The Economic Attainment of Mexican Refugees during the Age of Mass Migration

By

Peter Catron
Department of Sociology
University of Washington
catron@uw.edu

and

María Vignau Loría
Department of Sociology
University of Washington
mvl4@uw.edu

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Abstract

Research on immigrant economic integration generally focuses on the influence of human capital on later occupational success. This research, however, often ignores other individual-level and contextual-level influences on later attainment and when in settlement they are likely to matter. We therefore create a unique panel dataset that follows a Mexican refugee population from arrival and through settlement in the early twentieth century. This novel data source allows us to examine both individual and contextual characteristics on occupational attainment at different points in time. Our analyses show that individual characteristics beyond human capital measures are likely to matter at first arrival, but their effects attenuate over time. This is especially true for perceived skin complexion, persons travelled with, and age which hold large effects on occupational outcomes at first arrival, but smaller effects after longer settlement. Furthermore, we are able to explore the role context of settlement plays on economic attainment. Consistent with previous research, we find that more favorable contexts are associated with better outcomes than less favorable contexts. This research has implications for the understanding of the adaptation and integration of refugee and immigrant populations by shedding light on what and when different variables influence later attainment.

In the decade between 1910 and 1920, hundreds of thousands of Mexican citizens entered the United States seeking to escape a revolution that convulsed their homeland. The Mexican Revolution resulted in widespread political turmoil, devastation, and economic collapse that produced an economic and political refugee flow.¹ Although some of the refugees would return to their homeland once the Revolution ended, many did not and instead settled throughout the United States. This group concentrated in industries such as agriculture, construction, mining, and other low-wage sectors that helped fuel economic growth. Despite the recent resurgence in research studying historical immigration, however, surprisingly little is known about the extent of economic progress of Mexicans provided their premigration characteristics and conditions of settlement during the age of mass migration (1880-1930). Yet, as scholars continue to look to the past to draw inferences about today's immigrant trajectories, some have argued that the historical Mexican case is the best predictor of contemporary Mexican progress (Fox 2012; Telles and Ortiz 2009). This article seeks to understand how premigration characteristics and context of settlement facilitated or inhibited economic progress of Mexican refugees who remained in the U.S. between 1910 and 1930.

Mexicans at the turn-of-the-twentieth century occupied an important part of the U.S. labor market, particularly in the Southwest and parts of the Midwest. Like their European counterparts, Mexicans benefited from an open border policy that allowed entry into the U.S. In

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¹ Throughout this article we describe the Mexican immigrant flow between 1910 and 1920 as a refugee flow consistent with prior work on this group (see, e.g., Pedraza-Bailey 1985). Although this flow predates official and legal U.S. definitions of who is a refugee and does not fit the 1951 UN Refugee Convention definition of fleeing due to race, religion, nationality, membership of a particular group or political opinion, the Mexican Revolution greatly influenced the conditions of migration during this period. We therefore consider this a flow of sociological refugees in that there is a level of coercion for moving following FitzGerald and Arar (2018).

addition, Mexicans were classified as white by the federal government, which entitled them, in theory, to the same privileges as Europeans such as becoming a citizen, voting, and holding public office. However, economic trajectories of Mexicans varied substantially compared to other European groups. Whereas Europeans experienced upward absolute and relative intergenerational occupational mobility, Mexicans experienced little occupational mobility relative to other groups (Kosack and Ward 2020). Indeed, segments of the Mexican population experienced downward assimilation during this period (Escamilla-Guerrero 2019, Kosack, and Ward 2020; Pedraza-Bailey 1985; Fox 2012). However, most research on Mexican immigration during this period has relied solely on U.S. census data, which excludes premigration characteristics of individuals and the contextual influences of the places they settle. Prior research often argues that premigration occupational differences are the most important drivers of immigrant economic trajectories (Borjas 1994). Low-skilled groups often have long-term disadvantages after settlement leading to slower economic progress than high-skilled groups. However, a large literature has also shown that places people settle can alter these influences by providing greater or worse outcomes both between and within groups (Luthra, Soehl, and Waldinger 2018). In this article, we assess the individual and contextual level factors associated with better or worse economic performance among the Mexican refugee population.

We create a unique dataset of border crossing records of Mexican individuals who crossed between 1910 and 1920 that we then link to their 1920 and 1930 U.S. Census record. This data captures the flow of the legally crossing population. Border crossing records provide a wealth of information of individuals including a physical description, occupation before arrival, and other demographic and economic characteristics of the individual. We use these individual at-entry characteristics to predict economic outcomes after settlement when we find these

individuals later on. This dataset is the first to connect Mexican refugee's premigration characteristics to their after-settlement characteristics in this period. In particular, we focus on how both individual and contextual-level features influenced occupational attainment over time. We find that at early settlement, perceived skin complexion, who they travelled with, and premigration occupation hold significant influences on attainment. However, the influences of complexion and persons travelled with decline in their influence over time while the influence of premigration and selection increases in influence over time. This article is the first to assess occupational attainment over time and the relative influence of skin complexion, premigration occupation, and selection, as measured by height, in the same analyses. In addition, we assess the influence of contextual features after settlement. We analyze the influence community ethnic capital, political reception, and societal reception on later attainment. We find that the level of ethnic capital positively influenced late attainment, while societal reception negatively influenced later attainment. We find a small influence on political reception. This article is the first to assess highly detailed individual and contextual-level influences on immigrant attainment over time.

Mexican Immigration During the Age of Mass Migration

Mexican immigration is one of the most mature migration flows to the United States. After the seizure of Mexico's northern territories following the Mexican-American War of 1846-48, Mexicans soon began crossing the newly formed territorial border for both seasonal work and permanent stay. This flow has generally been characterized as economic where Mexican immigrants entered the U.S. seeking to earn a certain amount and then returned to their homeland. Initially, Mexicans moved to California during the gold rush and then entered Texas

and Arizona seeking work in agriculture, railroads, and mining where wages were six times more than similar work in Mexico (Pedraza-Bailey 1985). The seasonality of work and spread of railroads that connected the interior of Mexico to the U.S. led to a large-scale circular migration pattern that likely surpassed any other immigrant group who entered the U.S. during this time (Martinez 1975). But while many Mexican immigrants would return to their sending community, some did not and instead established residence in the U.S. One of the most consequential periods for settlement in the U.S. among Mexican immigrants occurred between 1910-20 when Mexicans entered as refugees.

In the decades before the Mexican Revolution, the dictatorship of Porfirio Diaz arranged several economic policies that destabilized rural communities in an attempt to industrialize the nation. These policies led to internal migration to Mexico's cities, which in turn led to perennial food shortages and the spread of diseases like typhus (Martinez 1975). Discord among the population led to several revolutionary forces to revolt against the dictatorship in 1910. While the Diaz regime was defeated in less than a year, numerous factions led by different revolutionary leaders kept the country in a state of war and military rebellion for an entire decade (Cardoso 1980). The upheaval greatly affected the country's economic welfare leading to a lost decade of economic growth (Vernon 1963). At the same time, the U.S. Southwest increased its demand for Mexican labor. Southwestern states began large-scale irrigation projects that expanded the level of farming that required a cheap workforce. However, labor shortages occurred throughout the southwest due to the 1882 Chinese Exclusion Act and 1906 Japanese gentleman's agreement that limited the number of workers who traditionally held these positions. As a result, employers in the Southwest began recruiting Mexicans to fill the demand for labor. In addition, meat packinghouses and manufacturing plants in the Midwest also sought a Mexican

workforce for cheap labor and to serve as strikebreakers. Following the entry of the U.S. into World War I, demand for Mexican workers increased in agricultural jobs, railroad construction and maintenance, and mining (Cardoso 1980). Though most Mexicans remained in counties geographically close to the U.S.-Mexico border, the group was spread across the nation.

Due to the nature of the jobs Mexicans took, especially in agriculture, many individuals would often return to their homes in Mexico during the winter months. However, due to the Revolution, political instability, and economic collapse described above, return became less desirable. As a result, Mexican men moved their wives and children to places like El Paso and San Antonio, Texas (Sanchez 1993). There, recruiters from across the country would continue to recruit Mexican men where these cities served as labor “clearing houses” (Sanchez 1993). Men would leave women and children behind for jobs until they returned, resulting in El Paso and San Antonio becoming the only cities in the nation with more women than men during this time (Sanchez 1993). Return to Mexico was often a goal of these families (Martinez 1975), but the prolonged Revolution ultimately increased time horizons and Mexicans began to integrate into U.S. society.

As Mexicans began to settle, both individual-level and community-level factors influenced their life chances and mobility trajectories. To be sure, most of these conditions pushed members of this group into low-paid occupations during the time (Perlmann 2005). However, the terrain that Mexicans settled was unequal across states, counties, and cities where some conditions would allow Mexicans to move away from unskilled positions. Like immigrants today, the factors related with success in the U.S. were associated with both socioeconomic characteristics of individuals and families and the structural characteristics of places people settled. At the individual-level, immigrants arrive with different resources needed to facilitate

economic advancement with some advantaged by higher socioeconomic positions, human capital, social networks, and knowledge of English that facilitate economic progress after arrival. At the contextual-level, factors such as the level of ethnic capital, the level of discrimination, and local and federal governmental policies influence how far individuals may advance (Luthra, Soehl, and Waldinger 2018). We discuss both factors that may help or inhibit occupational attainment for immigrant populations below.

Individual influences of occupational attainment

Individual influences of occupational attainment are often well-known in studies of socioeconomic attainment. Individuals with greater levels of capital – human, social, and cultural – are often observed to perform better in the labor market than individuals with lower levels. Initially, immigrants often experience a socioeconomic penalty at first arrival since they are unable to transfer skills and language to obtain occupations similar to what they left (Gans 2009, Toussaint-Comeau 2006). However, over time, some immigrants overcome these disadvantages by leveraging their human capital and ethnic and non-ethnic networks (Alba and Nee 2003). Since the process of transferring skills and reskilling takes time as migrants must learn to navigate new societies and institutions, there are often smaller differences between groups at initial settlement, but these differences grow over time (Toussaint-Comeau 2006). In part, this is due to high skilled migrants' ability to make greater economic progress through a pattern of accelerated assimilation as they reestablish their class-based lifestyle through building careers in the U.S. (Villareal and Tamborini 2018). At the same time, migrants in unskilled occupations in their countries of origin are more likely to remain unskilled workers in countries of destination (Toussaint-Comeau 2006).

How far migrants are able to transfer their skills, however, is often dependent on race and skin complexion (Villareal and Tamborini 2018; Han 2020). Immigrants arrive as foreigners with different complexions from the native-born. A large literature has shown that exposure to discrimination by skin color among immigrants as well as non-immigrant groups yields large effects on a range of economic and other well-being outcomes (Monk 2015; Han 2020). Colorism entails unequal forms of treatment for individuals and Mexicans famously occupied complex positions in relation to the white-nonwhite boundaries at the turn of the twentieth century (Fox and Guglielmo 2012). Mexicans were considered “white by law,” but this boundary was not institutionalized consistently at the federal, state, and local levels. On the one hand, the boundary between Mexicans and native-white populations was structured such that Mexican opportunity structures were limited given their membership to a group (Alba 2005). However, in particular contexts and circumstances, individual characteristics such as skin tone, occupation, English ability, home ownership, and a host of other factors allowed some immigrants to be accepted as native-white populations (Fox and Guglielmo 2012). The difference in treatment likely yielded positive outcomes for some individuals and not for others. Thus, discrimination targeted towards some individuals and not others may yield important insights into who succeeds and who does not beyond human capital accumulation.

Contextual influences of occupational attainment

Research today generally argues that contextual features influence economic trajectories of immigrants and their children. These features include a diverse range of structural and social processes that can yield long-lasting effects on the experiences and life chances of the foreign-born that can produce differences among groups. As originally hypothesized, contextual features

are comprised of three dimensions – migration policy, societal reception, and the size and structure of co-ethnic community – that can yield positive, negative, or neutral effects on different immigrant groups (Portes and Rumbaut 2001). Depending on the combination, the contextual features can either override or enhance individual-level characteristics that ultimately determine the socioeconomic attainment of immigrants. Although the concept of context of reception is used to distinguish outcomes between contemporary immigrant groups, researchers have begun to analyze how different contextual features affected outcomes of immigrants who entered in the first half of the twentieth century (see, i.e., Fox and Bloemraad 2015; Connor 2018; Catron 2019). Rather than focusing on between-group differences like the contemporary literature, however, historical studies have explored how background, demographic, and contextual traits vary across members within the same immigrant group. In addition, recent research has helped identify key contextual variables thought to influence overall outcomes of individuals within groups that include the level of ethnic capital, measures of social distance, and political status composition in a community (Luthra, Soehl, and Waldinger 2018). We discuss these features and how they impacted the Mexican refugee population at the turn-of-the-twentieth-century.

Co-ethnic community and ethnic capital: After arrival, immigrants are often reliant on their ties to members of their group to find employment, housing, and other basic needs. The level of ethnic capital, a group's social structure and its capacity to mobilize group resources, yields important effects on individual economic success (Luthra, Soehl, and Waldinger 2018). Ethnic capital influences the ways immigrants are connected to employers through referral networks, the quality of information that may flow through ethnic ties, and the support that immigrants

receive when navigating host-society institutions. The resources shared in communities greatly influence individual attainment as they can offset individual qualifications by offering positive or negative benefits.

Ethnic capital extends beyond providing resources to individuals in that it also yields reputational effects. Non-ethnic employers often engage in statistical discrimination where they accept or reject some individuals based on their group membership regardless of individual skill or capacity (Luthra, Soehl, and Waldinger 2018). Areas of high ethnic capital often produce positive reputational effects and employers hire individuals into better positions as a result. In the age of mass migration, most Mexican refugees settled in *barrios* (Mexican neighborhoods) within cities such as El Paso, Los Angeles, and San Antonio. Each *barrio* reflected different levels of ethnic capital and their corresponding reputational effects that ultimately encouraged or discouraged economic success. For instance, in Los Angeles, some areas were settled by only unskilled workers with little education that led to occupational instability for those who settled there (Sanchez 1993). The workers in these locations competed for unskilled and unstable work that limited shared resources within the community. Other *barrios*, however, witnessed larger settlement of white-collar workers, such as in the railroad district of Los Angeles (now the arts district and adjoining neighborhoods to Boyle Heights), that allowed for ethnic entrepreneurship. The unskilled workers who settled in this area were better able to find successful and stable employment (Sanchez 1993). These processes occurred throughout cities that ultimately influenced success of the group (Garcia 1981).

Societal Reception: While the ethnic community provides resources and reputational effects, immigrants are also influenced by the racial and ethnic hierarchy they enter. As already

mentioned, Mexicans occupied a tenuous racialized position during this period. Some Mexicans were treated as members in some circumstances but not in others; boundaries between Mexicans and native-white populations were not consistently enforced and this likely led to disparities in economic success since discrimination was greater in some areas over others. For instance, in New Mexico, newcomers were welcomed by policy and the native-born, many of whom were of Mexican descent, that allowed for better attainment (Jacobson, Tichenor, and Durden 2018). Places such as Arizona and Texas, however, had a harsher environment targeted towards Mexicans that severely depressed their chances of leaving unskilled positions (Jacobson, Tichenor, and Durden 2018). Harsher social contexts, whether treatment by the native-born or law enforcement, produce a form of social control and urban discipline that then shape how individuals and groups behave in an area (Armenta 2015; De Genova 2002). At the extreme end of discrimination during this period, Mexicans were targets of lynchings and other forms of racial violence by the native-born and Texas Rangers (Carrigan and Webb 2013). Thus, areas with high levels of prejudices by the native-born due to brighter boundaries are likely to suppress occupational attainment while areas with lower levels of prejudice by the native-born may have neutral or positive effects.

Political Reception: The resources that migrants find among their co-ethnics and their susceptibility to discrimination by the native-born are likely to yield strong influences on economic trajectories. However, migrants are unique from other minority groups in that they are also influenced by migration status disparities produced by policies of migration control and naturalization. That is, to gain full access to the labor market, immigrants must cross both the territorial boundary as well as an invisible boundary of citizenship, which stratified immigrants

in the first half of the twentieth century (Catron 2019). In the Age of Mass Migration, local, state, and federal laws and private employers began to stratify immigrant groups by placing naturalization restrictions for certain types of employment. While these policies largely took hold in the Northeast and Midwest where European immigrants mostly settled, alien employment restriction laws and policies also influenced Mexicans. As Mexican refugees arrived, the native-born feared that this group would take control of state legislatures and therefore discouraged naturalization (Menchaca 2011). Discouragement of naturalization also meant that Mexicans were barred from some occupations as many localities began passing laws requiring that immigrants be intending citizens or citizens to work (Catron 2019). The degree of enforcement of alienage laws varied across states that made it easier or harder to achieve better occupational attainment (Jacobson, Tichenor, and Durden 2018). This led to citizenship being rewarded more in some localities than others of which the aggregate effects likely had widespread influences on individual outcomes.

In sum, the contextual influences that Mexican refugees encountered after settlement likely had large influences on the group's success, as well as favored the reproduction of within-group inequities and inequalities. The remainder of this article seeks to assess both the individual- and contextual-level characteristics that influenced the economic success of the Mexican refugee population. We shed light on how individual and contextual elements shape the experiences of a displaced migrant population. In addition to studying the influences of individual and contextual characteristics of immigrant economic integration, we also expand our understanding of the political, social, and demographic contexts that might favor the integration of sociologically displaced populations (Fitzgerald and Arar 2018).

Data and Methods

To assess the conditions of Mexican economic success after settlement, we rely on a unique data source of Mexican immigrant border crossing records of individuals who arrived between 1910 and 1920. Since its inception, the United States has kept detailed records of individuals stepping foot onto U.S. soil. However, most laws that governed what information was recorded corresponded to those arriving via ships from Europe since 1813 (Catron 2020). Land border agents, especially those at the Southern border, did not systematically keep information of individuals who entered the U.S. until the early 1900s when the Immigration Act of 1903 called for rules governing entry and inspection. Initially, inspectors at the Mexican border were tasked with enforcement of the Chinese exclusion law. However, their duties expanded in 1905 to fill in information on a standardized form, called Form 548, for each alien applying for admission at an official port of entry. This form included much of the same information found on ship manifest lists that recorded information on European immigrants who entered at the same time. The information included on the manifests cover a range of information about individuals including a physical description as well as demographic and geographic characteristics depending on year of entry.

To make the data more concrete, we reproduce a border crossing record from 1920 in Figure 1. As shown, the manifests include a range of information including a physical description, occupational and economic characteristics, where the immigrant intended to initially reside after crossing the border, and motivations for migration. However, the information recorded in the manifests changed over time. Before mid-1917, much of the information shown in Appendix A was not recorded by inspectors. Early manifests included only basic demographic information such as age, marital status, and birthplace; a physical description; and economic

characteristics including how much money the person carried, their occupation, and whether the person could read or write. In 1912, less information was recorded across all entry ports. The forms in 1912 allowed inspectors to fill in most information as in years prior and after this date; however, the forms were largely left blank with the exception of name, age, sex, literacy, occupation, and money carried in almost all cases. We have been unable to identify any purpose or directive to leave such information blank in this year. After 1917, however, more information about the individual was recorded including the purpose for entry, the length of time they intended to remain in the U.S., intention to become a citizen, and whether they had ever been deported. The change in information collected by border inspectors corresponds with the 1917 literacy act, which explicitly increased the amount of information required to be documented for each entrant at all ports of entry.

[Figure 1 Here]

As of this writing, the information from Form 548 has not been digitized.² We therefore create a sample of records from ports of entry in Arizona (Nogales, Douglas, and Naco), California (Calexico), and Texas (El Paso, Laredo, Eagle Pass, Del Rio, and Brownsville). These ports constitute nearly all official ports of entry during this period.³ The records may be found at the National Archives and Records Administration (NARA) and we gained access to the file

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² There are two known samples of this form: a cross-section from 1920 (see Kosack and Ward 2014) and a sample of records between 1906 and 1908 (see Escamilla-Guerrero 2019). Both of these samples were explicitly drawn to omit the Mexican refugee population.

³ The only major port excluded from the sample is San Ysidro. This port sorted records between 1909 and 1952 alphabetically instead of by entry date making sampling of individuals in the decade of 1910-20 difficult. In addition, a few smaller ports, like Columbus, New Mexico, did not record this information during this period.

images through Ancestry.com.⁴ We create a stratified random sample of individuals who arrived between January 1st, 1910 and December 31st, 1920 for each entry port. The records in the NARA files are sorted by entry date. Therefore, we partitioned consecutive strata of 1,000 records and then randomly selected 20 records from each strata that we then hand-coded. This results in a final sample size of 8,062 individuals sampled from approximately 400,000 records of those who crossed the border. We note, however, that this dataset is representative of the Mexican flow who crossed through official border crossing stations, but not necessarily the entire Mexican flow. There is no reliable data on the entire flow of the Mexican population during this time (Kosak and Ward 2020). Estimates of the flow from this decade range dramatically using a variety of data sources (Cardoso 1980). Our results below, therefore, apply to documented migrants who remained in the U.S., but not necessarily to all Mexican migrants.

The Mexican-border crossing sample includes individuals who were born in Mexico as well as other immigrant groups including Europeans, Chinese, and Japanese. We include only individuals with a Mexican birthplace in our final sample. Figure 2 reports the number of entries by sex on the left panel and birth state for only men on the right panel. As described below, our analyses focus on men due to our interest in occupational outcomes, computational issues following women, and that most of the flow consists of men. Nevertheless, the peaks of entry occurred in 1912 and after 1917. The 1912 peak is likely due to a migrant wave after the most extreme fighting during the revolution ended and changing economic opportunities shifted individual decisions to migrate (Holland and Peters 2020). Railroad infrastructure in Mexico contributed to the rise in post-1917 migration. In addition, the majority of Mexicans arrived from

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⁴ Records include NARA Files A3412, A3437, A83372, A3396, A3467, M1502, M1755, M1760, M1769, and M1770.

central and northern Mexico. These regions were home to the largest uprisings as well as places that had access to north-south railroads that allowed for travel. Most of our sample arrived through the port of El Paso, which provided easy access to east-west trains in the U.S. that took people to places like Los Angeles and San Antonio.

[Figure 2 here]

After arrival, we are able to track individuals across U.S. censuses using algorithms developed for historical record linkage (Abramitzky et al. 2019). To create a panel dataset, we connect border crossing records of individuals to their 1920 and 1930 U.S. Census records (IPUMS; Ruggles et al. 2019). We limit the sample to men who arrived over the age of 14 between 1910 and 1920 and were younger than 65 in each respective census. The focus on men is due to naming practices of individuals. As noted below, we rely on first and last names to follow individuals over time. Women often change their names at marriage making it impossible to follow across records.⁵

We use a linking procedure that follows standard algorithms that match individuals using their name, age, and place of birth (Abramitzky et al. 2019; Catron 2019, 2020). This technique links individuals from their border crossing record to their 1920 or 1930 census record by first

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⁵ Mexicans do not fully follow naming practices that make matching women impossible as they do for other groups. Namely, Mexicans add, rather than subtract, names at marriage. This would make matching easier since we could develop an algorithm to systematically go through paternal and maternal last names to find the correct match. However, the U.S. Census and sometimes the border crossing records forced a two-name format that shifted how women would present their name. Thus, someone named Rosa Torres who marries Ramon Garcia could remain Rosa Torres or change to Rosa Garcia or use Rosa Torres de Garcia. In a smaller hand-matching project of these data, evidence suggests that individual women would use all three types of names in different contexts. Men, however, tend to consistently use their paternal last name in the U.S.

standardizing first and last names by correcting for nicknames and then uses a New York State Identification and Intelligence System (NYSIIS) phonetic coding to account for alternate and misspelling of names. Observations from the border records are first matched forward to the 1920 census and then to the 1930 census. Each sample does not include all of the same individuals. Reasons for matching in one census and not another may include return migration or poor enumeration of an individual in one census and not the other. We therefore also create a dataset that includes only individuals that we are able to find across both censuses to track individuals across more time-periods. In our analyses of context, as defined below, we also match the full-count of Mexican-born individuals in the 1920 census to the full-count in the 1930 census, which allows for larger sample size. Figure 3 describes the matching procedure and details what information is taken from the different datasets. Observations are first matched based on exact criteria mentioned above. If there is one unique match, the procedure stops and the individual is considered matched. If there is not a match, we try matching within a 1-year age band (older and younger) and then within a 2-year age band; if there is one unique match, the individual is included in the final sample. However, if there are multiple matches, or there is no match, the observation is discarded as unmatched.

[Figure 3 here]

The matching procedure produces a final sample size of 1,130 individuals from the border records matched to the 1920 census and 1,140 individuals from the border records matched to the 1930 census. We are able to find 637 individuals in both the 1920 and 1930 census. In addition, we are able to match 12,411 individuals from the 1920 census to the 1930 census in the full-count sample. The full count sample includes only individuals who arrived

between 1910 and 1920. Since this sample does not rely on the border records, which only include legal immigrants, this sample is comprised of both documented and undocumented migrants. Our match rates correspond to approximately 30 percent, which is consistent with prior research that uses similar data sources (Catron 2019).⁶ Table 1 below reports differences between the full sample and matched sample. In our analyses below, we weight the coefficients by the propensity of being matched $P_i(M_i = 1|X_i)$, which is calculated from a probit of match status on the covariates.⁷ These observations are reweighted by $(1 - P_i(M_i = 1|X_i))/P_i(M_i = 1|X_i) \times q/(1 - q)$, where q is the proportion of records linked. Unweighted results report similar findings.

Using the matched border crossing-to-census samples, we seek to understand the individual and contextual factors that promoted or inhibited economic success among the Mexican population. As noted, Mexican border records provide information about individuals not found in U.S. censuses. We therefore leverage this extra information to predict occupational outcomes shortly after settlement, measured in 1920, and after longer settlement, measured in 1930. Most Mexican immigrants were either farm laborers or general laborers in the historical censuses. We therefore distinguish between unskilled and skilled workers using occupational codes (occ1950) calculated by IPUMS.⁸ We define unskilled workers as having a code that starts

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⁶ Reasons for not matching include having a common name (i.e. Jose Perez), name changes, mortality, age heaping, and transcription error. In addition, Mexican immigrants held one of the highest return migration rates during this period, which included voluntary and involuntary return (Sanchez 1993). This article, therefore, is about Mexican immigrants who settled in the U.S. long-term.

⁷ Variables used to weight the results include age, birth state, marital status, premigration occupation, literacy, and prior trips to the U.S.

⁸ Most studies on the economic incorporation of historical immigrants tend to use occupational income scores as their dependent variable (Catron 2019, 2020; Connor 2020). This variable assigns the median income of each detailed occupation in the 1950 census that is then applied to

with an 8 or 9 (omitting non-occupational responses; occ1950>=980) and skilled workers as having occupational codes not defined as an unskilled position. The most common skilled occupations for Mexicans include barbers, carpenters, merchants, proprietors, salesmen and tailors.

To analyze how at-entry characteristics influence occupational success, we fit the following formula to predict the odds of being in a skilled position:

$$\ln \left[\frac{P(Y_i=1)}{P(Y_i=0)} \right] = \beta_0 + \beta_1 X_i + \beta_2 Z_i + E_i \quad (1)$$

where $\ln \left[\frac{P(Y_i=1)}{P(Y_i=0)} \right]$ represents the log odds of being in a skilled occupation relative to being in an unskilled occupation for each migrant i , X_i represents whether migrants had a skilled or unskilled pre-migration occupation, and Z_i is a vector of individual pre-migration controls from the border records. These analyses allow us to understand premigration individual influences on economic outcome at early arrival (1920) and after 10-20 years of settlement (1930).

For the analyses above, we control for at-entry characteristics taken from the border records to predict occupational attainment in 1920 and 1930. The control variables include a range of information including arrival age, whether the immigrant had ever been to the U.S., whether the immigrant arrived alone or with family, whether they could read or write in any language, marital status, occupation before arrival, place of birth, and year and port of arrival. In addition, we also control for skin complexion, an open-ended question which included a range of subjective answers from light, medium, and dark, to other answers such as olive, ruddy, and

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earlier censuses to economically scale occupations. However, because most immigrants were in unskilled positions (see Table 1), we prefer this binary measure.

brown.⁹ We have been unable to identify any information that instructed inspectors to code someone as light versus dark complexion. We assume this information was up to the inspector's subjective assessment. We therefore take a strict stance to deal with this variable and partition it into three categories, definitely and unambiguously dark (those coded as dark), definitely and unambiguously light (those coded as light), and a medium category that includes the intermediate categories and all others that seem uncertain. Given that this is a subjective measure, we interpret complexion not as an objective measure of color, but as a measure of perceived social distance from the native-born.

In the above analyses, we also control for the person's height so that we may be able to rule out differences in immigrant selectivity when assessing at-entry characteristics. Height is correlated with higher earnings, health, physical strength, and other features associated with socioeconomic attainment over time (Steckel 2009). The Mexican flow during this period was positively selected in that the flow was taller than the average Mexican population (Kosak and Ward 2014). In addition, Mexican refugees worked in labor-intensive industries in which better physical strength and health would be particularly useful.

Using equation 1, we predict occupational attainment for immigrants in the 1920 sample and in the 1930 sample separately. These analyses allow us to understand the influence of various at-entry characteristics in 1920 and in 1930. While these analyses allow us to understand

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⁹ Complexion began to appear on immigration records by the late 1890s largely in response to new sources of sending sources in southern and eastern Europe (Perlmann 2019). The US Immigration Bureau recognized that official nationality appearing on passenger lists and identifying passengers as nationals of the multi-ethnic Austro-Hungarian, Russian, German, or Ottoman empires obscured who could be considered "desirable" or "undesirable." A new tool was therefore implemented in all immigration records to draw differences between race, nationality, and complexion. As Mexicans were included in the white racial category as a result of negotiations after the Mexican-American War, documents pertaining to Mexican nationals also included this added information.

the influence on different points in time, it does not report how the influences of at-entry characteristics may change over time. We therefore limit the sample to only those for which we find individuals in both the 1920 and 1930 censuses using the panel dataset. We run a fixed effects logistic regression for the two periods:

$$\ln \left[\frac{P(Y_i=1)}{P(Y_i=0)} \right] = \mu_t + \beta_1 X_{it} + \gamma Z_i \quad (2)$$

where $\ln \left[\frac{P(Y_i=1)}{P(Y_i=0)} \right]$ represents the probability that an individual is in a skilled occupation in 1930, X_{it} is a vector of time varying predictors including marital status and literacy, and Z_i is a vector of time-invariant predictors including the variables from the border records described above. This analysis allows us to assess the within-person variation. Necessarily, as a function of this type of analysis, we exclude individuals who do not vary in occupation in 1920 and 1930. Our sample size for this analysis is therefore reduced to 258 individuals out of 637 in the panel dataset. The inclusion of the time-invariant variables is interpreted as an interaction with time to understand the rate of change across our time periods (Allison 2009). The advantage of this analysis is that it allows us to account for unobserved characteristics while assessing the influences of observed characteristics over time (Allison 2009).

The above analyses report the individual-level influences on economic success after arrival. However, as noted, success may also depend on contextual effects of the places they settled. These resources include both the general context of communities that influence everyone in the areas as well as co-ethnic resources that may aid individuals in the group. We operationalize context at the county level to assess the factors that promoted or inhibited economic outcomes among Mexican men. Specifically, we calculate the percentage of

individuals working in certain sectors of the labor market (farming, mining, and manufacturing) and the level of urbanism in the county. For co-ethnic specific variables, we measure the percent of individuals who are Mexican in a county. Data for these variables comes from Haines (2010) and our own calculations using full count censuses. Our interest, however, is on whether the resources available from co-ethnics, the degree of societal acceptance within an area, and exposure to differential effects of migration policies influence outcomes as they do for today's immigrants (Luthra, Soehl, and Waldinger 2018). We operationalize these variables following previous research where we include the average educational income score of the Mexican immigrant population, whether mob violence towards Mexicans had been present in an area, and the percent of Mexican immigrants who are naturalized in a county. We describe each contextual variable in detail below.

Ethnic Capital: To proxy the strength of the co-ethnic community, we measure ethnic capital through the community's average occupational education score (Nakao and Treas 1994). This measure is created by constructing the percentage of people in the respondent's occupational category in the census who had completed one or more years of college. Education is strongly associated with income, occupation, and socialization processes that can yield population-wide advantages.

Societal Reception: To proxy the degree of societal acceptance in an area, we measure anti-Mexican mob violence, including lynchings, during this period. This measure is associated with social distance between Mexicans and the native-born. We use data from Carrigan and Webb (2013) and Seguin and Rigby (2019) to assign whether violence towards Mexicans occurred in

an area between 1900 and 1930. Most of the counties in which mob violence occurred appeared in southern Texas. However, mob violence towards Mexicans occurred throughout the southwest during this period.

Political Reception: To measure the exposure to various policies, we calculate the percent of Mexican individuals in each county in the complete count census who were fully naturalized.

Each contextual variable is measured in the census prior to measurement of occupational outcomes. In datasets that connect the Mexican border crossing records to the US censuses, we measure context in the 1910 census. We use each individual's "intended final destination" answer in the Mexican border crossing as the very first place of settlement. In cases with unknown final destinations, we assign the port city as the first place of settlement.¹⁰ We assigned the values of each county to the intended final destinations to analyze how characteristics before the migrants arrive predict later occupational success as defined below. For the full-count sample, we assigned contextual variables in each census.

With the contextual variables, we fit equations 1 and 2 defined above and include the contextual variables in addition to the individual-level variables. For equation 1, we measure context at very first arrival to predict later attainment using the 1920 and 1930 samples. First arrival is defined as the person's intended destination from the border record. We also use the full-count sample where we use county of residence in 1920 to predict occupational attainment in 1930. These analyses allow us to understand how context in an earlier period may influence later

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¹⁰ Assigning the port city as the first place of settlement may not necessarily capture the first settlement of some migrants given the role of labor recruiters and railroads discussed above. As a robustness check, we omit all individuals who report a port city or provide an unknown final destination. We find similar results to the ones shown below.

occupational attainment over time. In addition, we also exploit the within-person variation in the full-count sample and fit equation 2. We take the difference in context between 1930 and 1920 to understand how context shapes attainment among individuals while controlling for unobservable characteristics. In these analyses, context is treated as time-varying variables. We also include other time-varying variables including whether the person lived in a county along the U.S.-Mexico border, marital status, state lived in, and literacy. We also include controls for time-invariant variables including age and year of arrival. Table 1 presents the descriptive statistics of variables used in our different samples.

[Table 1 here]

Results

Individual characteristics of attainment

We begin our analyses by first assessing the influence of individual at-entry characteristics on Mexican economic success after settlement. As noted, our sample consists of men who arrived between 1910-20 and were over the age of 14 at arrival. We use the linked border record to census samples described above to understand the likelihood that an individual is in a skilled position after 10-20 years of settlement. These analyses report the influence of individual characteristics that may help or inhibit occupational outcomes soon after arrival, measured in 1920, and after longer settlement, measured in 1930.

As shown in model 1 of Table 2, multiple at-entry characteristics influence occupational attainment at first arrival including age, arriving with others (as opposed to travelling alone), and complexion. Immigrants who travelled with others often reported members of their family as

those who accompanied them. The positive influence may reflect differences in motivations with those seeking more permanent settlement with family versus target earners seeking to return to Mexico. People who view migration as permanent may invest in U.S.-specific human capital earlier in order to improve their life chances. Those who view return as more likely may have weaker attachment to the labor force and therefore invest less into their U.S.-specific human capital. Similarly, those perceived as “light” complexion by border inspectors also report positive log odds of being in a skilled position. Here, we may be seeing the influence of better treatment by the native-born where closer social distance may reflect better outcomes. However, this effect may be due to selection where those coded as “light” may also have higher socioeconomic status, be more literate, and hold other characteristics that may lighten individuals outside of any phenotypic characteristics. Models 2 and 3, therefore, add premigration occupation and height to control for selection of the flow. Controlling for these characteristics, complexion continues to betray a positive influence on occupational success shortly after arrival.¹¹ This finding points to the importance of social distance and economic outcomes at first arrival.

Models 2 and 3 of Table 2 also report the influence of premigration occupation. As noted, the class positions immigrants are in before migration are thought to have a large influence on the economic trajectories after migration. Those who are in unskilled positions before arrival should perform worse in the labor market than those who were in skilled positions. Our results are somewhat consistent with this argument where those who are in unskilled positions before arrival are less likely to be in skilled positions within the first decade of settlement. However, when controlling for height, our best measure of selection, this effect fails to achieve a

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¹¹ Our sample includes people who are 14 years old and older. We ran similar models with only those who are over the age of 18 when growth severely slows. Results remain similar in these analyses.

conventional significance level. This suggests that some of the influence of premigration skill immediately after arrival is due to migrant selection, but time after arrival may be needed to fully show differences between occupational classes. Model 4 reports the same information, but with only individuals that we are able to find in both the 1920 and 1930 census. Results remain consistent for this subgroup. The 1920 analysis finds that conditions of arrival such as who one arrives with, social distance as measured by skin tone, and class positions before arrival influence immediate or near immediate occupational outcomes after arrival.

Models 5-8 report the same analyses, but use the 1930 sample to predict occupational outcomes after longer settlement. As shown, few of the variables that had a positive influence on occupational outcomes in the 1920 analyses betray any statistically substantive influence on occupational outcomes in 1930. The main influence of occupation in 1930 is whether the individual was in an unskilled occupation before migration. This result is stronger compared to the 1920 result as more time has passed for individuals to transfer their premigration class into post-migration positions. We also find that those coded as “light” complexion report no statistically discernible difference from those coded as “dark.” Individuals in our “medium” category report lower odds of being in a skilled position, although this result does not reach conventional levels of significance.

[Table 2 here]

Table 2 suggests that individual at-entry characteristics yield important influences at early arrival, but lose their influence after later settlement. To further test this hypothesis, table 3 reports results of time invariant variables from a fixed effect logistic model using the dataset in

which we are able to find individuals in both the 1920 and 1930 census. This analysis exploits the within-person variation to help us understand what variables hold greater or lesser influence on occupational outcomes over time. The coefficients in the below table, therefore, should be interpreted as how the rate of change over time varies across different subgroups. We report the effects of selected variables from models that include all controls excluding height and including height.

As shown in table 3, the influence of premigration skill and height hold a stronger influence in 1930 than in 1920 while complexion and arriving accompanied holds a smaller influence. The results from this analysis suggest that discrimination may have a larger impact at initial settlement. This finding is different from recent research describing long-lasting effects of dark skin complexion (Han 2020). This may be due to the subjective measure as opposed to objective measures used in prior studies. The border inspector's subjective assessment is closest to the 1920 measurement and may capture perceptions of individuals soon after arrival. However, over time, initial subjective perceptions of complexion may shift as migrants acculturate in new contexts, making those initial effects attenuate. Other measures, however, yield a larger influence over time. Migrants who are in higher occupational classes are often able to capitalize on resources to recreate their premigration class positions (Feliciano and Lanuza 2017; Villareal and Tamborini 2018, Toussaint-Comeau 2006). Immigrants initially fall in status after arrival (Engzell and Ichou 2019) and must engage in practices to capitalize on resources to achieve their premigration status (Alba and Nee 2003; Waldinger and Feliciano 2004). This finding is important since little research has linked *when* selectivity matters for migrants, whether earlier or later on in settlement (Feliciano 2020, Villareal and Tamborini 2018, Toussaint-Comeau 2006). Since our data follows only permanent migrants, this finding is not

due to selective return migration that is often a disadvantage of previous research (Feliciano 2020). Nevertheless, our findings from the above analyses suggest that at initial settlement, individual and demographic features matter for predicting occupational success, but over time it is class positions and selectivity that matter for the Mexican refugee population.

[Table 3 here]

Contextual influences of attainment

The above section reports how individual at-entry characteristics influence economic attainment of Mexican refugees at early and later settlement. However, attainment among immigrants is influenced by both individual-level and contextual-level characteristics of places people live. Though context is endogenous to immigrant attainment since there is some choice on where immigrants move, it is no less important for understanding the factors that shape economic attainment over time. We therefore assess the influence of context on Mexican immigrant trajectories by focusing on place-based characteristics that may aid or inhibit economic attainment. We use the 1920 and 1930 samples from the previous section and supplement these samples with a full-count-to-full-count sample, which allows for a larger sample size. We first leverage the final destination from the border records to assess how the place of very first settlement influences later outcomes. We then assess how changing contexts across settlement then influences outcomes within individuals.

We begin by first reporting how Mexican refugees changed contexts across their settlement. Figure 4 presents migrants' county of first settlement and later settlement. For the 1920 and 1930 samples, first settlement is measured from the intended destination from the

border records; for the full-count sample, first settlement is measured from the 1920 census. The second place of residence is measured in the later census that we find Mexicans in. As shown, Mexican immigrants often report settling close to the U.S.-Mexico border, but then quickly spread throughout the country. For the most part, Mexicans moved to places in the southwest with large concentrations in San Antonio and Los Angeles. Yet, we also find Mexicans in places such as in Chicago and Detroit. Across these areas, the selection of migrants and the reception they received varied quite substantially. Some areas were dominated by agriculture while others were dominated by a range of industries that may have allowed for better attainment. In addition, the communities that Mexicans created also varied and these differences likely influenced outcomes. We therefore seek to understand how shifting context was associated with better or worse outcomes in the analyses below.

[Figure 4 here]

We next turn to the coefficients for our primary contextual variables of interest from the analyses described above, presented in Figure 5. We suppress the coefficients of the general contextual variables (i.e. industry composition, urban density) as these do not have strong influences on later attainment for the Mexican refugee population. The first set of logistic coefficients in the plot use the border crossing to census samples and use context of first arrival, measured in the border record, to predict occupation in the later period. The full count sample logistic regression analysis uses context measured in 1920 to predict 1930 occupational outcomes, with the fixed effects analysis analyzing the difference in context between 1930 and 1920. These first logistic regressions report the influence of earlier context on latter attainment.

The final analysis uses a fixed effect logistic model to analyze the within-person variation using the full-count sample.¹²

[Figure 5 here]

As shown in Figure 5, the level of ethnic capital, as proxied by average educational income score of Mexicans in an area, yields a positive influence on later occupational attainment across all samples and models. Context for the 1920 and 1930 samples comes from the individuals' intended destination from the border record, which we treat as the place of very first settlement for the migrant. In these two models, the positive influence suggests that the quality of ties to members of a group that may connect recent arrivals to employers is important in determining later attainment. Migrants who enter areas with stronger ethnic capital have higher log odds of being in a skilled position when we find them in a later census. This finding holds with our larger sample using the full-count censuses. The first model using the full-count census sample reports that being in areas with higher educational scores yields a positive influence on latter occupational attainment. The final model, which takes into consideration the within-person variation through a fixed effects analysis, again shows that educational score increases the log odds of being in a skilled position after 10 years.

As the level of ethnic capital has a positive influence on later occupational attainment, societal discrimination, as measured by lynchings and other racialized violence, lower the log odds of being in a skilled position later on. In the smaller 1920 and 1930 samples, these effects

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¹² Fixed effect logistic regressions performed on the 1920 and 1930 samples also reveal similar coefficients as those to the full-count models. However, we do not report these analyses as they rely on small sample sizes.

report no statistically discernible effect. Largely, this is due to cell size as few migrants report a lynching county as their first place of residence. However, for the full-count census sample, living in a lynching county significantly lowers the log odds of being in a skilled position by 1930. The logistic analysis reports that living in a lynching county reduces the odds ($e^{-.107}$) of being in a skilled position in 1930 by approximately ten percent. The fixed effect analysis continues to betray a negative effect, however, due to larger standard errors as a result of this analysis, this effect is not statistically significant.

Finally, the influence of political reception had a small impact on Mexican immigrants occupational attainment after settlement. In the 1920 and 1930 samples, the percentage of naturalized Mexicans had a negative, but not statistically significant effect. For the larger full-count sample, citizenship has a positive and significant influence with a small real-world effect. The change in sign is likely due to who is included in both samples. In the 1920 and 1930 samples, we are only able to include immigrants who entered the U.S. legally since they rely on the border records. However, the full-count sample includes both undocumented and legal migrants. This may point to the idea that the level of citizenship mostly benefits undocumented populations who may rely on citizens for job opportunities and the like. However, the small effects of citizenship are also due to where Mexican immigrants fall in the ethno-racial hierarchy as the returns to citizenship and social distance are connected (Catron 2021). As Catron (2021) shows, Mexican immigrants were unlikely to benefit from becoming a citizen since discrimination overshadowed any benefits to this status. Formal citizenship was unlikely to produce large benefits to Mexicans as it did for other European groups (Catron 2019). In this case, context may be unable to alter economic outcomes for groups who are furthest in social distance from the native-born.

The above results show that settlement in favorable contexts is associated with better outcomes for Mexican refugees. However, ethnic capital and societal reception had the largest impact while political reception had a lower impact. Nevertheless, our analyses show that structural barriers influenced economic attainment over long periods of time for the Mexican refugee population.

Discussion and Conclusion

This study reports the individual- and contextual-level influences on economic progress of Mexican refugees at first arrival and later settlement. At the individual-level, a large literature has argued that premigration differences in occupation, selection, and capital are likely to influence economic success. The contextual-level, however, is also likely to yield important influences. After immigrants cross territorial boundaries, they are subjected to further external factors that can alter the impact of premigration skills and characteristics. Every immigrant enters destination states as a foreigner, excluded from the circle of receiving society citizens. Foreignness may shape entry into the labor market and promotions thereafter, particularly right after settlement as transferability of skills and qualifications is not instant nor straightforward. In addition, shared characteristics related to schooling and the symbolic meaning it conveys is also likely to matter. To the extent that social circles tie immigrants and their offspring to other people of the same origin, the rewards to education or the penalties associated with lack of education may be widely shared. Though context is partially endogenous to understanding first-generation success, these conditions have the ability to shape the economic trajectories of immigrants beyond their individual attributes by providing various resources to members of

groups in some areas, but not in others. As a result, the conditions of economic success after settlement are only partly amenable to individual characteristics, skills and qualifications.

Using a novel data source that allows us to track both premigration and postmigration characteristics, we are able to assess the specific factors that stratified the Mexican refugee population in the early twentieth century. Whereas most research studies between-group variation and focuses solely on human capital to predict economic outcomes, our study examines within-group inequities and is able to analyze more of the immigrant experience that fosters economic progress. We show that at early arrival, individual factors such as perceived complexion, arriving with others, age, and premigration occupation yield important influences on whether an individual is in a skilled position after arrival. However, over time, premigration occupation and the selection of individuals begins to take a larger influence on postmigration occupation while perceived complexion and other factors take a smaller influence. This trajectory is likely due to the influences of structure and context of initial settlement for recent arrivals. In particular, immigrants are embedded within ethnic and non-ethnic networks after settlement that provide access to employment (Trouille 2021). However, as Rosales (2020) argues, membership within networks does not automatically give access to opportunity. Indeed, among recent arrivals, who receives help and who does not is stratified by class and other individual-level factors. Inclusion and exclusion from resources based on individual-characteristics is likely to yield significant effects at first arrival. Over time, individuals may move or find acceptance within these networks that would attenuate the influence of some individual-level factors as we show in this article.

At the same time, the communities that Mexican refugees entered had strong influences on later success. Consistent with previous research, a more favorable context was associated with

better outcomes than less favorable contexts (Portes and Rubaut 2001). However, while most research on modes of incorporation use nationality to proxy context (Waldinger and Catron 2016), our study is able to point to the specific contextual features that facilitated mobility within an immigrant group. For the Mexican refugee population, the level of ethnic capital had a consistently positive influence, while a negative societal reception betrayed a negative influence. Political reception had a small influence and we suggest that its relative importance was greater for undocumented immigrants than legal immigrants during this period. The low impact of citizenship at the community-level on later economic outcomes, however, is likely due to Mexican immigrants' position within the white-nonwhite boundary. Groups furthest away in social distance from the native-born during this period benefitted least from citizenship acquisition (Catron 2021). Thus, it is unlikely that Mexicans would have benefited from this particular contextual feature as their European counterparts. These results, therefore, also point to the idea that not all previously conceived contextual features yield an influence for all groups in all historical time periods.

The results above have important implications for theoretical arguments on the assimilation of immigrants in the United States in the first half of the twentieth century. First, our data is comprised of a refugee population and reports the influences of their success. Research today points to refugee success as a function of receiving federal aid for settlement. By contrast, our data shows the influences of variables when a refugee population does not receive any federal support. Second, the panel data structure of our study reveals that different dimensions of immigrants' individual characteristics hold distinct influences on their economic progress at different points in time. This finding highlights the importance of accounting for changes in how some individual characteristics impact mobility across economic trajectories, in other words, it

not only matters how we study these relationships but when in time we look at them. Third, we shed light upon the role of key features of contexts of settlement on aiding or hindering immigrants' occupational attainment.

Finally, while understanding these features is important for the study of first-generation integration and adaptation more broadly, these variables are also likely to influence the children of these migrants. For the second generation, parental characteristics and the places they grow up will exert large influences on their later success. If these influences change over time for the first generation, as we show in this study, they might also have varying influences on the second generation within families and groups depending on exposure due to age. Future research should test these influences on second generation success. Nevertheless, while many conditions prevented Mexican refugees from achieving upward attainment, our study shows that some conditions allowed for some movement into skilled positions.

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MANIFEST

U. S. DEPARTMENT OF LABOR
IMMIGRATION SERVICE
MEXICAN BORDER DISTRICT

Serial No. 11764

Form 514

Serial 380

Board Sheet (a) ☒ **380**

Immigrant ☒ Nonimmigrant ☐ Nonstatistical ☐ Nonseaman ☐ (b)

Port of **MEXICO**

ARRIVED **E. PERU** Head tax assessed against (c) **E. PERU** T. Receipt No. **41027** Exempt Fee (d) _____

Whether (coming for temp. stay) Port of origin _____ Form 514 No. _____

CHARACTER OF HEAD TAX ASSESSMENT (e) **1400**

Special Agents: S. S. * Temp. * T. * U. S. Sen. * Cha. * Und. 1A. * Refund ordered (f) _____

Name (g) **Rojas, Jose** Accompanied by **alone** Sheet No. _____

Age **20** (h) Mar. **M.** Conjugal condition **S.** Occupation (i) **Labour** Read **44** Write **20** (Yes or No) (Yes or No)

Language or dialect read **Spa** Grounds for literacy exemption (j) **0-3497**

Nationality **MEXICAN** Race **MEXICAN** Last residence (j) **Valparaiso, Zac**

Ticket **1** Passage paid by **Self** Money (l) **352** Ever in U. S. ? **No**

Period _____ Location _____

Going to join (m) _____ Name _____ Address _____

Purpose in coming **To seek work** Whether intend return country whence came after laboring temporarily U. S. (n) **No** Length of time intend remain U. S. **1 year** Whether intend become citizen U. S. **No** Whether previously excluded or deported within one year (if so, and reapplication for admission has been authorized, give authority) **No** Health (o) **Good**

PERSONAL DESCRIPTION				PLACE OF BIRTH	
HEIGHT	WEIGHT	COMPLEXION	HAIR	EYES	PLACES OF BIRTH
5' 8"	165	Med	Blk	Brn	Valparaiso Zac MEXICO

Sworn to before me this day **15** **1920**

Jose Rojas (Signature of applicant for admission.)

Action by primary inspector (g) **ADMITTED** Interpreter _____

ACTION BY BOARD OF SPECIAL INQUIRY (p)	DEPARTMENTAL ACTION (q)	FINAL ACTION (r)
R. S. I. SERIAL NO. _____	Decision (f) _____	(Adm. or cond.) _____
Action _____ Cause (s) _____	Date _____	Date _____
Delivered to _____ Cause _____		
Appeal taken by _____ Date _____		

Collected from _____

Completed (Sd) _____ Filed action _____ Detailed from _____

1. Check appropriate heading. 2. Insert date. 3. Insert nationality of principal member of family, e.g., Italian, American, Canadian, English, etc.

Figure 1: Example of border crossing record.

Figure 2: Yearly entry of men and women using full sample and place of birth for men aged 15 to 55.

Note: Sample size for the left panel is 7,301 and sample size for right panel is 3,778. Data come from Mexican border record sample.

Variables	Variables	Variables
Place of first settlement	Place of settlement	Place of settlement
Age at arrival	Age	Age
Previous experience in U.S.	Occupation	Occupation
Arrived alone or accompanied	Year of arrival	Marital status
Skin complexion	Marital status	Literacy
Literacy	Literacy	
Marital status		
Premigration occupation		
Birthplace		
Year of arrival		
Port of arrival		

Figure 3: Samples created from links

Note: 1920 sample refers to border record to 1920 census; 1930 sample refers to border record to 1930 census; panel sample refers to border records matched to both 1920 and 1930 census; and full count sample refers to the 1920 complete count census matched to the 1930 complete count census.

Figure 4: County of first residence and later settlement of Mexican refugee population

Note: Scales for the data from the border crossing manifests are different from those that come from the full count census

Figure 5: Effects of selected contextual variables predicting whether a Mexican refugee is in a skilled position.

Note: Data come from the 1920 sample, the 1930 sample, and the full count sample. In the logistic regressions using the 1920 and 1930 sample, we control for individual-level factors from models 2 and 6 in table 2. For the full-count sample, we control for marital status, literacy, year of arrival, and age. All models also include controls for other contextual variables including percent in agriculture, percent in mining, percent of population who are Mexican, percent of individuals in urban centers, a state fixed effect, and whether the person lived in a county that touched the US-Mexico border. All standard errors in these analyses are clustered at the county-level.

Table 1. Descriptive statistics of samples

	1920 sample		1930 sample		Panel sample		Full count		Full border records	
	Percentage or Mean	sd	Percentage or Mean	sd	Percentage or Mean	sd	Percentage or Mean	sd	Percentage or Mean	sd
Border Crossing Characteristics										
Age	29.12	10.32	27.29	8.3	27.38	8.33	28.52	9.75	28.97	9.43
Prior visit to the US										
No	47.6		47.4		48				49.02	
Yes	52.4		52.6		52				50.98	
Arrived accompanied										
No	33.2		35.6		34				32.40	
Yes	66.8		64.4		66				67.60	
Skin Tone										
Dark	62.8		64.4		64.9				62.10	
Medium	15.9		16.5		15.0				15.51	
Light	4.2		4.5		4.4				5.11	
Missing	17.0		12.6		15.7				17.28	
Marital Status at arrival										
Single/Widowed	52.4		53.4		53.8		48.65		48.81	
Married	47.6		46.6		46.2		51.35		51.19	
Literate										
No	27.1		20.3		23.3		33.24		27.92	
Yes	72.9		79.7		76.7		66.76		72.08	
Region of birth in Mexico										
North	39.5		43.5		40.3				39.73	
West, Center and South	42.8		44.8		42.9				42.22	
Missing	17.7		11.7		16.8				18.05	
Pre-migration occupation										
Unskilled	70.1		71.7		72.9		71.21		71.10	
Skilled	29.9		28.3		27.1		28.79		28.90	
Height	66.29	2.35	66.36	2.37	66.27	2.36			66.37	2.37
Post-migration occupation										
Unskilled	67.4		62.5		68.2		64.25			
Skilled	32.6		37.5		31.8		35.75			
Contextual Variables (Mexican specific)										
Average Edscore	5.66	1.41	5.66	1.29			4.82	1.84		
Lives in Lynching County	46.95		38.24				22.36			
Percent Citizen	9.91	6.01	20.89	10.23			4.27	3.28		
Contextual Variables (general context)										
Percent in farming	5.33	4.74	5.39	4.80			6.23	5.16		
Percent in mining	2.08	3.41	1.86	3.11			1.24	2.24		
Percent in manufacturing	3.11	1.09	3.09	1.13			3.68	2.06		
Percent Mexican	28.35	15.03	28.10	15.08			16.77	14.72		
Percent urban	30.32	37.23	31.49	37.55			31.17	37.42		
Lives in border county	67.23		67.24				30.59			
N	1,130		1,140		638		12,728		3,778	

Note: data come from respective samples defined in figure 2. Percentages and means derived from the earliest period from each match (i.e. for the full count sample, percentages and means refer to 1920). Premigration occupation in the full-count sample refers to 1920 occupation in the US. We suppress year, state, and port of arrival statistics, but they are available upon request. The full border record descriptives refer to our original sample of border records in order to assess how the matched population looks relative to the representative flow.

Table 2: Logistic regression predicting being in a skilled occupation, 1920 and 1930

	1920 Outcomes				1930 Outcomes			
	Model (1)	Model (2)	Model (3)	Panel Data (4)	Model (5)	Model (6)	Model (7)	Panel Data (8)
Border Crossing Characteristics								
Arrival age	-0.102* (0.0407)	-0.0954* (0.0407)	-0.0711 (0.0465)	-0.1229 † (0.073)	-0.0728 (0.0573)	-0.058 (0.0572)	-0.0485 (0.0651)	0.0198 (0.0726)
Arrival age-sq	0.00143** (0.0005)	0.00134* (0.00055)	0.00107 † (0.00061)	.00187 † (0.1879)	0.00181* (0.00088)	0.00158 † (0.000876)	0.00145 (0.00097)	0.0004 (0.0011)
Prior visit to the US	0.176 (0.143)	0.16 (0.144)	0.131 (0.162)	0.1785 (0.1928)	0.0701 (0.147)	0.0481 (0.148)	-0.15 (0.164)	0.1470 (0.1868)
Arrived accompanied	0.338 † (0.173)	0.360* (0.175)	0.345 † (0.182)	0.4538 † .2327	-0.0322 (0.18)	-0.0276 (0.182)	-0.0979 (0.186)	0.2650 (0.2229)
Skin complexion (ref. dark)								
Medium	0.0717 0.188	0.0238 0.19	0.0371 0.191	0.0116 (0.2612)	-0.343 (0.221)	-0.405 † (0.221)	-0.376 † (0.217)	-0.3239 (0.2626)
Light	0.713* 0.316	0.629* 0.314	0.678* 0.313	0.7500 † (0.4237)	0.223 (0.305)	0.103 (0.31)	0.112 (0.307)	0.5181 (0.4238)
Missing	-0.129 0.536	-0.313 0.547		-0.3661 (0.7606)	1.06 (0.811)	0.922 (0.843)		2.177 (1.135)
Literate	0.0508 (0.192)	-0.00241 (0.196)	0.0314 (0.242)	-0.02415 (0.2660)	0.12 (0.206)	0.0376 (0.202)	0.138 (0.263)	0.1066 (0.2638)
Married at arrival	0.205 (0.165)	0.189 (0.166)	0.171 (0.178)	0.1440 (0.2193)	-0.274 † (0.161)	-0.25 (0.162)	-0.22 (0.178)	-0.1718 (0.211)
Region of birth (ref. North)								
Center, West, South	-0.258 (0.167)	-0.221 (0.168)	-0.247 (0.172)	-0.3343 (0.2248)	0.0215 (0.17)	0.0651 (0.171)	0.0265 (0.176)	-0.1635 (0.217)
Missing	0.592 (0.528)	0.598 (0.532)	0.172 (0.707)	0.8235 (0.7329)	-0.956 (0.832)	-1.083 (0.861)	-0.437 (0.74)	-1.556 (1.113)
Unskilled premigration occupation		-0.306* (0.154)	-0.316 † (0.17)	-0.437 * (0.2144)		-0.521** (0.155)	-0.541** (0.168)	-0.0139 (0.2105)
Height (inches)			-0.0231 (0.033)				0.00207 (0.033)	
Year of arrival	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Port of arrival	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.727 (0.721)	0.847 (0.727)	1.969 (2.267)	1.711 (1.201)	0.0949 (0.909)	0.305 (0.897)	-0.286 (2.25)	-1.3805 (1.191)
N	1130	1130	934	638	1140	1140	959	637

† p<0.1, *p<0.05, ** p<0.01, *** p<0.001

Note: data for models 1-3 and 5-7 come from matched border record to 1920 census and border record to 1930 census samples. Data for models 4 and 8 come from the panel sample. Log odds are reported with standard errors in parentheses. In model's 3 and 6, we use listwise deletion for individuals without height listed on the border record. For individuals that do not have a height listed, we also do not have skin complexion.

Table 3: Effects of selected variables predicting being in a skilled occupation in 1930 relative to 1920 using conditional maximum likelihood estimation

	All controls excluding height	All controls including height
Arrived accompanied	-.373 (.369)	-.663 (.415)
Complexion (dark ref)		
Medium	-.152 (.426)	-.129 (.458)
Light	-.073 (.739)	-.490 (.785)
Missing	2.043 (1.250)	
Premigration unskilled occupation	.493 (.332)	.703† (.377)
Height (inches)		.232** (.075)
N	258	212

† p<0.1, *p<0.05, ** p<0.01, *** p<0.001

Note: data come from panel sample. Log odds are reported with standard errors in parentheses. Analyses also control for variables presented in table 2. We use listwise deletion in the model that includes a control for height.