

The Labor Market Effects of Mexican Repatriations: Longitudinal Evidence from the 1930s*

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Abstract

We examine the consequences of a significant return-migration episode, during which at least 400,000 Mexicans returned to Mexico between 1929 and 1934, on U.S. workers' labor market outcomes. To identify a causal effect, we instrument the county-level drop in Mexican population with the size of the Mexican communities in 1910 and its interaction with proxies of repatriation costs. Using individual-level linked Census data from 1930-1940, we find that Mexican repatriations resulted in reduced employment and occupational downgrading for U.S. natives. These patterns were stronger for low-skilled workers and for workers in urban locations.

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“The large alien population is the basic cause of unemployment.”

— Martin Dies, House of Representatives Member, 1930

“It is the purpose of the Department of Labor...to foster, promote, and develop the welfare of the wage earners of the United States, ... and to advance their opportunities for profitable employment; and it is a mere corollary of this duty and purpose to spare no reasonable effort to remove the menace of unfair competition which actually exists in the vast number of aliens.”

— Harry E. Hull, Commissioner General of Immigration, 1931

1 Introduction

At several points in U.S. history, especially when workers experienced economic hardship, politicians have proposed the idea that halting immigration could alleviate their problems. As the Great Depression was forcing many Americans into unemployment, this idea was pushed one step further. Between 1929 and 1936, a significant group of Mexicans and their children (many of whom American Citizens) were subject to a range of measures, from encouragement to facilitation, pressure and outright forceful repatriation to their country of origin.

The historical accounts of this episode vary in their view of how coercive/voluntary these repatriations were, as well as in the estimated number of people who returned to Mexico. A large share of historians and social scientists (e.g. [Hoffman \(1974\)](#), [Guerin-Gonzales \(1994\)](#), [Balderrama and Rodríguez \(2006\)](#), [Perlmann \(2005\)](#), [Massey \(2006\)](#)) as well as the influential U.S. Commission on Civil Rights (1980:10, 44-45), emphasizes that “coercion” or “forced deportation” was a prevalent aspect of this event. Other accounts, however, (e.g. [Gratton and Merchant \(2013\)](#)) based on more conservative analysis of the records, and emphasizing the significant return rate of Mexicans already during the 1920s, suggest a substantial share of voluntary returns.

In all accounts, it is clear that organized efforts by local and state governments with the support of the federal administration, local charities and, sometimes, even the Mexican

government, contributed to promote, encourage and reduce the cost of repatriation. These policy-induced pressures and actions resulted in an excess return migration of Mexicans. We evaluate the consequences of such a drop in Mexican working-age populations on labor market outcomes of native workers.

Overall, a total count of around 400,000 individuals, first and second generation Mexicans, left the US during the years 1929-34, according to the most reasonable estimates. Some estimates ([Balderrama and Rodríguez, 2006](#)) indicate that as many as one million individuals repatriated. Others (e.g. [Hoffman \(1974\)](#)) put the number between 400,000 and 500,000. The lower figures are more in line with those obtained analyzing census data, as done in [Gratton and Merchant \(2013\)](#) and in this study. This figure corresponds to about one third of the total Mexican population in the US at the time. Between one fourth and one third of those who repatriated were US-born, second-generation immigrants and hence US citizens.¹ Historians agree that several actions aimed at repatriation targeted all people of Mexican origin. This episode has recently been considered a grave violation of civil rights (see [Johnson \(2005\)](#) and the book [Balderrama and Rodríguez \(2006\)](#)).

The explicit goal of the efforts by national and local authorities was to reduce the local economic burden brought by Mexicans and create jobs for the natives by removing Mexicans who were “taking away” employment opportunities. This justification was very clearly stated by the politicians of the time as exemplified in the two quotes from Congressman Martin Dies and Commissioner Harry Hull, displayed above.

In this paper, we use the 1930 and 1940 U.S. censuses to analyze whether this claim had merit. Namely, we estimate whether in counties where the Mexican population dropped by larger amounts as a fraction of the local population in working-age, native workers experienced improved employment conditions during the decade. In order to address this issue, we exploit rich county-level variation in the drop of Mexican population. While certainly

¹Only a small minority of repatriated Mexicans were children (under 16). Table 4 in [Gratton and Merchant \(2013\)](#) shows less than 5% of the estimated repatriation was constituted by individuals younger than 15, while a more sizeable 15% was between 16 and 24.

not random, this variation was largely driven by differences in the size of the local Mexican population and in the ease (or cost) of repatriation to Mexico. In the presence of a common push to repatriation (part encouragement, part forceful), differences in the size of local Mexican communities and in the cost of repatriating generated the differences in the Mexican population drop relative to local population.

We focus on 684 counties in eleven U.S. states near the Mexican border. Our main explanatory variable is the Mexican population drop measured as the total decrease of the Mexican working-age population between 1930-40 relative to the county’s total working-age population in 1930. Our main outcomes are changes in employment and in occupation-based wages for individual natives, whom we follow from 1930 to 1940 using linked Census data.

Local economic conditions in 1930 could affect both repatriation intensity and employment outcomes of natives in the following decade. To address concerns of potential omitted variable bias, we use an instrumental variable (IV) strategy. Our instruments are based on the local presence of settlements of Mexicans as of 1910, a classic “enclave” IV, either used by itself or interacted with a measure of the repatriation cost, proxied by the presence of (or distance from) a railway line to Mexico.

The use of a simple “enclave” instrument may raise concerns about identification, which we attempt to address in four ways. First, the Mexican share variable is measured in 1910, nearly twenty years before the onset of the repatriation, which is meant to reduce the correlation of persistent economic factors. Second, we control for a large set of economic, policy and geographic variables measured in 1930. Specifically, we always include a control aimed at capturing the local severity of the Great Depression ([Fishback et al., 2005](#)) together with controls for the generosity of New Deal policies ([Fishback et al., 2005](#)), which were implemented in response to the Great Depression. Next, we add extreme weather variables, as some counties were affected by the Dust Bowl or droughts during this time period, local demographic characteristics and state fixed effects. Third, we verify that our instrument is not correlated with economic outcomes in the decades 1910-20 and 1920-30 preceding our

analysis. Fourth, we also rely on alternative identifying variation by interacting the share of Mexicans with a dummy for the local presence of a railway line to Mexico. While the distance of a railway from a county could be correlated with past economic conditions, its interaction with earlier Mexican settlements is more likely to be exogenous, as we explicitly control for the presence of a railway line towards Mexico as well.

We use individual-linked data for natives in the 1930 and 1940 censuses from [Abramitzky et al. \(2012\)](#), following individuals who resided in border states in 1930 independently from where they were in 1940. This method ensures accurate measurement of the effect on incumbents, is unaffected by composition changes, and controls carefully for invariant and unobserved individual-level characteristics. While we can only match about 30% of the male population, we show that this group is not significantly different from the general population, albeit it is somewhat more educated. We also show that the matching probability across counties is uncorrelated with our instrumental variables, hence unlikely to introduce systematic bias in our estimates.

Three main results emerge from the analyses. First, a drop of Mexican population by one percent of the 1930 county working-age population produced a decline in the incumbent natives' probability of having a job in 1940 by 0.2-0.3 percentage points and a decline in their occupation-based wage by 0.3 percent. Second, this impact was larger for low skilled natives and stronger in urban areas. Third, native workers of non-Mexican origins did not migrate internally to replace the missing Mexican workers.

The negative employment and occupational downgrading effects on incumbents are consistent with several explanations, related to specialization, agglomeration forces and choice of technology. First, the loss of Mexican workers, largely employed in “low-skilled” occupations such as “laborers” and “farm laborers,” resulted in a decline of the sectors using this type of workers intensively. Sectors like agriculture (in rural areas) and construction and manufacturing (in urban areas) were significantly reduced. As a consequence, firms in those sectors may have left, new firms did not arise, and hence, demand for labor collapsed.

Second, local agglomeration economies may have been substantially reduced. A significant effect of urban decay and human capital decline has been documented in other episodes of forced migration. Religious or cultural attitudes have often produced sudden expulsions, such as that of Germans from the Czech Republic after WWII ([Testa, 2020](#)) or that of Jews in Germany during the Nazi regime ([Huber et al., 2019](#)). These studies (reviewed and summarized in [Becker and Ferrara \(2019\)](#)) generally find that such episodes generated substantial urban decline, often as they lost high skilled workers, but also just as local population left. Areas, especially rural ones, that lost Mexicans experienced a decline in local population. Previous studies suggest a local population decline of such magnitude can lead to a reduced housing value ([Cortes and Sant’Anna, 2020](#)) and physical capital and depressed aggregate demand and growth, inducing additional people to leave in a downward vicious cycle.

Finally, an additional factor could be that the Great Depression was a time of important restructuring and selection of firms (e.g. [Hershbein and Kahn \(2019\)](#) recognizing the “technological restructuring” role of recessions). With such backdrop, the loss of a certain type of labor induced the remaining firms to adopt technologies that reduced the demand for it. This would generate the same effect as described in [Lewis \(2011\)](#), who finds low-skilled intensive technological choice in response to immigration. This “directed” technological choice, made more prominent in a period of strong firm restructuring, may have enhanced the negative impact of the loss of Mexicans on other low skilled native workers.

Did the extreme economic conditions of the Great Depression affect the external validity of this analysis? While the 1930-40 period, including the Great Depression, was a very unusual decade, and some effects could have been amplified or confounded by it, there are reasons to think that the lessons learned should be applicable to other repatriation episodes. First, the years 1930 and 1940, used in our analysis, were more comparable to each other than intermediate years of the decade in that the GDP was close to its long run trend, with a deep recession and a big recovery in between. Second, given the very high average unemployment rate of 1930-31, the claim that Mexicans could be competing with

non-employed Americans for very limited jobs seems at its strongest during this period.² In particular, the active repatriation initiatives were predicated on the claim that this was an effective way to increase native employment. Finally, similar to now, Mexicans were highly concentrated in less skilled occupations relative to natives, hence the pre-repatriation labor market situation was not too different from that of today.³ In general, as restrictive policies towards immigrants become more popular in periods of economic crisis, this study provides a valid case study for the consequences of such measures on native labor market outcomes.

2 Literature Review

Many studies assess the labor market impact of inflows of immigrants to the US. Some of them, such as [Borjas and Katz \(2007\)](#), [Card and Lewis \(2007\)](#) and [Monras \(2018\)](#), focus specifically on Mexican immigrants. Differently from this study, however, most papers use variation in immigrants' inflows, rather than outflows, and focus on immigration in the post-1960 period. Episodes that produced sudden and localized immigrant inflows to the US, such as the Mariel Boatlift, have been objects of intense study among economists ([Card, 1990](#); [Borjas, 2017](#); [Peri and Yasenov, 2019](#)). They are considered valuable “natural experiments”, which allow scholars to isolate likely causal effects of immigration on labor markets. Alternatively, causal identification of the impact of immigrants on local labor markets has come from exploiting changes in the supply of immigrants proxied by shift-share instrumental variables based on past immigrant location and current aggregate flows ([Card, 2001](#)) or on combinations of past location and policy changes, such as the changes in the H-1B visa quotas ([Kerr and Lincoln, 2010](#); [Peri et al., 2015](#)). Most of these papers find only small effects of immigration on native employment and wages on average and, specifically, on low

²Especially during the peak repatriation years of 1932-34, the unemployment rate in the US was higher than 20%.

³As of 2017, 40% of Mexicans were employed in the two lowest skill occupations (“Laborers and Farm Laborers” and “Service Workers”), while for natives, this number was 18%. When classifying the next two occupational categories (“Craftsmen” and “Operatives”) as low skilled, these numbers change to 72% and 36% respectively.

skilled native workers. Several studies have provided explanations for the lack of displacement and competition effects of immigrants, such as complementarity of abilities ([Ottaviano and Peri, 2012](#)), productivity-enhancing specialization ([Peri and Sparber, 2009](#)), choice of appropriate technology ([Lewis, 2011](#)) and positive local demand effects ([Hong and McLaren, 2015](#)). Other recent studies share our historical focus in that they analyze the economic impacts of immigration to the US during the early 20th century (era of mass migration), exploiting variation across counties and local labor markets ([Abramitzky et al., 2019b](#); [Price et al., 2020](#); [Sequeira et al., 2020](#); [Tabellini, 2020](#)).

Our paper, unlike this literature, studies the labor market consequences of repatriation (outflow) of immigrants. The value of such addition is multi-faceted. First, the impact of a loss of immigrants who are integrated into the labor force can be different from the impact of adding them. There are different costs of integrating and separating workers, each disrupting production, and they may work in different ways. Second, as at least some of the repatriations were coercive, and given the large economic and human costs of deportation-based policies, it is important to test whether there is any evidence that supports the labor market benefits promised to natives. More closely related to our study is [Clemens et al. \(2018\)](#), who analyzed the effects of repatriations following the end of the Bracero program in 1964, when almost half a million agricultural workers from Mexico were excluded from the US labor market. The authors find no significant effects on employment and wages of native agricultural workers. They argue that capital-intensive technology and crop adjustments played a key role in absorbing the labor change, hence not significantly affecting labor market outcomes for natives. While that paper mainly focuses on agricultural workers, the repatriations of the 1930s involved many urban communities within large cities, whose economies were already based on manufacturing and services.⁴ Hence, we view our paper as complementary to and extending the analysis of [Clemens et al. \(2018\)](#). A recent and relevant paper, focusing on the economic effects of repatriations/enforcement on local labor markets, is [East et al.](#)

⁴For instance, authorities in the urban communities of Los Angeles, CA, and East Chicago, IN, were among the most active enforcers of deportations as documented in [Simon \(1974\)](#).

(2018). The authors show that the county-level introduction of Secure Community, a policy which allowed local police to detain undocumented immigrants and increased deportation from 2008 to 2012, resulted in a reduced supply of immigrant workers and negative effect on employment of native workers, especially less skilled ones.

Our work is also related to the literature on the effects of forced migration. This literature usually studies the consequences of forced migration on receiving populations. The effects on sending regions have received much less attention (Becker and Ferrara, 2019). Few studies exploit historical episodes as natural experiments, and usually find negative effects on sending populations. For instance, Testa (2020), who studies the massive expulsion of ethnic Germans from the Czechoslovak borderlands after World War II, finds that municipalities from which Germans were driven away experienced higher rates of unemployment. Ferrara and Fishback (2020) shows that counties with larger outflows of Germans due to local anti-German sentiment after World War I, experienced a decrease in average manufacturing wages. We advance this literature by studying an episode of forced, or at least encouraged, migration, mainly predicated on its positive economic consequences, rather than based on religious or cultural reasons, or on national security concerns.

This paper also offers important additional novelties relative to the existing literature. First, by analyzing individual (rather than aggregate local) data, we isolate effects on native employment and wages from composition and selection effects, found to be very relevant when assessing the impact of immigrants on aggregate data (see Borjas and Edo (2021)). Additionally, this approach allows us to control for individual time-invariant characteristics. Due to data limitations, this type of analysis is only done in few historical studies in the US and in some European countries, where longitudinal administrative data are available (Foged and Peri, 2016). While not a novelty, we align with the most recent literature in addressing concerns of enclave instruments and testing its validity regarding its correlation with previous economic trends, an issue emphasized by Jaeger et al. (2018). We further probe the robustness of our estimates by interacting our instrument with transportation cost

proxies. Finally, we are the first economists to study this historical episode and evaluate the impact of this repatriation policy. This historical episode was important, consequential and worth a specific analysis in its own right.

3 Historical Background

Immigration from Mexico to the US grew in the early 20th century, driven largely by employers recruiting workers for jobs in railroad, meatpacking, steel mills and agriculture. Prior to 1924, immigration from Europe was much larger and quantitatively more relevant than immigration from Mexico, so European filled the jobs. With the Immigration Act of 1924 imposing quotas on Europeans, but not on natives of the Western Hemisphere, immigration from Mexico grew robustly and steadily through 1929, partially replacing immigration from Europe. As of 1929, Mexican immigrants were the majority of the most recently arrived and more “ethnically” different from the native population than the previous European immigrants. Thus, they were a relatively more identifiable target once the public sentiment toward immigration turned sour, as the Great Depression unraveled.

As the Great Depression hit the US economy in 1929, media and local political groups pressed for – and organized themselves to help with – repatriation of Mexicans and Mexican Americans ([Balderrama and Rodríguez, 2006](#)). Using data from ports of entry in Mexico, [Hoffman \(1972\)](#) suggest that between 400,000 and 500,000 Mexicans left the US between 1929 and 1937. Other sources, ([Balderrama and Rodríguez, 2006](#)), claim much higher levels (up to one million, in some sources, even two million), but with little support in the official statistical records.⁵

More conservative, but better documented and more reliable, estimates ([Gratton and Merchant, 2013](#); [Hoffman, 1974](#)) imply that of the around 1.3 million Mexicans in the US, about 400,000 were repatriated during this period. This figure constituted about 30% of the Mexican population in the US as of 1930 and about 1% of the total labor force in 1930,

⁵See [Gratton and Merchant \(2013\)](#) for a summary of aggregate figures.

mainly concentrated in the states near the Mexican border.

While we mentioned disagreement on the exact historical account of this large repatriation episode, most historians agree that a significant fraction of Mexicans were forced or at least strongly pressured and harassed into returning to Mexico ([Balderrama and Rodríguez, 2006](#)). In several cases, at least in the early years of the initiative, charities and the Mexican government aided with repatriations, with the idea that this would improve the economic well-being of Mexicans and rejoin them with their people and country. Progressively, however, local authorities became more aggressive, even for the cases classified as “voluntary”. Few cases were direct deportations carried out by the federal government, but there is consensus that the Hoover administration had a complacent attitude and allowed local agents to act, sometimes forcefully, in promoting repatriation. Recently, some US states have recognized their role in violating civil liberties and coercing their citizens into repatriation; in 2005, the state of California passed the “Apology Act for the 1930s Mexican Repatriation Program,” officially recognizing “unconstitutional removal and coercive emigration of United States citizens and legal residents of Mexican descent.”⁶

A clearly stated motivation for the repatriation campaign was the economic cost of Mexicans and their causal role in increasing local unemployment of US citizens. The two main reasons cited by Secretary of Labor William Doak for repatriation were that (i) “it was essential to reduce unemployment of citizens,” and (ii) “many of the target individuals were jobless and on relief,” i.e., receiving some form of public or charity assistance ([Hoffman, 1972](#)). This oft-repeated claim of a beneficial effect of repatriation on native unemployment was used to justify the support and involvement of local authorities and charities. Yet, these efforts to promote repatriation would eventually be criticized for violating civil liberties and personal freedom, and for having negative social consequences. The main goal of this paper is to evaluate whether the underlying predicated economic motivation was valid, a hypothesis that has, so far, remained untested in the academic literature.

⁶A memorial plaque was placed in LA Plaza de Cultura y Artes in Los Angeles, claiming that “an estimated 2 million people of Mexican ancestry were forcibly relocated to Mexico” during the Great Depression.

The main time period we are considering (1930-40) includes the Great Depression, a deep disruption of economic activity across many localities and industries. Other studies ([Boustan et al., 2010](#); [Fishback et al., 2005](#)) have shown that local weather conditions (e.g., extreme events such as the Dust Bowl and severe droughts) and the generosity of the New Deal resulted in large local economic effects and in internal labor mobility. Therefore, we include variables capturing those phenomena, as well as state fixed effects, as controls to assuage the concern that unobserved variables may be correlated with both Mexican repatriation and local economic conditions. We are interested, specifically, in the economic impact on US workers of a large number of Mexicans and Mexican Americans leaving the US. Various intensity of encouragement, harassment or, to the extreme, deportations, generated exogenous repatriation intensity providing a way to identify the impact of their repatriation on local workers.

4 Data and Summary Statistics

4.1 Sources, Sample and Repatriation Intensity

Our primary data sources are the 1930 and 1940 US censuses. We use both the Integrated Public Use Microdata Series (IPUMS) full count ([Ruggles et al., 2019](#)) and the linked individuals versions ([Abramitzky et al., 2012, 2014, 2019a](#)). The linked data follows individuals by matching records from the 1930 and 1940 censuses based on their first name, last name and year of birth. We aggregate the full count data at the local labor market level to measure the intensity of repatriation for each locality. In order to test correlations with labor market pre-trends and to construct our instrumental variable, we also rely on the 1910 and 1920 full count US censuses. Lastly, we use county-level data for several control variables, including the decline in retail sales between 1929 and 1932 (as a proxy for Great Depression intensity), New Deal spending and extreme weather events, such as the prevalence and intensity of the Dust Bowl phenomenon ([Fishback et al., 2005](#)).

We measure the intensity of decline in Mexican population and we locate native individuals at the county level. Counties represent finer geographical units compared to both state economic areas and commuting zones, which are often used to define local labor markets in more modern settings (Autor et al., 2013; Chetty et al., 2014). Our choice is dictated by several considerations. First, such fine geographical detail allows us to maximize the spatial variation of the intensity of Mexican repatriation and the number of units in our analysis. Second, this choice is related to one of our instruments – the county-level presence of a railway to Mexico – which proxies for the cost of repatriation much more closely in smaller geographic units. Choosing larger units would attenuate the connection between railway line presence and repatriation cost and reduce the power of one of our instruments. Lastly, many of the historical variables that we use as important controls were only collected at the county-level.

A potential disadvantage of using counties as geographical units is that county boundaries changed over time, such as between 1910 and 1930. This could affect our analysis because we use the presence of Mexican community in 1910 as an instrument for repatriation intensity in 1930. For this reason, we keep county boundaries for 1910-1940 constant by cross-walking our individual and aggregate data to the 1910 boundaries. Another possible concern is that the small size of counties may induce measurement error in the demographic shock we analyze. To allow for correlation between neighboring counties, we cluster the standard errors at the county level.

As of the early 1930s, the vast majority of the Mexican community in the US resided near the states bordering Mexico. More precisely, most Mexican communities were in the regions which belonged to Mexico prior to 1849 and were claimed by the US in the Treaty of Guadalupe Hidalgo following the Mexican-American war (1846-48). Thus, the repatriation was most consequential in this region. We, therefore, focus our analysis on the following set of “two-layer” border states: California, Arizona, New Mexico, Texas, Louisiana, Oregon, Nevada, Utah, Colorado, Oklahoma and Arkansas. They are comprised of 684 counties,

constituting our main sample. The repatriation intensity exhibited large variation across counties in these states, as Mexican communities were unevenly distributed throughout them. The presence of and the change in Mexican population between 1930 and 1940 in the states outside of the considered region was negligible. Hence, by including them, we would introduce statistical noise without gaining any additional identifying variation.

Our sample includes working-age (18-65 years old) individuals residing in all 684 counties of the border states as of 1930. Because repatriation efforts followed ethnicity lines and not citizenship status, we denote individuals as Mexican if either they or one of their parents were born in Mexico. The linked individuals dataset, which we use to measure outcomes, includes only natives of non-Mexican origin who are matched across census years to the same first name, last name and birth year. Our initial sample corresponds to the one used in [Abramitzky et al. \(2012, 2014, 2019a\)](#), who provide details on the methodology and the prevalence of incorrect matches.⁷ Due to name changes following marriage, this dataset contains information on men only. Men with higher socioeconomic status are more likely to be matched possibly because they are less likely to misreport or misspell their age and name. We compare this sample to the general population in the subsection below. We limit the sample to individuals between 18 and 55 years old in 1930, so that they remain under 65 by 1940. When measuring outcomes, we further restrict the sample to exclude individuals who, as of 1930, were unpaid family workers, in school or employed in the army.

Our measure of Mexican repatriation is the county-level change in the number of working-age individuals of Mexican origin (age 18-65) between 1930 and 1940, relative to the total working-age population of the county in 1930. For county c , the variable of interest is:

$$(MexPopulationDrop)_c = -\frac{(Mex_c^{1940} - Mex_c^{1930})}{Pop_c^{1930}}. \quad (1)$$

The variable $(MexPopulationDrop)_c$ is a measure of the drop of the Mexican population

⁷We are very grateful to Katherine Eriksson for making their data available to us and to John Blanchette for providing expert help and support.

as a percent of the initial working-age population. As noted above, we only consider the population in working-age, to approximate losses in labor, but we call this variable, for simplicity, "drop of Mexican Population." Including the negative sign in front of the fraction implies that higher declines are measured as larger positive numbers.⁸ The largest part of the drop in Mexican population was caused by repatriation.⁹ We analyze the response of native individual outcomes to variations in this measure, matching their location in 1930 to the county's Mexican population drop between 1930-40.

To visualize the variation in Mexican Population Drop across the counties in our sample, Panel A in Figure 1 presents a county-level map of this variable. Darker shades of gray correspond to larger declines, in percent of the initial population. Two facts are worth noting. First, in counties with largest repatriation, the decline in the Mexican population was as large as 20 or even 30 percent of the 1930 working-age population. A decrease larger than three percent of the 1930 working-age population in the county is indicated by the darkest color. This represents a significant change in the labor force. Second, while clearly the largest Mexican population drop was in counties closest to the border, omitting those, there is significant idiosyncratic variation in the remaining areas. Some counties in Colorado, northern California, Texas and Nevada had a very large population drop, while other counties, sometimes closer to the border, had much smaller ones.

The Mexican population drop defined in equation (1) can be decomposed into two terms as follows:

$$-\frac{(Mex_c^{1940} - Mex_c^{1930})}{Pop_c^{1930}} = -\frac{Mex_c^{1930}}{Pop_c^{1930}} \cdot \left[\frac{Mex_c^{1940} - Mex_c^{1930}}{Mex_c^{1930}} \right]. \quad (2)$$

The first term is the share of Mexicans in the population in 1930, which measures the size of the pre-existing local Mexican community. It is a good starting point to provide

⁸The very few counties with an increase in Mexican population have a negative value of this variable.

⁹Internal mobility, deaths and migration to other counties also contributed to the change. We include the average death rate by county to control for the change in Mexican population. Additionally, for the counties with positive number of Mexicans in 1930, we control for the shares of Mexican origin aged 6 to 16 and aged 55 and over. These results are quantitatively similar to our main results, and available upon request.

identifying variation. This term, as it measures the prevalence of the Mexican population in the county, is highly correlated with repatriation and the drop in the Mexican population as a share of the initial population. It is also pre-determined and linked to past historical events that have affected the local settlement patterns and growth of the Mexican population. Panel C of Figure 1 presents the historical precursor of this term, namely the Mexican working-age population as a share of the total population in 1910. This is the “historical enclave” measure, which we will leverage in our instrumental variable approach, and was driven by early determinants of Mexican migration, unlikely to be correlated with post-1930 economic conditions. Even a very casual look at Panels A and C of Figure 1 shows that the Mexican population drop and the size of Mexican community in 1910 are strongly correlated. We will show below that variation in the 1910 Mexican population share is not correlated with economic and demographic trends in the 1910s and 1920s. Moreover, as both variables clearly exhibit an inverse gradient of intensity with distance from the Mexican border, we explicitly control for distance to Mexico in all regressions. Variation in the size of Mexican community in 1910, conditional on distance to Mexico, was likely driven by specific historical episodes determining the initial location of the early Mexican migrants. In the simplest empirical specification, we use the 1910 historical Mexican share as an instrument for the whole term in equation (1) capturing the Mexican population drop.

The second term in equation 2 represents the local percentage decline of Mexican population between 1930 and 1940. This term varies across counties also due to different intensities in the implementation, enforcement and realization of the repatriation policy. Local differences in the cost of Mexican repatriation may produce variation in this term.

In two extensions of our IV strategy, we proxy for this term using two variables likely correlated with the cost of repatriation to Mexico, but much less likely to be correlated with economic growth in the 1930-40 decade. The first one is the presence of railway lines to Mexico as of 1931 (Panel B of Figure 1). We used the *Commercial Atlas of the World* (1931), which identifies the counties through which railway lines ran for each state in our

sample. We coded the presence of a railroad to Mexico only if the county hosted a ‘major’ rail line of the Union Pacific network.¹⁰ This binary distinction often involved an element of subjectivity. In particular we required that (i) a county had a railway line that followed the general path toward Mexico on the Union Pacific network and (ii) that line passed near the center where the majority of the county population lived. We then use the interaction of this dummy with the size of the 1910 pre-existing Mexican community to predict the drop in Mexican population. The second extension is interacting the 1910 Mexican share with a county-level indicator for the presence of a close railway line to Mexico (i.e., below median distance in the sample of counties) not necessarily in the county. The two dummies described above will be used to capture the second term in the decomposition of repatriation intensity shown in Equation (2) above.

Using the three instruments described here, namely (i) the 1910 Mexican population share, and that share interacted with (ii) an indicator for railway presence and (iii) an indicator for being close to a railway, we examine whether the drop of Mexican population produced the effect, predicated by those supporting the repatriation effort, of creating jobs for the local population of natives.¹¹ Note that when using the interaction variables as IVs, we also control for the railway dummy variables that we constructed.

The main outcome variables we analyze are the individual change in employment status and in occupational status between 1930 and 1940. Wage data is not available in 1930, so we can only measure occupational up/downgrading by using the occupational score or by assigning the mean occupational wage in 1940 to all workers in 1930. The occupational score variable, instead, assigns each occupation a value representing the median total income of all persons with that occupation in 1950. IPUMS computes the occupational score, assigning to each occupation a value representing the median total income of all individuals with that occupation in 1950. Additionally, we analyze self-employment and internal mobility. All

¹⁰Available from the University of Alabama’s *Historical Map Archive* at http://alabamamaps.ua.edu/historicalmaps/us_states/states.html.

¹¹One could also use, in principle, only the railway proxies on their own as instruments for repatriation intensity. The power of those, however, is too low to produce any meaningful 2SLS estimates.

outcomes are measured for natives with no Mexican-born parents.

One important change in the variable definition between 1930 and 1940 is worth noting. The modern labor force definition was laid out around the 1940 census in preparation for the World War II draft. In the 1940 census, people were considered employed if they worked at least one hour for pay in the previous week. Prior to this, employment was recorded as having any gainful occupation on the previous day. Because of these discrepancies, we choose to measure Mexican repatriation intensity by changes in working-age population (and not employment), which can be consistently defined in 1930 and 1940. For the individual data on natives, we flag workers as employed if they meet the corresponding employment definitions in each census, which is admittedly imperfect. Nevertheless, this will only be problematic if the changing employment definition induced a measurement error which is correlated with repatriation rates after controlling for local demographic characteristics, pre-trends, Great Depression intensity, etc. This is more likely the case of a classical measurement error without consequences on the coefficient estimates.

4.2 Summary Statistics

To have a clearer idea of which labor market segments were most affected by the Mexican repatriation, we show the occupational specialization of the native and the Mexican workforce in 1930. Table 1 shows the distribution of Mexicans (Column 1) and natives (Column 2) across nine broad occupation groups ordered, from top to bottom, by their average hourly wage in 1940. We define the bottom three categories (service workers, laborers, and farm laborers) as low skilled, and the rest (managers, professional, craftsmen, sales, clerical and operates) as high skilled. Low-skilled occupations were associated with lower education, lower literacy rates and more manual-intensive tasks.¹²

The first two columns of Table 1 provide a clear picture of the very different occupational

¹²Note that throughout the paper, whenever we split the sample into low and high skilled workers, we omit the group of farm managers, that equals about 21% of the male employment, because it is very heterogeneous and difficult to attribute to either category.

distributions between Mexicans and natives. The former were much more heavily concentrated in the three low skill occupation groups. While only 36.4% of the native workforce was employed in these occupations, for Mexicans this share was 72.3%. To the contrary, Mexicans were underrepresented in high skill occupations such as clerical, managerial, professional and sales positions. Specifically, the top six occupations accounted for 63.6% of the natives, but only 27.7% of Mexicans.

In the last column, we show the occupational distribution for the sample of 1930-40 linked natives. Unsurprisingly, compared to the general population, they are slightly more represented in high skill occupations (70.8% vs 63.6%). This pattern reflects the fact that the sample includes men who had higher literacy rate on average, a determinant of the probability of identifying one's name correctly ([Abramitzky et al., 2012](#)). The occupational distribution of the linked group of male natives is quite similar to that of the overall natives and drastically different from that of Mexicans. This table suggests that Mexicans were not likely to compete with natives for similar jobs. Rather, their contribution to production was in tasks that may complement the jobs of natives. It is even likely that, within occupations, their job descriptions might have been more manual- and less language-intensive than those of natives, due to their very low literacy level and poor English language proficiency. Overall, Table 1 suggests that the mechanisms of complementarity ([Ottaviano and Peri, 2012](#)), differences in specialization ([Peri and Sparber, 2009](#)) and upgrading of natives on the occupational ladder ([Foged and Peri, 2016](#)) were likely to be at work in response to a change in the local Mexican populations, even within skill groups.

Next, in Table 2, we present more summary statistics from the 1930 census. Panel A summarizes our individual-level variables in the full count sample (Column 1), the full count male sample (Column 2) and in the linked individuals sample (Column 3).¹³ In 1930, men comprised 50.4% of the working-age population. Next, 68.3% were married and 95.6% were literate, while about two out of three individuals were in the labor force. Compared to the

¹³The Census includes information on 10.13 million working-age individuals, of whom 5.10 million were men, and among which 1.48 million were matched in the 1930 and 1940 censuses.

general population, men were more likely to be in the labor force (92.9% vs 59.9%), but the other demographic characteristics were largely similar. Relative to the male and entire population, our linked individuals sample had fewer black people, slightly more literate people and a higher fraction of students. On average, however, the full-count male and the linked male samples are quite similar in most of their characteristics, including the share of literate, share in school and share in the labor force.

In Panel B, we summarize the county-level control variables for all the 684 counties in our sample, measured in 1930. The average Mexican population drop across those counties was 2% of the 1930 working-age population. The mean illiterate share was 7%, and the share of young individuals (age 18-40) was 64%. We also report the means of all the variables we use in the full set of controls. For example, the mean number of months with extreme weather events (drought or wet) is 8.5 and the average distance to Mexico is almost 429 miles. Lastly, for our instruments, the mean share of Mexicans in 1910 was 4.1%, and about 47% of counties had a railway line connecting to Mexico.

5 Identification: Early Mexican Settlements and Railroad to Mexico

5.1 Instrument Construction and Power

If Mexican repatriation intensity was randomly distributed across counties, a least squares regression of individual outcomes on county-level Mexican population drop would produce an estimate of its causal effects. However, it is likely that local economic and social conditions, such as the intensity of the Great Depression, policies and demographics, were correlated with repatriation intensity and individual economic outcomes. If we are not able to fully control for these factors, this could introduce significant omitted variable bias. To alleviate this concern, we include a series of controls and use an instrumental variable strategy. Specifically,

as mentioned in Section 4, we leverage the idea that the Mexican population drop as a share of local population was higher in counties with larger pre-existing Mexican communities as of 1910. Mexican settlements in 1910 were driven by early circumstances, only weakly correlated with the local economic situation twenty years later and with employment growth in the 1930-40 decade. Nevertheless, early settlement, because of the networking nature of migration flows, still affected the size of the Mexican community as of 1930. Building on this idea, we use the standard “enclave” instrument, pioneered by [Altonji and Card \(1991\)](#), which exploits variation in the size of pre-existing Mexican communities in 1910. Once we control for several measures of economic conditions in 1930, distance to Mexico, labor market pre-trends and state fixed effects, these instruments are unlikely to be correlated with determinants of economic change in 1930-40. We also test explicitly that they are not correlated with trends in 1920-30.

As the simple enclave instrument may leave significant lingering correlation with persistent economic shocks ([Jaeger et al., 2018](#)), we also use two different sets of IVs that build on the decomposition in expression (2) and leverage an additional source of variation of the Mexican repatriation intensity. To do so, we interact the size of the 1910 Mexican community with two variables that are potentially correlated with the cost and opportunity to repatriate local Mexicans. We construct two versions of this instrument. In the first version, we use a dummy that is equal to one if a railway line connected to Mexico goes through any part of the county and zero otherwise. Its interaction with the 1910 Mexican share is what we call the “Railroad IV dummy.” In the second version, we use a dummy equal to one if there is a railway line to Mexico at a distance less than 15.8 miles from the most populated center in the county.¹⁴ In this second instrument, the presence of a railway does not depend on the area of the county, which may be desirable given the large differences in county sizes between some states in our sample (e.g., California and Texas). The interaction of this variable with the 1910 Mexican share is what we call the “Railroad IV distance.”

¹⁴This is the median value of the distance to railroad variable in our sample. Hence, this captures whether the distance to the closest railway is lower than the median for the sample.

Looking at Figure 1, it is evident that there is a correlation between the share of Mexicans in 1910 and the presence of a railway to Mexico in 1931. However, it is also clear that the correspondence is not perfect, and there is some idiosyncratic variation in the presence of a railway. For instance, there are some counties in Oregon, Utah and Colorado with only a small share of Mexicans, and a railway line to Mexico. Similarly, there are counties in Arizona with very large shares of Mexicans without direct railway access to Mexico.

We should also be aware that the presence of a railway line to Mexico may capture other factors that could have influenced native success during the 1930s. The presence of a railway line could be correlated with the county’s exports to and imports from Mexico, or with its industrial structure. In the regression, however, we explicitly control for the presence of a railway and the distance from Mexico, so that identification is only produced by the interaction of distance with the 1910 Mexican share and the size of such share.

Figure 2 shows the correlation between the Mexican population drop 1930-40 and the Mexican population share in 1910. This is just a simple correlation, and it does not capture the power of the first stage, which instead measures the partial correlation after regressing on the controls. Nevertheless, the figure provides preliminary evidence of a very strong and not far from linear correlation. It shows no unreasonable outliers, and it allows us to identify the counties experiencing the most substantial drop in Mexican population as a share of the initial population, mainly in Arizona and Texas. Notice that the counties of Zapata and Duval in Texas, which share a border with Mexico, had a Mexican share larger than 80% in 1910, hence representing very extreme cases. Still they were close to the regression line between the initial share and the 1930-40 drop.

Table 3 shows the first stage results. The regression is run at the individual-level even if the main explanatory variable and IV only varies at the county level: individual observations in the same county share the same endogenous variable and the same IV. The individual characteristics are controlled for to express the power of the IV consistently with the individual regression of the second stage. Standard errors are clustered by county. The independent

variables are the 1910 Mexican enclave instrument (Columns 1-2), the “Railroad IV dummy” (Columns 3-4), and the “Railroad IV distance” (Columns 5-6). The dependent variable is the Mexican repatriation intensity, $(MexPopulationDrop)_c$, as described in Section 4. The odd-numbered columns include county-level controls only for our baseline characteristics: (log) population, population share of the young (age 18-40), urban status, share of illiterate, employment share of agriculture and manufacturing, population density, all measured as of 1930, extreme weather events in 1930-40, and state fixed effects. In the even-numbered columns, we use the full set of controls, which include the following variables: linear and quadratic terms for growth in retail spending between 1929-33 and 1933-1939 (proxying for the local severity of Great Depression), linear and quadratic terms for the distance to Mexico, their interactions, the death rate¹⁵, and three New Deal Spending variables (Fishback et al., 2005) - Agricultural Adjustment Administration (AAA) spending, total relief grants and total loans.¹⁶ Standard errors are clustered by county, in order to account for potential correlations within local labor markets and are shown in parenthesis. In the first stage regressions, the relevant identifying variation is at the county level.

The coefficients in the first two columns show that after controlling for local characteristics and economic conditions, a pre-existing Mexican community larger by 1 percent of the county’s population in 1930 is associated with a 0.2 percentage points larger repatriation rate. This correlation is highly statistically significant, and the first stage F-statistic is around 28. In Columns 3 through 6, we use the two versions of the railroad IVs (dummy and distance) and show that, all else equal, the presence of a railway line connecting to Mexico interacted with the Mexican enclave has a strong predictive power as well. The first stage F-statistics for these IVs is between 11 and 33. Overall, these results assert the notion that our instrumental variables are reasonably good predictors of Mexican repatriation

¹⁵We control for the death rate because the change in Mexican population could be affected by the number of deaths. The source of the data is from the IPUMS version of the 1930 Vital Statistics (Manson et al., 2017).

¹⁶These control variables are not available in some counties, and thus the number of observations change slightly across columns.

intensity between 1930 and 1940 even after controlling for an array of economic, geographic and demographic characteristics of the county in 1930.

5.2 Instrument Validity

The key question for any instrument is whether it satisfies the exclusion restriction. In our setting, this amounts to whether the variation produced by the Mexican share in 1910 or its interactions with proxies for railway presence are correlated with unobserved economic changes in 1930-40 after controlling for distance to Mexico, the full set of local controls and state fixed effects. In order to test this proposition, we analyze the partial correlation of the IVs with pre-1930 individual-level economic trends. In particular, we ask whether the proposed IVs are correlated with individual outcomes, such as internal mobility, during the 1920-30 period. If economic changes are persistent, a correlation of the instruments with pre-existing individual trends would cast doubt on the exclusion restriction in our setting.

Table 4 shows the results from this exercise. Each panel presents the estimated coefficients from regressions of a separate pre-trend outcome (denoted in the header) on each instrumental variable. Column 1 uses the Mexican share 1910 as an IV, and Columns 2 and 3 use our two railroad IVs. All regressions include the full set of control variables. The dependent variable in Panel A is an indicator for whether the person has moved across counties within state between 1920 and 1930, and, in Panel B, it is a dummy for remaining in the same state during the same time period. The dependent variable in Panel C is the 1920-30 change in gainful employment, and, in Panel D, it is the 1920-30 change in occupation wage. Finally, the dependent variable in Panel E is a dummy for remaining in the same county throughout the period. These variables reveal indirectly the correlation between the IVs and local economic conditions in 1920-30. If the IV is correlated with the county’s economic growth (and attracting people) or decline (and losing people) in the decade before 1930, this may reveal persistent correlation with lingering economic variables.

The estimated coefficients are statistically not significant at conventional levels in all

but one cases. In Panels A and B, the probability of individuals moving within a state or staying in same state between 1920 and 1930 are not significantly associated with any of the IVs. Similarly, in Panel C, the change in gainful employment do not show any significant correlation with the IVs. Then, in Panel D, two out of three IVs are not significantly correlated with the 1920-30 change in occupational wages. There is a negative significant correlation (at the 5% but not at the 1% confidence level) when using the Railroad IV. Finally, the probability of remaining in the same county between 1920 and 1930, shown in Panel E, is not significantly correlated to any of the IVs. In other words, after controlling for a wide array of economic and geographic factors, our instrumental variables are not correlated with previously ongoing economic and demographic trends. There is only one significant correlation out of 15 estimated coefficients, which one could expect as a "false positive" in a 5% test of the null hypothesis. These results are consistent with our IVs satisfying the exclusion restriction.

Another test that we perform to examine the validity of our IVs is to check whether they are correlated with the linkage rate of the individual data. If such a correlation exists, this would imply that the instruments may simply capture the effects of differential attrition across counties. This may generate spurious results. In Table 5, we regress the county-level percentage of adult male population in 1930 that is linked to their 1940 record on the IVs. We find that, reassuringly, the coefficients are not significant in seven out of eight cases, with a 5% significance in just one specification. While the linked sample is certainly selected, the selection does not seem to be significantly correlated with the identifying variation we use to estimate our result.

6 Empirical Specification and Estimates

The equation we estimate is as follows:

$$\Delta y_{ic}^{1930-40} = \alpha + \beta(MexPopulationDrop)_c + \gamma X_c^{1930} + \delta Z_{ic}^{1930} + \lambda_s + \varepsilon_{ic}. \quad (3)$$

The dependent variable is the 1930-40 change in the relevant outcome for individual i who was residing in county c as of 1930. The individual-level outcomes we focus on are employment status and occupational wage (based on 1940 wage of the occupation) or occupational score (based on the 1950 average income for that occupation). The specification includes the county-level controls, X_c^{1930} , either “baseline” or “full set,” described for the first stage regression in Section 5.1, as well as a set of individual-level controls, Z_{ic}^{1930} . The latter are age, age squared, race dummies, marriage and literacy indicators, as well as all the two-way interactions of all variables as measured in 1930. These control for personal characteristics that may affect the evolution of individual labor market outcomes over the 1930-40 period. Any time-invariant individual characteristics, observable and unobservable, that affect the probability of employment or the wage level of an individual are “differenced” out in our approach. The term λ_s represents state fixed effects, capturing aggregate state level economic trends during the 1930-40 period. Lastly, ε_{ic} is the individual error term. Our sample is always restricted to natives who resided in the set of two-layer border states as of 1930. We do not use weights when estimating this individual-level equation. The standard errors are clustered at the county level.

6.1 Baseline Estimates

The main estimates of the coefficient of interest (β) from the regression equation (3) are reported in Tables 6, 7, and 8. In Panel A of Table 6, the outcome is the change in the individual employment status between 1930 and 1940. It is equal to one for workers who move from non-employment in 1930 to employment in 1940, zero for no change and minus one for the opposite change. Note that the definition of who counts as employed varies between the two census enumerations, so this variable may contain some noise.¹⁷ In Panel B, the dependent variable is a transition dummy from non-employment in 1930 to employment in 1940. This variable is equal to one if such a transition is experienced by the individual and

¹⁷See section 4 for details.

zero otherwise. Next, in Panel C, the outcome is a transition dummy from employment in 1930 to non-employment in 1940 (the opposite transition from that in Panel B), and lastly, in Panel D, the dependent variable is the change in self-employment status (equal to 1 for self-employed) between 1930 and 1940. Columns 1 and 2 display the OLS estimates for comparison. Columns 3 and 4 show the 2SLS estimates when using the 1910 Mexican share as an IV, while Columns 5 through 8 present the estimates with the railroad IVs (“dummy” or “distance”). The odd-numbered columns include the baseline set of county-level controls (see above), while the even-numbered columns control for the full set of county-level variables. All regressions include the individual-level controls.

The baseline estimates presented in Panel A of Table 6 are robust across all the 2SLS specifications. They imply that a decrease in the Mexican population by one percent of the 1930 county population decreased the probability of a native in that county to be employed in 1940 by 0.14 to 0.43 percentage points. This means that in counties where Mexicans dropped by as much as 15 percent of the population, putting them among the top 5 percent most affected counties, native individuals experienced a lower employment probability by about 2 to 4.2 percent in 1940 relative to a county with no drop in Mexican population. This is a statistically significant and economically meaningful effect. This effect arises mainly from a decreased probability of transiting from non-employment in 1930 to employment in 1940, as illustrated by Panel B of the same table. The probability of employment to non-employment transitions, instead, is not significantly affected by the drop in Mexican population, as shown in Panel C of the table. The same is true for the probability of transitioning into or out of self-employment, shown in Panel D. Hence, the first result emerging from the individual regressions is that Mexican repatriations are actually associated with *lower* potential opportunities for incumbent natives to find employment in the subsequent years.

Comparing the estimates across columns in Table 6, one notices that the “full controls” estimates are usually larger than the “baseline controls” estimates. To better understand what factors drive the differences in the estimates across specifications, we show in Appendix

Table A1 how the coefficient estimates changes when we progressively include controls (first the retail sales growth, then New Deal spending, then death rate, and finally the distance to Mexico), starting from the “baseline” specifications. The table shows that including controls for the retail sales growth and death rates does not affect the estimates. The inclusion of the New Deal spending has a small effect, while the inclusion of distance to Mexico, especially in the IV estimates, generates larger negative estimates of our main coefficient. Distance to the border is strongly and negatively correlated with the share of Mexicans and with repatriations.¹⁸ At the same time, it may proxy unobservable aspects of the severity of the recession. The Great Depression hit sectors like construction, manufacturing and shipping most severely, so that the East Coast and Great Lakes were the most affected and proximity to those locations implied stronger economic effects. For this reason, counties closer to the Mexican border had better economic performance. In fact, when included, the distance from the border is negatively, but not significantly, related to employment growth. Omitting this variable, which is negatively related to the share of Mexicans and weakly negatively related to employment growth, would generate a bias towards zero on the estimated coefficient of repatriations, which is what we observe. An intuitive possible explanation is that counties near the Mexican border may have enjoyed better economic performance for being farther from the core-region affected by the Great Depression, and without controlling for that, as they also were those with larger Mexican repatriations, one would underestimate the magnitude of the impact of such repatriations on employment.

The direction of the effect is consistent with the hypothesis that Mexican workers were complementary to natives, as suggested by the drastically different occupational specialization between natives and Mexicans presented earlier. It is possible that the loss of Mexican laborers had a negative local multiplier (or complementarity) effect on demand for skilled, professional, and specialized workers. The departure of Mexicans could have left natives with fewer employment options fitting their skills in local firms and unlikely to take one of the

¹⁸The raw correlation is -0.54

lower paid, manual jobs freed by the repatriated Mexicans. An alternative channel for these negative effects could be that firms and investors left cities where the Mexican labor supply was substantially reduced by repatriation. Local industries, thus, may have experienced the collapse of workers and firms in a negative agglomeration effect (de-agglomeration), and incumbents were left less likely to find a job. As additional evidence of such a de-agglomeration effect, Appendix Table A2 shows that Mexican repatriations resulted in reduced number of manufacturing establishments in urban areas, suggesting that a lack of workers with the appropriate skills also drove a loss of capital (firms). This is consistent with the findings in Testa (2020), where forced migration of 3 million Germans, expelled from the Czechoslovak borderlands after World War II, produced a de-agglomeration effect. Even in the long-run, this was only partially filled by local migration, as only 1.2 million Czechs replaced them in the following two years.

Next, Table 7 shows the estimates of the impact of Mexican repatriations on the occupational wage (or score) of incumbent natives. Recall that wage data is not available in the 1930 census, so, as we described in section 4, we assign every worker the median occupation wage observed in 1940 for their occupation in 1930. The variable occupational wage (score) captures the wage (percentile) associated with the occupation. An increase (decrease) in those variables implies that a worker moved to an occupation that in 1940 was better (less well) paid. In Panel A, the dependent variable is the change in occupational wage between 1930 and 1940. In Panel B, it is defined as the log of the ratio of 1940 to 1930 occupational score. Most coefficients show that the occupational wage and the occupational score declined for natives in response to Mexican repatriation. While these results are not informative on the impact of repatriations on occupation-specific wages, which we do not observe, but could have been affected, it is informative about native workers' occupational mobility. Natives downgraded or did not upgrade their occupations in counties with a large outflow of Mexicans relative to counties with lower outflows. This is consistent with Mexicans occupying lower levels in the occupational ladder before 1930 relative to natives, and natives respond-

ing to emigration in their occupational choice by taking those jobs and downgrading their skills. This is a symmetric effect to what is found in [Peri and Sparber \(2009\)](#) in response to immigrants' inflows. Natives were left with fewer employment opportunities, as shown in Table 6, and if some of the jobs left by Mexicans were filled by natives, this implied a decrease in their occupational wages (score).

Lastly, in Table 8, we investigate the geographic mobility of natives in response to Mexican repatriation. The outcome in Panel A is an indicator equal to one if the individual stays in the same state in 1930 and 1935 and zero otherwise. Panel B extends the period of mobility to 1930-1940. In Panel C, the outcome is a positive measure of mobility, a dummy equal to one if individuals moved from a rural area to an urban area. While the estimates are rather noisy and not always significant, they suggest that repatriation of Mexicans resulted in out-migration of natives. Individuals were equally or less likely to stay in the same state as they were in 1930, both as of 1935 and as of 1940, in response to Mexican repatriation. The 2SLS estimates suggest that a one percent of the population increase in Mexican repatriation affected the probability of incumbent natives to live in the same state as of 1935 by zero or reducing it by up to 0.51 percentage points (Panel A). The out-migration effect was similar, and still quite noisy, when the period is extended to 1940 (Panel B). Estimates of Panel C show that individuals were equally or more likely to move from rural to urban areas in response to Mexican repatriations. Natives in rural areas may have experienced the collapse of agricultural sectors driven by the large repatriation of Mexican farm laborers. It is also likely that the collapse of the agricultural sector led to reduced employment opportunities in rural areas and to the flight of some natives.

Overall, using three different sources of identifying variation, we find evidence that, for the average native worker, the Mexican population decline led to (i) a loss of employment opportunities, (ii) occupational downgrading and (iii) encouraged out-migration.¹⁹ While

¹⁹In additional checks, we examine whether the repatriation of Mexicans affected native's chances of gaining work relief jobs, an institutional feature of the late 1930s ([Liu and Fishback, 2019](#)). Using a specification similar to those used for employment, we find no significant evidence that the repatriation affected the probability of engaging in work relief in 1940. These results are available upon request.

this average effect may hide significant heterogeneity across subgroups, the effects estimated in this section are probably close to what the median American worker experienced as a result of this large repatriation episode. The stated objectives of the repatriation initiative, as explained in Section 3, did not seem to have materialized, and the incumbent native workforce did not experience the positive labor market effects that were thought to be a straightforward consequence of repatriating Mexicans and Mexican Americans.

6.2 Effects on High and Low Skilled Incumbents

Next, we examine whether the repatriation of Mexicans had a differential effect on high and low skilled incumbent natives. We define low and high skilled workers based on their occupation in 1930. Specifically, if a worker was employed in the three lowest ranked occupations (service workers, laborers, and farm laborers) based on 1940 wages, they are counted as low skilled. Otherwise, they are considered high skilled workers.²⁰

A standard theoretical story of complementarity in production between low and high skilled workers (Goldin and Katz, 2009) implies that the repatriation of Mexicans leads to negative wage and employment effects among high skilled natives, while low skilled natives should experience positive labor market effects (as in Borjas (2017)). However, it is possible that the presence of Mexicans sustained local agglomeration of industries, attracted firms, physical capital, entrepreneurs and expertise in unskilled intensive industries, thus increasing the demand for low skilled workers.²¹ Through the lens of this theories, and in contrast with the standard model, repatriating Mexicans, depresses low skill industries and induces firm closures, hurting low skilled natives more than high skilled ones.

Table 9 presents the results of the impact of Mexican repatriations on labor market outcomes of incumbent native individual workers by skill type. Each number in this table is the estimated coefficient β from equation (3) on a sub-sample of low (Columns 1-3) or

²⁰See Table 1 and Section 4 for more details.

²¹This is a mechanism similar to what was found for high skilled immigrants in Switzerland by Beerli et al. (2021) and in the same spirit of Lewis (2013).

high skilled (Columns 4-6) native incumbent workers. Panels A and B display the results for employment outcomes, denoted in the headers, Panel C looks at occupational wages, and Panel D examines migration response. Columns 1 and 4 use the Mexican share in 1910 as an IV, while columns 2 and 5 (3 and 6) use the dummy (distance) railroad IV. All regressions include the full set of controls, as previously defined. Standard errors are clustered by county and shown in parenthesis.

Panel A shows that a drop in Mexican population by one percent of the 1930 county-level population decreased the probability of a low-skilled native to be employed in 1940 by about 1 percentage point. This is a much larger effect than the one observed for the average worker and presented in Table 6. At the same time, high skilled natives experienced a lower probability of employment by about 0.3 percentage points; in some specifications, this effect is insignificant.²² As shown in Panel B, these patterns are driven by a decreased probability of transitioning from non-employment in 1930 to employment in 1940. Those coefficients show that, following a one percent increase in repatriation, this probability decreased by about 0.5-0.8 percentage points for low-skilled and by 0.1-0.2 percentage points for high skilled workers. Next, Panel C suggests that high skilled incumbent workers downgraded their occupational standing in response to repatriations. Lastly, when separating high and low skilled, the estimates of the effect of Mexican population drop on migration of natives become quite imprecise, and while usually negative, the estimates are not statistically significant.²³

6.3 Effects in Rural and Urban Areas

The impact of Mexican repatriations on incumbent native workers could have been different in rural and urban areas. In urban labor markets, producing more complex and diversified manufacturing goods and services, complementarities between workers and diversity of skills within the labor force were larger and likely more important for productivity. Moreover,

²²Note that, as mentioned above, in all results by skill level, we exclude farm managers, as we are uncertain to which group they belong. It is, therefore, not necessary that the estimates from Table 9 average out to the ones from Table 6.

²³In Appendix Table A3, we find similar patterns for the period 1930-1940.

urban areas were richer, more dynamic in economic terms and provide a better comparison for the modern context. While Mexicans were an important part of agricultural labor force (as they are today), their impact on urban economies may be more consequential on economic growth.

Table 10 presents the results on the effect of Mexican reparations on incumbent natives separating rural (Columns 1-3) and urban areas (Columns 4-6).²⁴ Panel A shows that reduced employment opportunities due to Mexican repatriations were stronger for natives in urban areas. A drop in Mexican population by one percent of the 1930 county population decreased the probability of a native in urban areas to be employed in 1940 by more than 0.8 percentage points, while the corresponding effect is insignificant for natives in rural areas. In Panel B, we specifically look at the transition from non-employment in 1930 to employment in 1940. Here, we find significant negative effects on natives, both in rural and urban areas, but still larger effects on individuals in urban areas. Next, in Panel C, we find occupational downgrading of workers in urban areas, whereas no effect in rural areas. Finally, Panel D shows that the incumbent natives in both rural and urban areas were less likely to stay in the same state if Mexican population decreased, but the estimates are not significant. Overall, the results of Table 10 suggest harsher economic consequences for natives in urban areas that lost a large part of its Mexican community to repatriation.

6.4 Interpreting the Results

Summarizing the results from Table 6 to Table 10, three facts emerge as consequences of the large drop in Mexican population, largely driven by repatriation. First, native incumbent workers, and especially low skilled ones, experienced significant decreases in the probability of gaining employment. Second, native workers, primarily high skilled, experienced a weak downgrading, but certainly no upgrading, in their occupations, moving to lower paid/lower skilled ones. Third, these effects were stronger in urban locations than in rural locations.

²⁴Individuals are classified as in urban areas, following the Census Bureau's definition in 1930.

These results suggest that a standard model of aggregate production complementarities between high and low skilled workers with constant returns to scale would not successfully explain the impact of this event. In that type of model, a decline in one type of workers (say low skilled) will increase the wage and/or employment of the same type of workers and decrease the wage of the other type (high skilled).

The fact that all native groups experienced negative or null effects on employment and occupational downgrading suggests, instead, that local agglomeration or spillover effects must be at work, as estimated in [Ciccone and Hall \(1996\)](#), generating a negative local job multiplier as Mexicans leave (as in [Moretti \(2010\)](#)). At the same time, the stronger effects on the less skilled suggest that the local depopulation generated a particularly strong decline in unskilled intensive firms and workers, depriving the natives of opportunity.²⁵ Additionally, it is likely that within less skilled occupations, Mexicans and natives were differentiated and complementary, consistent with what [Ottaviano and Peri \(2012\)](#) find for more recent, less-educated immigrants and natives in the US. Mexicans were likely to do the more manual intensive jobs among low skilled occupations, while natives do the more communication intensive tasks. As in [Peri and Sparber \(2009\)](#), the loss of the first group reduced demand for the second. Our estimates suggest that a combination of the complementarity of Mexican workers and the flight of low-skill-industry-specific factors (physical capital, expertise and entrepreneurial abilities) caused the decline of low-skilled intensive industries and of low skilled native opportunities as a consequence of the Mexican population drop.

The fact that complex economies, like urban areas, were hurt more as a result of Mexican repatriations is in line with this explanation, as diversity and agglomeration economies brought by foreign-born residents are particularly strong in cities (e.g. [Ottaviano and Peri \(2006\)](#)). It is also possible that the outflow of Mexicans directly and indirectly reduced entrepreneurial abilities in low-skilled intensive industries. Consistent with this hypothesis, in Appendix Table [A4](#), we find a reduced probability of self-employment in urban areas

²⁵This is consistent with what [Beerli et al. \(2021\)](#) estimated regarding the inflow of skilled immigrants in Switzerland and their positive effect on employment and wages of high skilled workers.

with higher repatriation rates. In rural, less dense areas, the effects on employment and occupational downgrading were less pronounced. Given the important role of Mexicans in agriculture, their departure may have deprived these economies of local labor force and local demand (as implied by [Cortes and Sant’Anna \(2020\)](#)). However, the strongest negative agglomeration effects were in cities, consistent with those triggered by some other episodes of forced migrations, such as the expulsions of Germans from the Czech Republic ([Testa, 2020](#)). Such employment decline might have been enhanced by the impact of the Great Depression, which was producing a deep re-organization, reallocation and cleansing effect on firms during the same period ([Hershbein and Kahn, 2019](#)).

7 Conclusion

This is one of the very few studies focusing on the economic effects of increased return-migration, encouraged and sometimes forced by a repatriation campaign. We analyze the effect of the drop in Mexican population, primarily driven by a large scale repatriation campaign enacted in the US between 1929 and 1934. Politicians at that time argued that it would give American workers jobs, attenuating the unemployment problems caused by the Great Depression. In pursuit of this goal, policy makers were willing to incur the costs of facilitating or, at times, forcing repatriations, inflicting disruptions to Mexican families and communities. In this paper, we use linked individual-level data from the full count 1930 and 1940 censuses to analyze whether these strong claims had any validity.

We find that Mexican repatriations reduced the employment opportunities of incumbent natives, particularly for low-skilled natives. This finding is robust across several different specifications. This suggest that, among less skilled occupations, Mexicans and natives were complementary and that the presence of Mexicans may have supported local industries, capital and entrepreneurship hiring low skilled workers, such that their departure led to a decrease in local labor demand. We do not find evidence that internal migration of natives

replaced these Mexican missing workers. These results are in contrast with the claim that the incumbent workforce would gain employment opportunities following a large outflow of Mexicans. Overall, the campaign caused pain, disruption and economic hardship to Mexicans²⁶ and did not deliver the labor market benefits promised to natives.

²⁶This is described in the rich historical accounts of this episode ([Balderrama and Rodríguez, 2006](#))

References

- Abramitzky, Ran, Leah Platt Boustan, and Katherine Eriksson**, “Europe’s tired, poor, huddled masses: Self-selection and economic outcomes in the age of mass migration,” *American Economic Review*, 2012, *102* (5), 1832–56.
- , —, and —, “A nation of immigrants: Assimilation and economic outcomes in the age of mass migration,” *Journal of Political Economy*, 2014, *122* (3), 467–506.
- , —, and —, “To the new world and back again: Return migrants in the age of mass migration,” *ILR Review*, 2019, *72* (2), 300–322.
- , **Philipp Ager, Leah Platt Boustan, Elior Cohen, and Casper W Hansen**, “The Effects of Immigration on the Economy: Lessons from the 1920s Border Closure,” Technical Report, National Bureau of Economic Research 2019.
- Altonji, Joseph G and David Card**, “The effects of immigration on the labor market outcomes of less-skilled natives,” in “Immigration, trade, and the labor market,” University of Chicago Press, 1991, pp. 201–234.
- Autor, David, David Dorn, and Gordon H Hanson**, “The China syndrome: Local labor market effects of import competition in the United States,” *American Economic Review*, 2013, *103* (6), 2121–68.
- Balderrama, Francisco E and Raymond Rodríguez**, *Decade of betrayal: Mexican repatriation in the 1930s*, UNM Press, 2006.
- Becker, Sascha O and Andreas Ferrara**, “Consequences of forced migration: A survey of recent findings,” *Labour Economics*, 2019, *59*, 1–16.
- Beerli, Andreas, Jan Ruffner, Michael Siegenthaler, and Giovanni Peri**, “The abolition of immigration restrictions and the performance of firms and workers: evidence from Switzerland,” *American Economic Review*, 2021, *111* (3), 976–1012.
- Borjas, George J**, “The wage impact of the Marielitos: A reappraisal,” *ILR Review*, 2017, *70* (5), 1077–1110.
- and **Anthony Edo**, “Gender, Selection into Employment, and the Wage Impact of Immigration,” Technical Report, National Bureau of Economic Research 2021.
- and **Lawrence F Katz**, “The evolution of the Mexican-born workforce in the United States,” in “Mexican immigration to the United States” University of Chicago Press 2007, pp. 13–56.
- Boustan, Leah Platt, Price V Fishback, and Shawn Kantor**, “The effect of internal migration on local labor markets: American cities during the Great Depression,” *Journal of Labor Economics*, 2010, *28* (4), 719–746.
- Card, David**, “The impact of the Mariel boatlift on the Miami labor market,” *ILR Review*, 1990, *43* (2), 245–257.

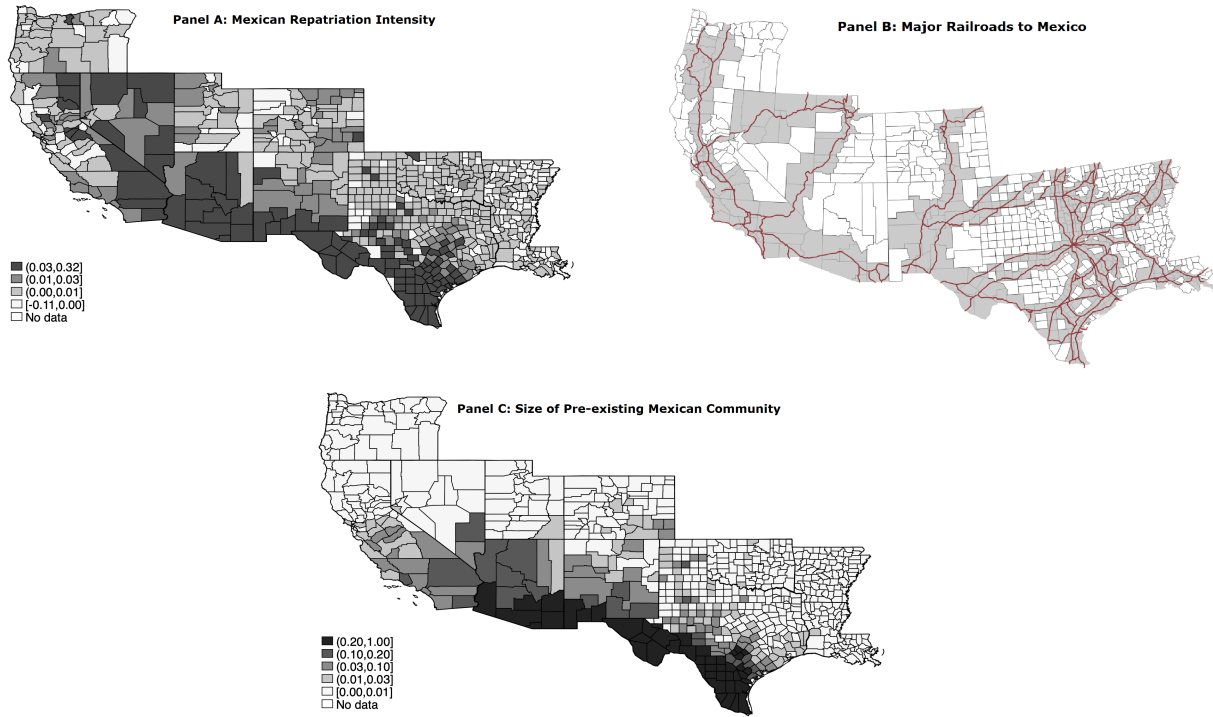
- , “Immigrant inflows, native outflows, and the local labor market impacts of higher immigration,” *Journal of Labor Economics*, 2001, 19 (1), 22–64.
- **and Ethan G Lewis**, “The diffusion of Mexican immigrants during the 1990s: Explanations and impacts,” in “Mexican immigration to the United States” University of Chicago Press 2007, pp. 193–228.
- Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez**, “Where is the land of opportunity? The geography of intergenerational mobility in the United States,” *The Quarterly Journal of Economics*, 2014, 129 (4), 1553–1623.
- Ciccone, Antonio and Robert E Hall**, “Productivity and the Density of Economic Activity,” *The American Economic Review*, 1996, 86 (1), 54–70.
- Clemens, Michael A, Ethan G Lewis, and Hannah M Postel**, “Immigration restrictions as active labor market policy: Evidence from the mexican bracero exclusion,” *American Economic Review*, 2018, 108 (6), 1468–87.
Commercial Atlas of the World
- Commercial Atlas of the World*, Geographical Publishing Company, 1931.
- Cortes, Gustavo and Vinicios Sant’Anna**, “Send Them Back? The Real Estate Consequences of Repatriations,” *Unpublished paper*, 2020.
- East, Chloe, Philip Luck, Hani Mansour, and Andrea Velasquez**, “The labor market effects of immigration enforcement,” 2018.
- Ferrara, Andreas and Price V Fishback**, “Discrimination, Migration, and Economic Outcomes: Evidence from World War I,” *Technical Report, National Bureau of Economic Research* 2020.
- Fishback, Price V, William C Horracc, and Shawn Kantor**, “Did New Deal grant programs stimulate local economies? A study of Federal grants and retail sales during the Great Depression,” *The Journal of Economic History*, 2005, 65 (1), 36–71.
- Foged, Mette and Giovanni Peri**, “Immigrants’ effect on native workers: New analysis on longitudinal data,” *American Economic Journal: Applied Economics*, 2016, 8 (2), 1–34.
- Goldin, Claudia Dale and Lawrence F Katz**, *The race between education and technology*, harvard university press, 2009.
- Gratton, Brian and Emily Merchant**, “Immigration, repatriation, and deportation: The Mexican-origin population in the United States, 1920–1950,” *International Migration Review*, 2013, 47 (4), 944–975.
- Guerin-Gonzales, Camille**, *Mexican workers and American dreams: Immigration, repatriation, and California farm labor, 1900-1939*, Rutgers University Press, 1994.
- Hershbein, Brad and Lisa B Kahn**, “Replication data for: Do Recessions Accelerate Routine-Biased Technological Change? Evidence from Vacancy Postings,” 2019.

- Hoffman, Abraham**, “*Mexican Repatriation Statistics: Some Suggested Alternatives to Carey McWilliams*,” *The Western Historical Quarterly*, 1972, 3 (4), 391–404.
- , *Unwanted mexican americans in the great depression: repatriation pressures, 1929-1939*, Vnr Ag, 1974.
- Hong, Gihoon and John McLaren**, “*Are Immigrants a Shot in the Arm for the Local Economy?*,” *Technical Report, National Bureau of Economic Research* 2015.
- Huber, Kilian, Volker Lindenthal, and Fabian Waldinger**, “*Discrimination, managers and firm performance: evidence from "Aryanizations" in Nazi Germany*,” 2019.
- Jaeger, David A, Joakim Ruist, and Jan Stuhler**, “*Shift-share instruments and the impact of immigration*,” *Technical Report, National Bureau of Economic Research* 2018.
- Johnson, Kevin R**, “*The forgotten repatriation of persons of Mexican ancestry and lessons for the war on terror*,” *PACe l. rev.*, 2005, 26, 1.
- Kerr, William R and William F Lincoln**, “*The supply side of innovation: H-1B visa reforms and US ethnic invention*,” *Journal of Labor Economics*, 2010, 28 (3), 473–508.
- Lewis, Ethan**, “*Immigration, skill mix, and capital skill complementarity*,” *The Quarterly Journal of Economics*, 2011, 126 (2), 1029–1069.
- , “*Immigration and production technology*,” *Annu. Rev. Econ.*, 2013, 5 (1), 165–191.
- Liu, Xing and Price Fishback**, “*Effects of New Deal Spending and the downturns of the 1930s on private labor markets in 1939/1940*,” *Explorations in Economic History*, 2019, 71, 25–54.
- Manson, Steven, Jonathan Schroeder, David Van Riper, Steven Ruggles et al.**, “*Ipums national historical geographic information system: Version 12.0 [database]*,” *Minneapolis: University of Minnesota*, 2017, 39.
- Massey, Douglas**, “*Borderline madness*,” *Chronicle of Higher Education*, 2006, 52 (43), B11–B11.
- Monras, Joan**, “*Immigration and wage dynamics: Evidence from the mexican peso crisis*,” 2018.
- Moretti, Enrico**, “*Local multipliers*,” *American Economic Review*, 2010, 100 (2), 373–77.
- Ottaviano, Gianmarco IP and Giovanni Peri**, “*The economic value of cultural diversity: evidence from US cities*,” *Journal of Economic geography*, 2006, 6 (1), 9–44.
- and —, “*Rethinking the effect of immigration on wages*,” *Journal of the European Economic Association*, 2012, 10 (1), 152–197.
- Peri, Giovanni and Chad Sparber**, “*Task specialization, immigration, and wages*,” *American Economic Journal: Applied Economics*, 2009, 1 (3), 135–69.

- **and Vasil Yassenov**, “*The Labor Market Effects of a Refugee Wave Synthetic Control Method Meets the Mariel Boatlift*,” *Journal of Human Resources*, 2019, 54 (2), 267–309.
- **, Kevin Shih, and Chad Sparber**, “*STEM workers, H-1B visas, and productivity in US cities*,” *Journal of Labor Economics*, 2015, 33 (S1), S225–S255.
- Perlmann, Joel**, *Italians then, Mexicans now: Immigrant origins and the second-generation progress, 1890-2000*, Russell Sage Foundation, 2005.
- Price, Joseph, Christian vom Lehn, and Riley Wilson**, “*The Winners and Losers of Immigration: Evidence from Linked Historical Data*,” Technical Report, National Bureau of Economic Research 2020.
- Ruggles, Steven, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas, and Matthew Sobek**, “*Integrated public use microdata series: Version 9.0 [dataset]*,” Minneapolis: University of Minnesota, 2019, 23, 56.
- Sequeira, Sandra, Nathan Nunn, and Nancy Qian**, “*Immigrants and the Making of America*,” *The Review of Economic Studies*, 2020, 87 (1), 382–419.
- Simon, Daniel T**, “*Mexican Repatriation in East Chicago, Indiana*,” *The Journal of Ethnic Studies*, 1974, 2 (2), 11.
- Tabellini, Marco**, “*Gifts of the immigrants, woes of the natives: Lessons from the age of mass migration*,” *The Review of Economic Studies*, 2020, 87 (1), 454–486.
- Testa, Patrick A**, “*The Economic Legacy of Expulsion: Lessons from Post-War Czechoslovakia*,” *The Economic Journal*, 12 2020. ueaa132.

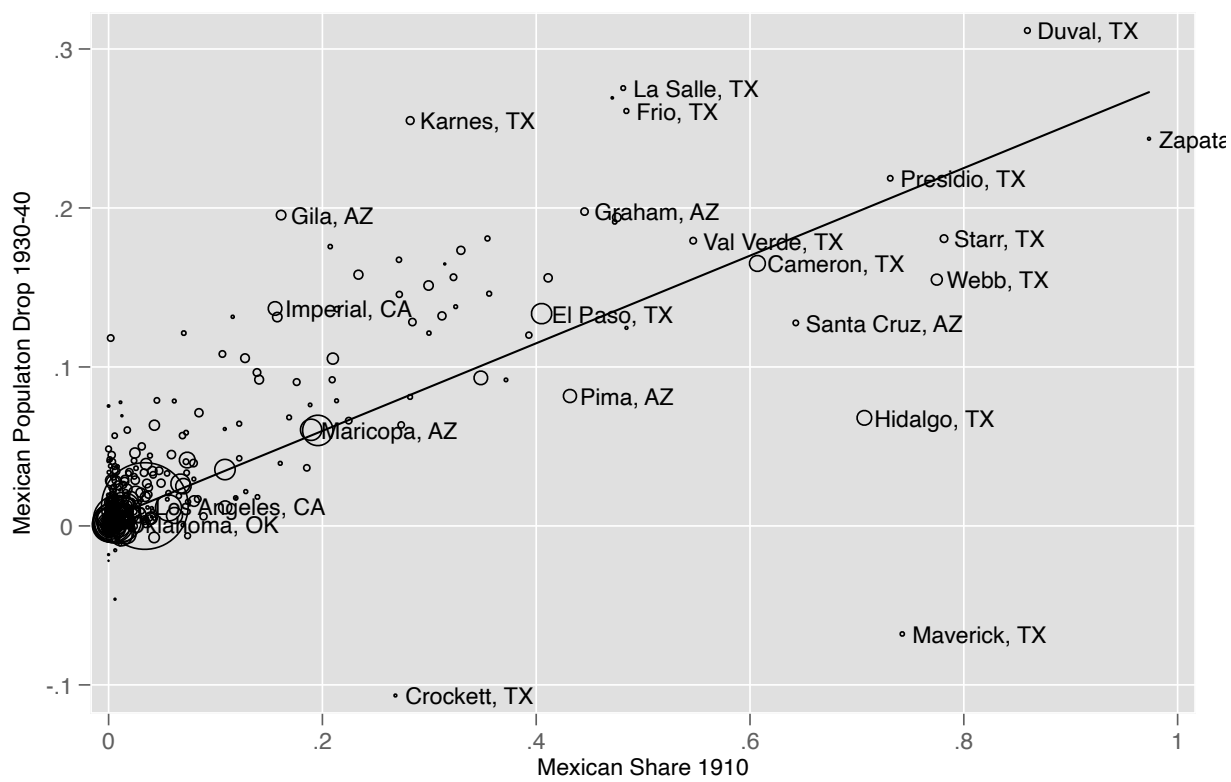
Figures and Tables

Figure 1: Mexican Repatriation Intensity and Source of Variation



Notes: Each polygon is a separate US county in 1910. Panel A shows the 1940-1930 (negative) change in working age Mexican population as a share of the total working age population in 1930. Panel B shows major railroads to Mexico as of 1931. Panel C shows the share of working age Mexicans in the total working age population in 1910. Sources: the 1930 and 1940 US censuses ([Ruggles et al., 2019](#)) and the *Commercial Atlas of the World* (1931).

Figure 2: First Stage Scatter Plot



Notes: Scatter plot of the Mexican population drop between 1930 and 1940 (Y-axis) versus the Mexican share in 1910 (X-axis). The circumference of the markers is proportional to the county's population in 1930.

Table 1: Occupational Distribution in 1930 by Ethnicity

	Mexican, Full Count Data (1)	Native, Full Count Data (Men Only) (2)	Native, Linked Individuals Data (3)
High-Skilled Occupations			
Managers, Officials, and Proprietors	2.9	11.1	11.6
Professional and Technical	1.4	6.4	7.1
Craftsmen	6.7	18.1	19.9
Sales workers	3.3	10.0	11.0
Clerical and Kindred	1.6	6.0	7.4
Operatives	11.9	12.0	13.8
Low-Skilled Occupations			
Service workers	9.8	5.7	4.9
Laborers	30.1	14.9	14.1
Farm laborers	32.4	15.8	10.2

Notes: Each column shows the percent workers from the specified ethnicity in various occupation categories in 1930. The last column presents the statistics for the linked individuals data. The occupations groups are ordered by mean wage in 1940. Source: the 1930 US census.

Table 2: Descriptive Statistics

Panel A: Individual Level			
	Full Count Data, Everyone (1)	Full Count Data, Men Only (2)	Linked Individuals Data (3)
Age	33.580	33.840	33.237
Male	0.504	1.00	1.00
Black	0.128	0.124	0.085
Married	0.683	0.648	0.666
Literate	0.956	0.954	0.974
In School	0.053	0.055	0.062
In Labor Force	0.599	0.929	0.932
Observations	10,128,862	5,102,938	1,475,002

Panel B: County Level			
	Mean	Min	Max
Share Illiterate	0.071	0.000	0.537
Share Age 18-40	0.640	0.398	0.814
Share Urban	0.208	0.000	1.000
Share Agriculture	0.457	0.004	0.907
Share Manufacturing	0.051	0.000	0.310
Months Extreme Weather	8.549	0.000	82.000
Dustbowl Intensity	0.190	0.000	5.000
Mex Pop Drop	0.020	-0.107	0.312
Retail sales growth 1929-33	-0.542	-1.670	1.019
Retail sales growth 1933-39	0.487	-0.601	2.167
Distance to Mexico	428.683	1.295	1019.443
Distance to Railway	28.184	0.037	182.969
Railway Presence	0.467	0.000	1.000
Mexican Share 1910	0.041	0.000	0.973
Observations		684	

Notes: Panel A shows variable means of the individual level 1930 full count census data (columns 1 and 2) and the 1930-40 linked individuals census data (column 3). The sample includes individuals in working-age (age 18-55) population. Panel B presents summary statistics for our county-level variables in 1930.

Table 3: First Stage Regressions

	(1)	(2)	(3)	(4)	(5)	(6)
Mex Share 1910	0.258*** (0.037)	0.220*** (0.042)				
Railroad IV			0.214*** (0.037)	0.147*** (0.043)		
Close to RR IV					0.214*** (0.038)	0.143*** (0.043)
First Stage F-stat	49.061	27.468	32.972	11.697	31.129	10.961
Observations	1288711	1288688	1288711	1288688	1288711	1288688
Adjusted R^2	0.713	0.729	0.612	0.661	0.607	0.657
Baseline Controls	X	X	X	X	X	X
Full Controls		X		X		X

Notes: Each entry shows the estimated coefficient from a regression of the change in Mexican working-age population between 1930 and 1940 relative to total working age population in 1930 on our instrumental variables and a set of controls. The unit of observation is a county. All regressions are weighted by total working age population in 1930. Standard errors are clustered by county. ***p < 0.01, **p < 0.05, *p < 0.1

Table 4: Instrumental Variable Falsification Tests

	Panel A: Moved Within State 1920-1930			Panel B: Same State 1920-1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Mex Share 1910	-0.052 (0.063)			-0.054 (0.089)		
Railroad IV		-0.014 (0.064)			-0.062 (0.086)	
Close to RR IV			0.023 (0.063)			0.003 (0.090)
N	1401995	1401995	1401995	1401995	1401995	1401995
$\bar{Y}$	0.250	0.250	0.250	0.700	0.700	0.700
	Panel C: Δ Employment 1920-1930			Panel D: Δ Wage 1920-1930		
	(1)	(2)	(3)	(4)	(5)	(6)
Mex Share 1910	-0.020 (0.025)			-0.145 (0.091)		
Railroad IV		-0.006 (0.025)			-0.200** (0.085)	
Close to RR IV			-0.008 (0.024)			-0.130 (0.088)
N	1401995	1401995	1401995	684882	684882	684882
$\bar{Y}$	0.268	0.268	0.268	0.868	0.868	0.868
	Panel E: Same County 1920-1930					
	(1)	(2)	(3)			
Mex Share 1910	0.002 (0.082)					
Railroad IV		-0.044 (0.083)				
Close to RR IV			-0.020 (0.089)			
N	1401995	1401995	1401995			
$\bar{Y}$	0.453	0.453	0.453			

Notes: Each entry shows the estimated coefficient from a regression of a pre-trend variable, denoted in each panel's header, on our instrumental variables and the full set of controls. The unit of observation is an individual worker in Panels A-B and a county in Panel C. Regressions in Panel C are weighted by total working-age population in 1930. Standard errors are clustered by county.***p < 0.01, **p < 0.05, *p < 0.1

Table 5: Correlation between the Instruments and the Share of Linked Individuals

	(1)	(2)	(3)	(4)	(5)	(6)
Enclave IV	0.006 (0.007)	-0.008 (0.009)				
Railway IV			0.002 (0.007)	-0.018* (0.011)		
Close to RR IV					-0.001 (0.008)	-0.024** (0.011)
N	684	682	684	682	684	682
$\bar{Y}$	0.118	0.118	0.118	0.118	0.118	0.118
Baseline Controls	X	X	X	X	X	X
Full Controls		X		X		X

Notes: Each entry shows the estimated coefficient from a regression of the share of linked individuals on our instrumental variables and a set of controls. The unit of observation is a county. All regressions are weighted by total working-age population in 1930. Robust standard errors are shown in parenthesis. ***p < 0.01, **p < 0.05, *p < 0.1

Table 6: The Impact of Mexican Repatriation on Employment

Panel A: Δ Employment 1930-1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	-0.063 (0.048)	-0.106* (0.057)	-0.146** (0.069)	-0.355*** (0.124)	-0.143* (0.073)	-0.431** (0.183)	-0.148** (0.074)	-0.450** (0.191)
N	1291041	1291018	1288711	1288688	1288711	1288688	1288711	1288688
$\bar{Y}$	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057	-0.057
Panel B: Non-Employed 1930 $\rightarrow$ Employed 1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	-0.057* (0.034)	-0.116*** (0.031)	-0.106** (0.044)	-0.255*** (0.064)	-0.123** (0.052)	-0.306*** (0.105)	-0.141*** (0.053)	-0.375*** (0.119)
N	1291041	1291018	1288711	1288688	1288711	1288688	1288711	1288688
$\bar{Y}$	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053
Panel C: Employed 1930 $\rightarrow$ Non-Employed 1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	-0.001 (0.018)	0.001 (0.021)	-0.025 (0.026)	-0.019 (0.043)	-0.004 (0.032)	0.070 (0.065)	-0.009 (0.033)	0.054 (0.065)
N	1291041	1291018	1288711	1288688	1288711	1288688	1288711	1288688
$\bar{Y}$	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049
Panel D: Δ Self-Employment 1930-1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	0.153 (0.106)	0.116 (0.122)	0.082 (0.140)	-0.102 (0.209)	0.180 (0.175)	-0.036 (0.309)	0.122 (0.173)	-0.110 (0.320)
N	1291041	1291018	1288711	1288688	1288711	1288688	1288711	1288688
$\bar{Y}$	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044
Baseline Controls	X	X	X	X	X	X	X	X
Full Controls		X		X		X		X
OLS	X	X						
Enclave IV			X	X				
Railroad IV					X	X		
Close to RR IV							X	X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. In addition, baseline and full controls are defined as in the text. Standard errors are clustered at the county-level. ***p < 0.01, **p < 0.05, *p < 0.1

Table 7: The Impact of Mexican Repatriation on Occupational Standing

Panel A: Δ Occupational Wage 1930-1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	-0.237** (0.099)	-0.122 (0.113)	-0.552*** (0.180)	-0.616** (0.264)	-0.550** (0.215)	-0.624* (0.376)	-0.587*** (0.221)	-0.701* (0.399)
N	1007649	1007631	1005668	1005650	1005668	1005650	1005668	1005650
$\bar{Y}$	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020
Panel B: Δ Occupational Score 1930-1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	-0.122** (0.050)	-0.173*** (0.051)	-0.123* (0.067)	-0.260*** (0.086)	-0.109 (0.080)	-0.242* (0.126)	-0.165** (0.083)	-0.372*** (0.139)
N	1010467	1010449	1008486	1008468	1008486	1008468	1008486	1008468
$\bar{Y}$	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
Baseline Controls	X	X	X	X	X	X	X	X
Full Controls		X		X		X		X
OLS	X	X						
Enclave IV			X	X				
Railroad IV					X	X		
Close to RR IV							X	X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. In addition, baseline and full controls are defined as in the text. Standard errors are clustered at the county-level. ***p < 0.01, **p < 0.05, *p < 0.1

Table 8: The Impact of Mexican Repatriation on Migration

Panel A: Same State 1930-1935								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	-0.050 (0.095)	0.161* (0.089)	-0.271* (0.154)	0.019 (0.175)	-0.513*** (0.184)	-0.366 (0.298)	-0.472** (0.187)	-0.266 (0.292)
N	1271303	1271280	1269002	1268979	1269002	1268979	1269002	1268979
$\bar{Y}$	0.821	0.821	0.821	0.821	0.821	0.821	0.821	0.821
Panel B: Same State 1930-1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	-0.041 (0.106)	0.151 (0.098)	-0.291* (0.176)	-0.053 (0.196)	-0.570*** (0.212)	-0.539 (0.349)	-0.516** (0.213)	-0.405 (0.335)
N	1291041	1291018	1288711	1288688	1288711	1288688	1288711	1288688
$\bar{Y}$	0.797	0.797	0.798	0.798	0.798	0.798	0.798	0.798
Panel C: Rural 1930 → Urban 1940								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>MexPopDrop_c</i>	0.104 (0.069)	-0.079 (0.073)	0.234** (0.104)	-0.032 (0.138)	0.314** (0.131)	0.105 (0.206)	0.257* (0.132)	-0.018 (0.213)
N	1291041	1291018	1288711	1288688	1288711	1288688	1288711	1288688
$\bar{Y}$	0.114	0.114	0.114	0.114	0.114	0.114	0.114	
Baseline Controls	X	X	X	X	X	X	X	X
Full Controls		X		X		X		X
OLS	X	X						
Enclave IV			X	X				
Railroad IV					X	X		
Close to RR IV							X	X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The outcomes are expressed in logarithms. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. In addition, baseline and full controls are defined as in the text. Standard errors are clustered at the county-level. ***p< 0.01, **p< 0.05, *p< 0.1

Table 9: The Impact of Mexican Repatriation by Skill Level

Panel A: Δ Employment 1930-1940						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.790*** (0.209)	-0.969*** (0.335)	-1.044*** (0.359)	-0.324*** (0.121)	-0.251 (0.157)	-0.293* (0.169)
N	239932	239932	239932	839759	839759	839759
$\bar{Y}$	-0.057	-0.057	-0.057	-0.066	-0.066	-0.066
Panel B: Non-Employed 1930 $\rightarrow$ Employed 1940						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.562*** (0.141)	-0.690*** (0.231)	-0.791*** (0.256)	-0.172*** (0.047)	-0.142* (0.075)	-0.205** (0.086)
N	239932	239932	239932	839759	839759	839759
$\bar{Y}$	0.086	0.086	0.086	0.044	0.044	0.044
Panel C: Δ Occupational Wage 1930-1940						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.431 (0.309)	-0.307 (0.397)	-0.346 (0.426)	-0.672*** (0.253)	-0.727* (0.375)	-0.810** (0.395)
N	220028	220028	220028	785622	785622	785622
$\bar{Y}$	-0.012	-0.012	-0.012	-0.022	-0.022	-0.022
Panel D: Same State 1930-1935						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	0.122 (0.196)	-0.345 (0.329)	-0.153 (0.312)	-0.027 (0.184)	-0.357 (0.296)	-0.305 (0.298)
N	235413	235413	235413	827578	827578	827578
$\bar{Y}$	0.792	0.792	0.792	0.832	0.832	0.832
Baseline Controls	X	X	X	X	X	X
Full Controls	X	X	X	X	X	X
OLS						
Enclave IV	X			X		
Railroad IV		X			X	
Close to RR IV			X			X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. In addition, baseline and full controls are defined as in the text. Standard errors are clustered at the county-level. ***p < 0.01, **p < 0.05, *p < 0.1

Table 10: The Impact of Mexican Repatriation on Rural/Urban

Panel A: Δ Employment 1930-1940						
	Rural			Urban		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.211 (0.132)	-0.165 (0.168)	-0.131 (0.173)	-0.663*** (0.219)	-0.829** (0.326)	-0.864*** (0.332)
N	618966	618966	618966	669722	669722	669722
$\bar{Y}$	-0.073	-0.073	-0.073	-0.042	-0.042	-0.042
Panel B: Non-Employed 1930 $\rightarrow$ Employed 1940						
	Rural			Urban		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.160*** (0.060)	-0.188* (0.102)	-0.243** (0.111)	-0.432*** (0.127)	-0.480*** (0.178)	-0.532*** (0.188)
N	618966	618966	618966	669722	669722	669722
$\bar{Y}$	0.039	0.039	0.039	0.065	0.065	0.065
Panel C: Δ Occupational Wage 1930-1940						
	Rural			Urban		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.456 (0.303)	-0.282 (0.396)	-0.327 (0.424)	-1.029*** (0.290)	-1.324*** (0.463)	-1.418*** (0.460)
N	513699	513699	513699	491951	491951	491951
$\bar{Y}$	-0.024	-0.024	-0.024	-0.015	-0.015	-0.015
Panel D: Same State 1930-1935						
	Rural			Urban		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.005 (0.177)	-0.499 (0.338)	-0.376 (0.325)	-0.103 (0.246)	-0.306 (0.356)	-0.269 (0.353)
N	607672	607672	607672	661307	661307	661307
$\bar{Y}$	0.827	0.827	0.827	0.816	0.816	0.816
Baseline Controls	X	X	X	X	X	X
Full Controls	X	X	X	X	X	X
OLS						
Enclave IV	X			X		
Railroad IV		X			X	
Close to RR IV			X			X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. In addition, baseline and full controls are defined as in the text. Standard errors are clustered at the county-level. ***p < 0.01, **p < 0.05, *p < 0.1

Appendix: Additional Tables

Table A1: Covariate Decomposition

Panel A: Δ Employment 1930-1940										
	Base	+ Retail	+ New Deal	+ Death Rate	+ Miles Mex	Base	+ Retail	+ New Deal	+ Death Rate	+ Miles Me
<i>MexPopDrop_c</i>	-0.063	-0.069	-0.087*	-0.084*	-0.112**	-0.146**	-0.158**	-0.208***	-0.209***	-0.357***
Miles to Mexico	(0.048)	(0.048)	(0.045)	(0.043)	(0.056)	(0.069)	(0.071)	(0.070)	(0.069)	(0.122)
Miles to Mexico Sq					-0.001					-0.005
					(0.004)					(0.005)
					-0.000					0.000
					(0.000)					(0.001)
Observations	1291041	1291018	1291018	1291018	1291018	1288711	1288688	1288688	1288688	1288688
Adjusted R^2	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Panel B: Non-Employed 1930 $\rightarrow$ Employed 1940										
	Base	+ Retail	+ New Deal	+ Death Rate	+ Miles Mex	Base	+ Retail	+ New Deal	+ Death Rate	+ Miles Me
<i>MexPopDrop_c</i>	-0.057*	-0.059*	-0.081***	-0.075***	-0.118***	-0.106**	-0.111**	-0.135***	-0.127***	-0.255***
Miles to Mexico	(0.034)	(0.035)	(0.027)	(0.027)	(0.031)	(0.044)	(0.045)	(0.037)	(0.037)	(0.062)
Miles to Mexico Sq					0.001					-0.002
					(0.002)					(0.003)
					-0.000					0.000
					(0.000)					(0.000)
Observations	1291041	1291018	1291018	1291018	1291018	1288711	1288688	1288688	1288688	1288688
Adjusted R^2	0.011	0.011	0.011	0.011	0.011	0.009	0.009	0.010	0.010	0.010
OLS	X	X	X	X	X					
Enclave IV						X	X	X	X	X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. Standard errors are clustered at the county-level. ***p < 0.01, **p < 0.05, *p < 0.1

Table A2: The Impact of Mexican Repatriation on Manufacturing Establishments

	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.004** (0.002)	-0.005* (0.003)	-0.004* (0.002)	-0.006 (0.004)	-0.005** (0.003)	-0.008* (0.005)
Observations	379	379	379	379	379	379
R-squared	0.135	0.209	0.129	0.191	0.112	0.133
Baseline Controls	X	X	X	X	X	X
Full Controls		X		X		X
Enclave IV	X	X				
Railroad IV			X	X		
Close to RR IV					X	X

Notes: Each entry shows the estimated coefficient from a regression of a change in local manufacturing establishments relative to total working age population in 1930 on the drop in Mexican working age population between 1930 and 1940 relative to total working age population in 1930 and a set of controls. The unit of observation is a county. The sample is restricted to counties with positive number of urban residents in 1930. All regressions are weighted by total working-age population in 1930. Robust standard errors are shown in parenthesis. ***p < 0.01, **p < 0.05, *p < 0.1

Table A3: The Impact of Mexican Repatriation by Skill Level: Additional Results

Panel A: Δ Self-Employment 1930-1940						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.033 (0.150)	0.037 (0.204)	0.100 (0.204)	-0.065 (0.297)	0.134 (0.428)	0.094 (0.442)
N	239932	239932	239932	839759	839759	839759
$\bar{Y}$	0.173	0.173	0.173	-0.028	-0.028	-0.028
Panel B: Δ Occupational Score 1930-1940						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.170 (0.217)	0.074 (0.298)	-0.236 (0.299)	-0.093 (0.098)	-0.074 (0.143)	0.001 (0.150)
N	220732	220732	220732	787736	787736	787736
$\bar{Y}$	0.259	0.259	0.259	-0.027	-0.027	-0.027
Panel C: Same State 1930-1940						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	0.047 (0.201)	-0.514 (0.358)	-0.264 (0.329)	-0.078 (0.206)	-0.489 (0.343)	-0.410 (0.340)
N	239932	239932	239932	839759	839759	839759
$\bar{Y}$	0.765	0.765	0.765	0.809	0.809	0.809
Panel D: Rural 1930 $\rightarrow$ Urban 1940						
	Low Skilled			High Skilled		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	0.082 (0.170)	0.287 (0.248)	0.193 (0.247)	-0.033 (0.144)	0.064 (0.219)	-0.069 (0.232)
N	239932	239932	239932	839759	839759	839759
$\bar{Y}$	0.152	0.152	0.152	0.107	0.107	0.107
Baseline Controls	X	X	X	X	X	X
Full Controls	X	X	X	X	X	X
OLS						
Enclave IV	X			X		
Railroad IV		X			X	
Close to RR IV			X			X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. In addition, baseline and full controls are defined as in the text. Standard errors are clustered at the county-level. ***p< 0.01, **p< 0.05, *p< 0.1

Table A4: The Impact of Mexican Repatriation on Rural/Urban: Additional Results

Panel A: Δ Self-Employment 1930-1940						
	Rural			Urban		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	0.191 (0.259)	0.549 (0.419)	0.587 (0.435)	-0.331** (0.150)	-0.379* (0.206)	-0.360* (0.204)
N	618966	618966	618966	669722	669722	669722
$\bar{Y}$	-0.015	-0.015	-0.015	0.099	0.099	0.099
Panel B: Δ Occupational Score 1930-1940						
	Rural			Urban		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.248* (0.140)	-0.148 (0.210)	-0.359 (0.232)	-0.218* (0.119)	-0.243 (0.166)	-0.331** (0.168)
N	515905	515905	515905	492563	492563	492563
$\bar{Y}$	0.105	0.105	0.105	-0.037	-0.037	-0.037
Panel C: Same State 1930-1940						
	Rural			Urban		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>MexPopDrop_c</i>	-0.055 (0.200)	-0.676* (0.399)	-0.517 (0.375)	-0.237 (0.282)	-0.482 (0.415)	-0.408 (0.402)
N	618966	618966	618966	669722	669722	669722
$\bar{Y}$	0.799	0.799	0.799	0.796	0.796	0.796
Baseline Controls	X	X	X	X	X	X
Full Controls	X	X	X	X	X	X
OLS						
Enclave IV	X			X		
Railroad IV		X			X	
Close to RR IV			X			X

Notes: Each entry shows the estimated coefficient from a regression of a labor market outcome, denoted in each panel header, on the drop in Mexican working-age population between 1930 and 1940 relative to total working-age population in 1930 and a set of controls. The unit of observation is an individual worker. The sample consists of non-Mexican natives between the ages 18-55, in the labor force, not employed in the army, not unpaid family workers and not attending school, all in 1930. All regressions control for age, age squared, race dummies, marriage and literacy indicators as well as all two-way interactions of these variables. In addition, baseline and full controls are defined as in the text. Standard errors are clustered at the county-level. ***p < 0.01, **p < 0.05, *p < 0.1