Send Them Back? The Real Estate Consequences of Repatriation

Authors:

Gustavo S. Cortes Vinicios P. Sant'Anna

Appendices



A Historical Newspaper Evidence of Harassment and **Anti-Mexican Sentiment**

(A) The New York Times (1931)



75,000, Due to Idleness and Sense of Unwelcome.

FEAR SPREAD BY ARRESTS

Deportation Campaign of Government Alarms Many-Sacrifices Made of Homes.

Special to The New York Times. LOS ANGELES, April 11 .- Moving southward by rail and automobile in families of from two to ten, more than 10,000 Mexicans, men, women and children, have been leaving Southern California monthly for more than three months and returning to Mexico. This was revealed today by Rafael de la Colina, local Mexican Consul. They are pressed by economic adversity, fearful over recently renewed activities of immigration authorities and perplexed by what they regard as anti-Mexican sentiment

(B) The Los Angeles Times (1930)



Inglewood Men Harass Mexican Laborers but Won't Work at Same Pay

INGLEWOOD, Oct. 16. Between forty and fifty unemployed Ameri-can laborers threatened a united disturbance this morning when they disturbance this morning when they iried to prevent Mexican workmen engaged in laying a conduit under Redondo Boulevard to continue their work by guarding the tool-boxes and demanding that the con-tractors employ while labor. Although local police were called to the scene of the discussion, no violence was reported, the agitators dispersing after refusing to accept work for the wages paid to the Mexicans.

Mexicans.

(C) The Washington Post (1930)

MEXICAN IMMIGRANTS.

There is a prospect that the House will pass a bill imposing the quota restriction upon Mexican immigrants. Pressure from labor organizations is very strong, and it is supported by influential organizations opposed to adulteration of the "American blood There are about 2.000,000 Mexistream." cans in the United States.

In several Southwestern States the economic system is based upon Mexican labor. Americans will not do the work that is performed by the Mexicans. In beet fields and on truck farms the Mexicans are good workers. They furnish most of the unskilled railroad labor. Good wages here and starvation conditions at home drive them across the border, and gradually they have displaced other classes of labor.

A sudden reversal of policy would work great hardship to employers throughout the Southwest. Nevertheless, some restrictive measure seems to be necessary in order to check the alien stream that flows north-ward. The Mexican immigrant is not good material for citizenship, and in some places Mexican colonies are decidedly objectionable.

One of the arguments used by employers is that Mexico would deeply resent the partial exclusion of its citizens from this country. There does not seem to be much basis for this argument, in view of the repeated statements of Mexican governmental spokesmen, who claim that their people would prefer to remain at home if they could make a livelihood. Stable conditions below the border might help to solve the problem of Mexican migration, but with high wages and

Figure A.1. Historical newspapers on the Mexican repatriation. This figure shows examples of newspaper articles from historical newspapers discussing the anti-Mexican sentiment after the Great Depression and during the period of the Mexican repatriation. Panel A shows a news piece from The New York Times from April 12, 1931. Panel B depicts a news piece from The Los Angeles Times dated from October 17, 1931. Panel C depicts a news piece from The Washington Post dated from January 20, 1930.

B Additional Data Description and Empirical Results

B.1 Additional Data Description and Visualization

Table B.1. Top 10 cities in terms of Mexican outflow. This table shows the top 10 cities in terms of their observed *Mexican Outflow* as defined by Equation (2) and calculated from the US Census data.

	City	Mexican Outflow Intensity, 1930–1940
1	San Benito, TX	17.8%
2	El Paso, TX	14.5%
3	Brawley, CA	11.9%
4	Del Rio, TX	11.8%
5	Brownsville, TX	8.9%
6	Laredo, TX	7.9%
7	East Chicago, IN	5.4%
8	Harlingen, TX	5.3%
9	San Antonio, TX	5.2%
10	Tucson, AZ	4.7%

Table B.2. Top 10 cities in terms of Mexican outflow (no missing outcome). This table shows the top 10 cities in terms of their observed *Mexican Outflow* among the cities with no missing information on all housing market outcome variables (building permits and median prices). *Mexican Outflow* is defined by Equation (2).

	City	Mexican Outflow Intensity, 1930–1940
1	El Paso, TX	14.5%
2	San Antonio, TX	5.2%
3	Pueblo, CO	2.0%
4	Gary, IN	1.9%
5	Los Angeles, CA	1.2%
6	Saginaw, MI	1.1%
7	San Diego, CA	0.9%
8	Phoenix, AZ	0.8%
9	Pasadena, CA	0.8%
10	Pontiac, MI	0.7%

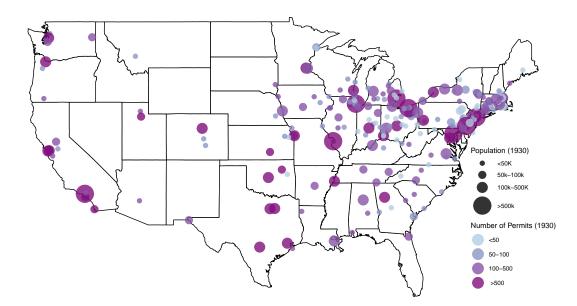


Figure B.1. Number of building permits by city. This figure shows the number of permits by city in our sample. The colors distinguish the cities by their number of building permits in 1930. The size of each bubble is proportional to the city's working age population. The data is collected by Snowden (2006) from several issues of the *Bulletin of the Bureau of Labor Statistics*.

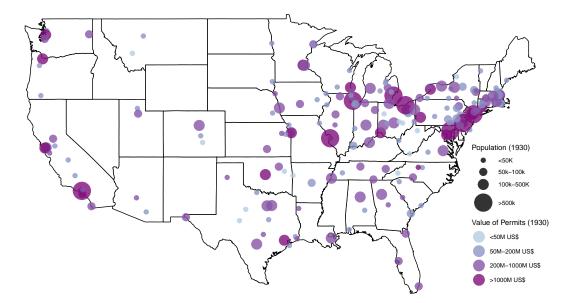


Figure B.2. Value of building permits by city. This figure shows the total value of permits in millions of dollars by city. The colors distinguish the cities by their value of building permits in 1930. The size of each bubble is proportional to the city's working age population. The data is collected from several issues of the *Dun & Bradstreet's Review*, a business and financial publication from the 1920s and 1930s.

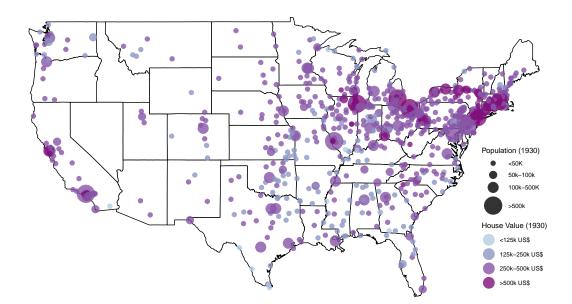


Figure B.3. Median house value by city. This figure shows the median house value in thousands of dollars by city. The colors distinguish the cities by their median house value in 1930. The size of each bubble is proportional to the city's working age population. The data is collected from the 1930 full-count US Census (Ruggles et al., 2020b).

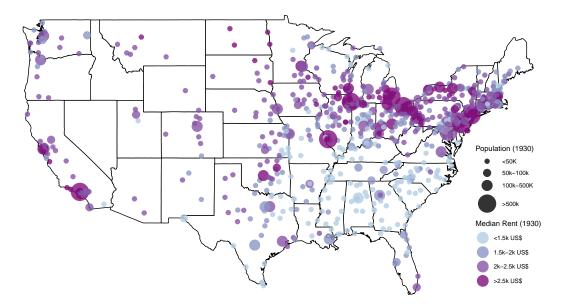


Figure B.4. Median rent by city. This figure shows the median rent in thousands of dollars by city. The colors distinguish the cities by their median rent in 1930. The size of each bubble is proportional to the city's working age population. The data is collected from the 1930 full-count US Census (Ruggles et al., 2020b).

Table B.3. Mexican and US-born workers distribution by sector and occupation in 1930. This table shows the distribution of Mexican and US-born workers in the US according to the full-count 1930 US Census. We report the number of workers in each category and their respective share relative to the total number of workers from each nationality. Occupations and sectors are as defined by the US Census Bureau. We break down the Manufacturing of Durable Goods category defined by the census into "construction related" and "non-construction-related". We consider as "construction-related" the following sectors: logging; miscellaneous wood products; furniture and fixtures; glass and glass products; cement, concrete, gypsum and plaster products; structural clay products; pottery and related products; miscellaneous non-metallic mineral and stone products; blast furnaces, steel works, and rolling mills; other primary iron and steel industries; fabricated steel products; fabricated nonferrous metal products; not specified metal industries. We consider as Mexicans anyone who declared Mexico as their birthplace. Similarly, US-born are individuals who reported the United States as their birthplace and that did not have Mexican parents. Taking a closer look at the descriptive statistics for industries and occupations, Panel A shows that Mexican immigrants in 1930 were primarily employed in agriculture (34.8%), transportation (12.8%), and construction or construction-related manufacturing durables (12.7%). In terms of occupations, Panel B shows that most Mexican immigrants in 1930 worked as laborers (42%), farm laborers (23%), and operatives (9.6%). For comparison, the table also presents the occupational and sectoral distributions of US native-born workers; it shows a far more even distribution of US-born workers across these dimensions.

	Mexican Workers		US-Born Workers	
Panel A. Sectors	Number	Share (%)	Number	Share (%)
Agriculture, Forestry, and Fishing	96,718	34.8	7,796,223	25.5
Transportation	35,662	12.8	1,653,261	5.4
Personal services	21,910	7.9	2,471,938	8.1
Retail Trade	19,661	7.1	3,099,550	10.1
Public Administration	19,465	7.0	3,732,724	12.2
Manufacturing (durables, construction-related)	18,163	6.5	972,667	3.2
Construction	17,113	6.2	1,733,481	5.7
Manufacturing (nondurables)	17,062	6.1	2,369,389	7.8
Mining	10,884	3.9	694,259	2.3
Manufacturing (durables, non-construction-related)	6,890	2.5	1,284,730	4.2
Business and Repair Services	3,490	1.3	848,087	2.8
Professional and Related Services	2,667	1.0	1,753,088	5.7
Utilities and Sanitary Services	2,297	0.8	244,492	0.8
Wholesale Trade	2,261	0.8	418,342	1.4
Finance, Insurance, and Real Estate	1,698	0.6	987,011	3.2
Entertainment and Recreation Services	1,567	0.6	169,687	0.6
Telecommunications	508	0.2	342,375	1.1
Not declared	231,022		29,207,522	
	Mexican Workers		US-Born Workers	
Panel B. Occupations	Number	Share (%)	Number	Share (%)
Laborers	131,523	42.0	8,791,265	24.3
Farm Laborers	72,106	23.0	2,686,644	7.4
Operatives	29,889	9.6	3,963,995	11.0
Farmers	19,908	6.4	4,878,106	13.5
Craftsmen	17,232	5.5	3,761,467	10.4
Service Workers (private household)	11,522	3.7	1,395,806	3.9
Service Workers (not household)	10,380	3.3	1,461,419	4.0
Managers, Officials, and Proprietors	10,210	3.3	4,917,715	13.6
Sales workers	6,736	2.2	2,195,253	6.1
Professional, Technical	3,394	1.1	2,105,494	5.8
Non-occupational response	196,138		23,621,662	

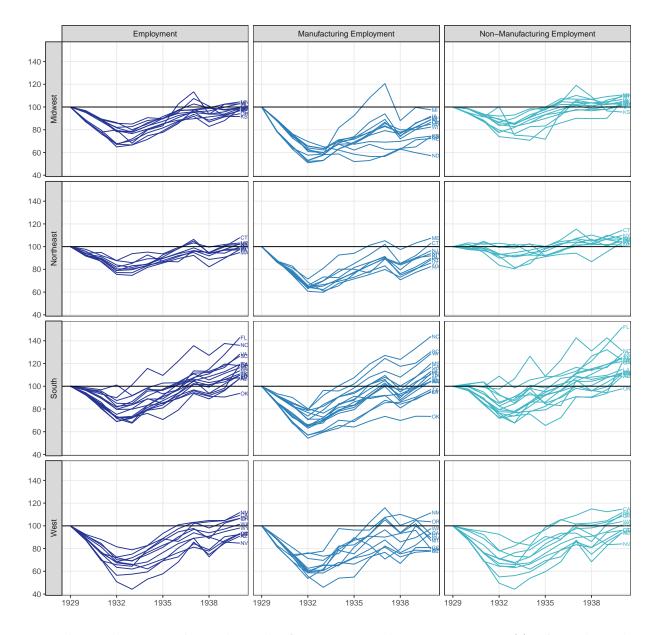


Figure B.5. Employment conditions during the Great Depression by state, 1930–1940. This figure shows the time series of total employment, manufacturing employment, and non-manufacturing employment in each US state, grouped by regions, between 1930 and 1940. The data are from the *Bureau for Labor Statistics*, collected by Wallis (1989).

B.2 Additional Empirical Results

This section presents additional empirical results in order of appearance in the main text.

B.2.1 Instrument Validation: State-level Results

In this section, we use the state-level change in employment as proxy of the Great Depression's intensity and test for the correlation with our instrumental variables. Table B.4 presents the estimates, confirming that our instruments are not significantly correlated with the state-level economic conditions of the Great Depression.

Table B.4. Instrument validation: Mexican repatriation and instrumental variables correlation with US state employment during the Great Depression. This table is another IV validation test. Here we test the correlation between our IV and state-level measures of employment from Wallis (1989). We run the following specification:

$$\Delta_{1929:39} Emp_s^{M|NM|Tot} = \alpha + \beta \cdot IV_s + \epsilon_s,$$

where $\Delta_{1929:39} Emp_s^{NM|M|Tot}$ represents the state-level changes in employment between 1929 and 1939 in one of the following: non-manufacturing (NM), manufacturing (M), and total (Tot) non-agricultural employment. The growth rate of employment is calculated using BLS data on employment for all US states (except Alaska and Hawaii) collected by Wallis (1989). IV_s is the equivalent state level instrument. Similarly to Equation (3), this is the interaction of the share of Mexicans in 1900 with the proximity to the US-Mexico border. We construct this IV by averaging the within-state county-level shares of Mexicans and proximity to the US-Mexico border. Columns 2 and 4 also include US region fixed effects (Northeast, Midwest, South, and West). Statistical significance: *** p < 0.01, ** p < 0.05, * p < 0.10.

	Mexican	Outflow	I	V			
	(1)	(2)	(3)	(4)			
Panel A. Non-manufacturing employment							
Employment Growth	-2.794*	-1.086	-4.936	-1.702			
	(1.536)	(1.553)	(4.379)	(4.036)			
Observations	48	48	48	48			
R-squared	0.067	0.318	0.027	0.313			
Panel B. Manufacturing employment							
Employment Growth	-1.104	-2.226	-2.896	-5.269			
	(1.906)	(1.747)	(5.324)	(4.539)			
Observations	48	48	48	48			
R-squared	0.007	0.404	0.006	0.400			
Panel C. Total employment							
Employment Growth	-2.062	-1.200	-3.705	-2.128			
	(1.393)	(1.313)	(3.942)	(3.419)			
Observations	48	48	48	48			
R-squared	0.045	0.393	0.019	0.387			
Region FE		\checkmark		\checkmark			

B.2.2 House Market Effects: Robustness to Different Percentiles of Values and Rents

For brevity, in the main text we opted to show the results of our baseline regression for different percentiles of the house value and rent distribution by plotting the coefficients (see Figure 6). Table B.5 shows the details of the estimations. We can see from the tables that the main conclusions discussed in Section 5.2 remain valid.

Table B.5. Robustness to different percentiles. This table presents the details of the estimations illustrated by Figure 6. It re-estimates the *House Value Growth* and the *Rent Growth* equations from our baseline specification in Columns 9 and 12 of Table 5 but uses the growth rates at different percentiles of each city's *House Value* and *Rent* distributions as the dependent variable. The equation we estimate is analogue to Equation (6) and is given by:

$$\Delta_{1930:40} Y_c(\tau) = \alpha + \beta \cdot \tilde{O}_{1930:40,c}^{MEX} \left(IV_{cty} \right) + \lambda_s + \mathbf{X}_{c,1930} + \epsilon_c,$$

where $\Delta_{1930:40} Y_c(\tau)$ is a city's 1930-40 growth rate in reported *House Value* or *Rent* at percentile τ . We construct house value and rent percentiles for the inter-quartile range (i.e., 25th to 75th percentiles), and calculate the growth rate in each percentile between 1930 and 1940. $\tilde{O}_{1930:40,c}^{MEX}$ (IV_{cty}) is the Mexican outflow between 1930 and 1940 in city c instrumented by IV_{cty} , which is the instrument defined in Equation (3); λ_s represents state fixed effects. $X_{c,1930}$ is a set of 1930 city-level controls, which include the population *Average Age*, average *School Attendance*, share of *Unemployed* workers, and employment *Sector Shares*. Each column presents 2SLS results with a different percentile $\tau \in \{25, 35, 45, 50, 55, 65, 75\}$ of the house value distribution (Panel A) or the rent distribution (Panel B). The median (i.e., 50th percentile) column is highlighted in grey to serve as a benchmark and was reported earlier in Columns 9 and 12 of Table 5 for house values and rents, respectively. All regressions are weighted by total working-age population in 1930. Standard errors in parentheses are clustered by state. Statistical significance: *** p < 0.01, ** p < 0.05, * p < 0.10.

	P25	P35	P45	P50	P55	P65	P75
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A. House value growth at each percentile							
Mexican Outflow	-0.616	-1.360***	-1.237***	-1.221***	-1.024**	-1.039***	-0.751***
	(0.426)	(0.388)	(0.384)	(0.351)	(0.389)	(0.306)	(0.260)
Observations	868	868	868	868	868	868	868
R-squared	0.20	0.23	0.26	0.29	0.23	0.27	0.31
Panel B. Rent growth at each percentile							
Mexican Outflow	-0.678	-0.549*	-0.553	-1.014***	-1.371***	-1.029***	-1.093***
	(0.421)	(0.323)	(0.369)	(0.222)	(0.212)	(0.209)	(0.219)
Observations	868	868	868	868	868	868	868
R-squared	0.06	0.07	0.10	0.15	0.16	0.13	0.14
Baseline Controls	✓	✓	✓	✓	✓	✓	>
State FE	✓	✓	✓	✓	✓	✓	
Sector Shares (16)	✓	✓	✓	✓	✓	✓	

C 1930-1940 Linked Address Sample

C.1 Address Linking Approach

This section describes the procedure we adopted to construct a sample of matched houses between 1930 and 1940. Our goal is to match US houses in 1930 to their records in the 1940 US Census. Our source of US houses and their addresses are from the IPUMS Restricted Complete Count Data (Ruggles, Fitch, Goeken, Grover, Hacker, Nelson, Pacas, Roberts and Sobek (2020a)). In addition to state and city, the main variables used in this linking approach are the street name and the house number of the household's street address, as written on the original census form.

Our approach to link addresses across censuses is similar in essence to previous approaches proposed in the literature of linking individuals across censuses (Abramitzky, Boustan and Eriksson (2012, 2014); Abramitzky, Boustan, Eriksson, Feigenbaum and Pérez (2021)). To the best of our knowledge, the first study to match addresses across the 1930 and 1940 Censuses is Akbar, Li, Shertzer and Walsh (2019). The authors perform the address matching for ten major US cities.

Our procedure follows four basic steps:

- 1. We remove observations with unidentifiable addresses, that are missing any component of the address: state, city, street name, or house number. We remove from the sample all housing units that are categorized as group quarters.
- 2. We standardize street names in the census, which are prone to typos and abbreviations. We standardize all the directional prefix and street suffix, convert ordinal street numbers to their cardinal text forms, remove special characters or punctuation, and remove any redundant information from street name. We also standardize house numbers by removing special characters or punctuation.
- 3. We restrict the sample to addresses that are unique by state, city, street name and house number. We identify over 10 million unique US addresses in 1930.
- 4. We match observations in 1930 to 1940 records using the following procedure. For each unique address in 1930, we look for an exact match by state, city, street name, and house number in 1940. If we find a unique match, we stop and consider the observations matched. If we find multiple matches for the same address, the observation is discarded to avoid a potential incorrect match. If there are no matches and the street name contains a suffix, we search for an exact match in 1940 that did not contain any suffix. Observations that find multiple matches are discarded. If none of these attempts produces a unique match, the observation is discarded.

The final sample contains only the addresses that can be successfully and uniquely matched between 1930 and 1940. This procedure generates a sample of over 4 million linked addresses, a matching rate of 41.7% of the identifiable addresses in 1930.