014; Grimm et al. 2012; Mandelman and Montes-Rojas 2009). These results lead scholars to view education as a source of critical human capital, which self-employed workers rely on to ensure the stability of their businesses.

I delineated between this prevailing perspective and an alternative explanation that education provides an indirect benefit through access to critical economic resources that can be invested in businesses. I also separated my analyses by gender to reflect disparate economic opportunities among men and women in Mexico. I found that, among men and women, after adjusting for opportunistic versus necessity or complementary reasons for entry into self-employment, possession of a designated business location and receipt of financial support from personal networks (friends, relatives, and informal investors) and more formal sources, as well as personal assets. Adjustment for these resources explained nearly half of the association between educational attainment and business survival, reducing it to statistical non-significance. These results indicate that the association between educational attainment and prosperous self-employment largely reflects access to financial resources in terms of inheritance, interpersonal networks, and access to salaried jobs, that accompany higher education.

There were important differences in business survival patterns by gender. Despite a lower rate of entry into self-employment to supplement household income, highly educated women had about the same rate of exit from self-employment as their less educated counterparts, even in the baseline models that did not adjust for differential access to resources. Recent studies show that women in Mexico and throughout Latin America earn less money for the same work done by men and have more limited access to resources including loans, social support, and intergenerational wealth transmissions (Camou and Maubrigades 2017; Kelley et al. 2017; Novta and Wong 2017; Torche 2015). My findings extend this research, showing that education does not confer added stability to women's business ventures, in contrast to a significant benefit among men. Yet, women benefitted disproportionately from the receipt of formal bank loans and

government funding at the moment of business formation, highlighting the potential for government intervention to reduce gender disparities in entrepreneurship.

More broadly, and from a policy perspective, results from my three chapters point to the importance of providing financial support to emerging businesses, which are often hindered by a lack of start-up capital, especially among workers with little schooling. Experimental studies of small informal firms in Mexico and other LMICs show that returns to one-time cash transfers and in-kind grants were greatest among the most capitally constrained firms (De Mel et al. 2012; McKenzie and Woodruff 2008). My analysis suggests that the broader implementation of microlending programs would disproportionately benefit workers with little schooling who have limited opportunities for economic mobility via wage labor.

It goes without saying that long-term responses to social inequality should involve ameliorating educational disparities. Indeed, Mexico has made significant strides in reducing inequitable access to primary and middle school (Parker et al. 2007). My findings reported in Chapter 2 call for additional resources for working-class high school students hoping to pursue university degrees. Yet such policies will primarily affect future generations. Short-term solutions are required to address the needs of working-age adults throughout LMICs who lack the educational credentials to secure salaried professional jobs. Workers in informal markets accumulate often substantial technical, social, and linguistic skills, which provide the human capital necessary to exit low-age informal sector jobs and initiate prosperous businesses (Balán et al. 1973; Hagan et al. 2015; Jütting et al. 2008; Maloney 2004; Perry et al. 2007). At the same time, those workers generally face substantial credit constraints, which can hinder their ability to stabilize nascent ventures (Lindstrom and Lauster 2001a; Stark 1991). My analysis suggests that access to financial capital promotes the formation of prosperous enterprises that enable economic

stability, particularly among less educated workers in LMICs such as Mexico, where stagnant wages and falling returns to education have dampened prospects for occupational mobility in recent decades (Bouillon et al. 2003; Parrado 2005; Passell et al. 2012).

LIMITATIONS AND FUTURE PLANS

This study has several important limitations, which will guide my upcoming research agenda. First, the analyses presented here were conducted exclusively at the individual-level. However, both self-employment and U.S. migration generally fit within multi-pronged family strategies intended to mitigate economic deprivation at the household-level (González de la Rocha 1994; Mines and de Janvry 1982; Selby et al. 1990; Stark 1991; Wood 1981). Second, the analysis of economic mobility among migrants focused on a small and non-random sample of return migrants in a single Mexican state. Although this type of analysis is ideal for identifying individual-level mechanisms, it limits the ability to make broad generalizations based on those findings. Third, the focus on self-employment and U.S.-migration omits a third mobility strategy available to Mexicans with little schooling – internal migration. Below, I briefly outline my plans to incorporate these factors into my research agenda.

To place my individual-level results in household context requires household level data. Later this summer, I will co-direct the collection of case studies with 15-20 migrant-sending households from the current sample of Mexican return migrants. The households will be stratified by local context using the three community types defined in Chapter 2. Each household will provide a unique case with which to investigate household decision-making processes surrounding international migration, the establishment of household enterprises, patterns of paid

and unpaid labor, shifting gender dynamics across the migratory circuit, and patterns of intergenerational transmission within migrant households.

To expand my analysis using large-scale data, I will replicate my analyses using data from the Mexican Migration Project (MMP). The results presented in Chapter 1 and Chapter 2 suggest that migrations have coherent structures that are predictive of long-term economic success and embedded in local context. Beginning this Fall, I will employ sequence analytic techniques to identify a typology of labor market behavior among Mexican return migrants. I will use optimal matching procedures and hierarchical clustering algorithms to measure the difference (similarity) between return migrants' labor market trajectories and then identify clusters that reflect common sequences. I will assess the fit between the identified clusters and theories of international migration using graphing techniques such as sequence index plots and other descriptive procedures available to describe sequence structures (Cornwell 2015). Next, I will treat the distinct labor market trajectories as dependent variables regressed on individuals' demographic characteristics, migration experience, and community context. Then, I will use the different trajectories as independent variables that predict income and wealth at the time of the survey as well as the risk of returning to the United States or migrating internally. Finally, I will explore variations in return migrants' labor market trajectories and migration behavior by community context and time period to assess how local and policy contexts affect labor market re-entry and migration behavior.

I will also evaluate the prevalence of domestic relocation as an alternative mobility strategy to self-employment or U.S.-migration. In Chapter 2, I showed the extent to which local context shapes labor market pathways, variously enhancing or restricting entrepreneurial prospects and opportunities for steady salaried employment. However, local context need not

have the final word. In Mexico, the rate of internal migration far exceeds travel to the United States. Although the expected wage gains associated with internal migration are generally smaller than those received by international migrants (Lucas 2015), internal migration still offers the promise of new opportunities, especially for residents in poor and agrarian communities with established traditions of U.S.-migration (Harris and Todaro 1970; Lindstrom and Lauster 2001a; Massey et al. 1987; Roberts 1978).

Moreover, increases in U.S. immigration enforcement across time disrupt migration patterns. Multiple studies have found that rising U.S. immigration enforcement has encouraged permanent settlement among Mexican immigrants in the United States (Massey, Durand, and Malone 2002; Massey et al. 2016). But what of return migrants who no longer view undocumented migration as a safe or affordable pathway to economic mobility (Angelucci 2012; Martínez et al. 2018; Massey et al. 2015)? Little is known about the fortunes of long-term circular migrants compelled to pursue domestic labor market strategies. As a component of my future research on internal migration in Mexico, I will explore changing patterns of internal migration among return migrants and residents in communities with long histories of circular migration to the United States in response to the rising costs and risks associated with undocumented migration.

APPENDIX 1

Table A1.1 Assessment of bias due to sample attrition

	Original sample	Longitudinal sample
Demographic characteristics		
Male (%)	89%	81%
Age in years (median)	35	39
Married/civil union (%)	82%	83%
Human capital characteristics		
Years of schooling (median)	9	6
Years of work experience (median)	20	21
Total number of jobs (median)	5	5
Ever directed/supervised others (%)	36%	40%
Migration characteristics		
Age at first migration (median)	17	17
Transferred skills from U.S. to Mexico (%)	50%	54%
Number of jobs in the U.S. (median)	2	2
U.S. duration in months (median)	30	24
Remitted money for investment (%)	17%	22%
Undocumented (%)	90%	90%
Ever deported (%)	9%	15%

APPENDIX 2

Table A3.1 Classification of source of funding and motivation for business formation

A. Source of funding at the time of business formation				
	Formal source	Informal source	Personal resources	No funding
Commercial bank	679	0	0	0
Development bank	42	0	0	0
Government program	198	0	0	0
Cajas Populares (popular cash)	722	0	0	0
Credit from suppliers	0	683	0	0
Lenders with interest	0	517	0	0
Friends/relatives with interest	0	4,652	0	0
Other	0	2,028	0	0
Sale/mortgage of personal possessions	0	0	329	0
Liquidation of previous business	0	0	1,519	0
Personal savings	0	0	17,393	0
Didn't need any	0	0	0	4,885
Total	1,641	7,880	19,241	4,885
B. Motivation for business formation				
	Opportunistic	Flexible/ complementary	Necessity	Other
Because of family tradition	1,191	0	0	0
To increase earnings	7,021	0	0	0
Had money and encountered a good opportunity	2,346	0	0	0
to use their education	2,440	0	0	0
To complement family income	0	9,367	0	0
Flexible schedule	0	1,300	0	0
It was the only way to earn money	0	0	2,118	0
Didn't have the experience necessary for a job	0	0	1,325	0
Didn't have the education necessary for a job	0	0	1,184	0
Was overqualified for current job	0	0	885	0
Only found low-wage jobs	0	0	1,807	0
Didn't have employment opportunities	0	0	877	0
Other	0	0	0	1,786
Total	12,998	10,667	8,196	1,786

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