

Declining Outmigration and Local Labor Markets

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ONLINE APPENDIX

Online Appendix

1 ENOE Migration Rates

The ENOE is a rotating panel in which households remain for up to five quarters. In the first survey round respondents are asked to list all residents of the household, and then are asked to repeat the list in subsequent surveys. We code anyone listed as no longer living in the household because they moved abroad as an out-migrant. We code anyone listed as an addition to the household because they returned from abroad as a return migrant. This method of measuring migrants differs from other well known surveys, such as the ENADID or Mexican Census, which directly ask respondents to list household members who migrated to or from abroad in the past five years and the date of the most recent migration. The nature of the ENOE means it counts migration *incidents* rather than the number of migrants over a given period. This distinction is important, as circular migration means that an individual migrant may have multiple migration incidents. For example, if an individual migrates, returns, and re-migrates during the time a household is in the ENOE, two migration incidents will be counted. The ENADID or Mexican Census would only count one. This is one reason the ENOE is our preferred source for migration, as we are interested in the total number of individuals who may be present or absent in Mexican labor markets at a particular point in time.

The ENOE also is preferable because it is the only dataset that reliably captures quarterly migration flows. Almost all other datasets ask the year of migration, not the month. Quarterly variation makes the ENOE ideal to examine the response to short-term, macroeconomic fluctuations (Rendall, Brownell, and Kups 2011). Another advantage of the ENOE is that it has a larger sample size than all other Mexican datasets that ask about migration, save the Census (Carriquiry and Majmundar 2013). This means it likely does a better job at capturing a low probability event like migration.

Despite the benefits of the ENOE, one concern is that because it is a sample of households currently residing in Mexico, it does not capture entire households that move abroad (Carriquiry and Majmundar, 2013). It also might fail to capture migration incidents if households dissolve after an individual migrates (Bertoli and Murard 2020). The ENOE is not unique in this respect, as other Mexican based datasets used to measure migration, such as the ENADID and the Mexican Census, suffer from the same problems. It is unclear how much undercounting of migration may occur due to these problems, but a comparison of ENOE flows to changes in the stock of Mexican migrants in the U.S. from the CPS suggest any possible undercounting is small.

Finally, the migration rates and trends over the time period we consider are similar in the ENOE and other data sources. For example, Rendall, Brownell, and Kups (2011) find that the ENOE generates similar annual, out and return migration rates as the ENADID. Chort and de la Rupelle (2016) find similar trends using the EMIF.

2 Construction of EMIF weights

To document patterns of Mexican emigration to the U.S. we use the “*EMIF Norte procedentes del Sur*” database (EMIF North coming from the South). This database is for

Mexican born people with a U.S. destination (as opposed to a Mexican border town destination). We use data for the years 1995, 1999, 2000, 2001, 2002 and 2004, as these were the years available when we first constructed these weights. The 2003 data did not provide complete information on the US destination state. Migrants are interviewed in locations in the northern Mexican border during 12 months of the year. To construct the weights we follow these steps. First, we take the individual level databases in any given year and homogenize the codes for the questions that ask about the Mexican state of birth and US destination state. Using the weights provided in the dataset, we then generate a matrix that counts the number of people in each Mexican state of birth (columns) and US destination state (rows) cell by year. We then sum the totals in each cell across all years to get an aggregate matrix. We add all the migrants in a given US state from the different Mexican states to obtain a row total. The weights are the proportion of migrants from a given Mexican state to the total migrants (row total) in a US state.

An alternative approach to constructing these weights would be to use another database for migrants that have voluntarily returned from the US to Mexico by land. Specifically using the database “*EMIF Norte procedentes del Norte via terrestre*” (EMIF North coming from the North by land). For consistency, we do not impose any restrictions on the data, we use the same years available in the first database: 1995, 1999, 2000, 2001, 2002 and 2004, and follow the same steps, but instead of coding the US destination state, we use the US state where most time was spent while abroad. First stage results using these alternative weights are reported in the paper on Table 2, column 5, they are consistent with those reported using the first set of weights.

3 Cells Approach

The paper that is most comparable to ours is that of Mishra (2007), who also finds a positive relationship between net migration and wages in Mexico during an earlier period (1970 to 2000). Our approaches, however, differ, as we estimate individual level regressions while Mishra employs the “cells” approach estimation strategy of Borjas, where wages and migration rates are calculated by skill groups instead of location. One argument for this method is that due to the migration of workers in response to labor supply shocks, modeling local labor markets is problematic (Monras 2020). However, this argument is made in the context of the U.S., where labor mobility is high. In Mexico internal migration is very low, likely leading to much lower rates of labor mobility (Bell and Muhidin 2009). In our context we prefer our approach to the cells one, as one key assumption of the latter is that individuals are affected by migration generated supply shocks from their same skill group, but not from others. We argue that given the large scale of Mexican migration, there will be indirect effects on workers in other skill categories.

For clarity, however, we replicate Mishra’s cells approach with our data. For skill we focus on education, as our migration data comes from flows from Mexican quarterly labor force surveys rather than stocks from the U.S. Census. Once we account for quarterly and, in some cases, state level variation, we simply do not have the numbers to reliably estimate the same number of education and experience skill categories as Mishra. We define four educational categories: primary or less, lower secondary, upper secondary, and college and above. The results are shown in Table A5. In the first set of columns we

replicate Mishra in modeling a national labor market with the migration rate and wages varying by quarter, year and education level. In the second set of columns we allow for state level variation, with the migration rate and wages varying by quarter, year, state and education level.

As shown in the table, using the cell approach of Mishra we find a negative relationship between net migration rates and the probability of employment and wages (similar to our OLS results). In other words, declining outmigration is associated with an increase in the probability of employment and wages. These results are counter-intuitive and, we think, speak to the negative bias that results from omitting labor demand shocks, or the differences in time period, and data sources outlined above in trying to replicate Mishra’s approach.

4 Adjustment to Previous Migration Shocks

We address the concern raised by Jaeger, Ruist and Stuhler (2018) that the instrument may be endogenous to labor market adjustments to past migration shocks. This may occur if there is little variation in the “shift” portion of the shift-share instrument, resulting in predicted migration flows that are highly persistent over time. The instrument thus assigns migrants to labor markets in the process of adjusting to past migration shocks, making it correlated with local labor market outcomes even if it is uncorrelated with contemporaneous productivity shocks.

The problem of long-term adjustment is more salient for studies that use longer term data (for example, 10 Census data), and not ones that use quarterly ones, like ours. However, as a robustness check we implement the multiple instrumentation procedure recommended by Jaeger, Ruist and Stuhler (2018). Using the following specification:

$$\begin{aligned}
 Outcome_{isqy} = & \beta_0 + \beta_1 \left(\frac{NetMigration}{Population} \right)_{\sum_{t=-1}^{-2} sqy-t} \\
 & + \beta_2 \left(\frac{NetMigration}{Population} \right)_{\sum_{t=-3}^{-4} sqy-t} \\
 & + X'_{sy} \gamma + Z'_{iqy} \lambda + \delta_q + \delta_y + \delta_s + \epsilon_{isqy}
 \end{aligned} \tag{1}$$

Where we estimate outcomes as a function of the net migration rate for the previous two quarters. Given the lagged nature of our data, to not lose the years 2005 and 2006, we use two quarters instead of four. This leads to a very high correlation between the two potential job instruments, and our F stats fall well below 10 as a result. These values, along with the second stage results, are shown in Appendix Table A13. As a result, some of the signs and significance of our coefficients change. Overall, however, we continue to find a decrease in the probability of employment and salaried work, and increase in self employment for men, and an increase in the probability of employment for women.

Table A1: Characteristics of Migrants in the ENOE

	Before 2007			After 2007		
	(1) Non-Migrants	(2) Out Migrants	(3) Return Migrants	(4) Non-Migrants	(5) Out Migrants	(6) Return Migrants
Woman	0.53 (0.50)	0.01 (0.10)	0.14 (0.35)	0.52 (0.50)	0.01 (0.11)	0.17 (0.38)
Age	38.00 (12.61)	31.94 (10.38)	33.00 (10.68)	38.44 (12.79)	33.52 (11.06)	33.53 (11.00)
Household Size	4.71 (2.12)	5.49 (2.42)	5.18 (1.97)	4.57 (2.05)	5.17 (2.20)	5.22 (2.20)
Employed	0.65 (0.48)	0.45 (0.50)	0.59 (0.49)	0.64 (0.48)	0.39 (0.49)	0.53 (0.50)
In Labor Force	0.67 (0.47)	0.48 (0.50)	0.71 (0.45)	0.68 (0.47)	0.43 (0.49)	0.68 (0.46)
Years of Education	8.45 (4.78)	4.24 (4.83)	7.75 (3.73)	9.05 (4.65)	4.27 (5.10)	8.34 (3.94)
<i>Education</i>						
Less than Tertiary	0.77 (0.42)	0.95 (0.22)	0.90 (0.30)	0.76 (0.43)	0.94 (0.24)	0.89 (0.32)
Tertiary	0.23 (0.42)	0.05 (0.22)	0.10 (0.30)	0.24 (0.43)	0.06 (0.24)	0.11 (0.32)
Observations	2,207,157	15,444	2,530	4,754,039	15,154	3,458

Note: Population weighted mean values reported. Standard deviations in parentheses

Source: ENOE, Before 2007 includes 2005, 2006 and 2007. Years after include 2008 to 2012

Table A2: Robustness Checks, First Stage IV Results

	Migration Rate		Excluding States		
	(1)	(2)	(3)	(4)	(5)
Out		Return	No Main Receiving States	No Main Sending States	No Katrina Affected States
Predicted Migration	0.2018*** (0.0165)	0.0996*** (0.0080)	0.1113*** (0.0196)	0.0827*** (0.0171)	0.1030*** (0.0172)
Observations	5,152,306	5,152,306	5,152,306	4,839,368	5,152,306
A-P F stat	149.38	156.46	32.33	23.48	35.78

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Note: Coefficients on the instrumental variable for net migration shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the EMIF, and INEGI.

Table A3: Correlation of Weights with Pre-Period Trends

	Receiving State Weights				
	(1) California	(2) Texas	(3) Florida	(4) Arizona	(5) New York
<u>Change Percent Employed Who Are:</u>					
Informal	-0.269 (0.254)	0.196 (0.230)	-0.072 (0.194)	-0.297 (0.486)	-0.350 (0.314)
Self-Employed	-0.134 (0.146)	-0.047 (0.132)	0.052 (0.112)	0.660** (0.280)	0.268 (0.181)
Tertiary Educated	0.187 (0.141)	0.078 (0.127)	0.200* (0.108)	-0.252 (0.270)	0.023 (0.174)
Women	-0.024 (0.118)	-0.007 (0.106)	-0.069 (0.090)	0.270 (0.225)	0.172 (0.145)
Observations	32	32	32	32	32
R ²	0.23	0.03	0.20	0.20	0.12

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

Note: Outcome variables are trends from Q12001 to Q12004, measured by $\log(Q12004) - \log(Q12001)$.

Source: ENE, CPS and the US Census 2000, as accessed through IPUMS.

Table A4: OLS Results, Men

	Of Those Who Are Employed							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	In Labor Force	Employed	Formal Employment	Salaried	Self Employed	Unpaid	Hours Worked	Log Wage Income
PANEL A: Net Migration	-0.831*** (0.280)	-0.712** (0.289)	0.697** (0.333)	-0.454 (0.395)	0.552 (0.350)	-0.098 (0.152)	-3.592 (16.758)	-1.286 (1.106)
Observations	2,490,416	2,490,416	2,059,720	2,059,720	2,059,720	2,059,720	2,059,720	1,641,338
PANEL B: Out Migration	-0.691*** (0.260)	-0.674** (0.268)	0.930*** (0.302)	-0.733** (0.339)	0.808** (0.315)	-0.075 (0.144)	-9.377 (15.727)	-0.956 (1.052)
Observations	2,490,416	2,490,416	2,059,720	2,059,720	2,059,720	2,059,720	2,059,720	1,641,338
PANEL C: Return Migration	0.236 (0.407)	-0.070 (0.472)	0.963* (0.558)	-1.048 (0.709)	0.998 (0.660)	0.050 (0.210)	-20.132 (32.862)	0.762 (1.670)
Observations	2,490,416	2,490,416	2,059,720	2,059,720	2,059,720	2,059,720	2,059,720	1,641,338

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Note: Coefficients on the OLS estimate on the net migration rate over the previous four quarters are shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the EMIF, and INEGI.

Table A5: Aggregate Cell Regressions

	National Level			State Level			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Outcome=Log Income							
Net Migration Rate	-60.868*** (20.399)	-167.164*** (32.812)	-14.964*** (3.141)	-25.331*** (1.882)	-15.370*** (1.874)	-1.064** (0.537)	-0.385 (0.548)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Outcome=Prob. Employed							
Net Migration Rate	-0.364 (2.497)	-10.094** (4.149)	-2.298*** (0.820)	-2.274*** (0.254)	-1.356*** (0.253)	-0.592*** (0.124)	-0.498*** (0.126)
Observations	112	112	112	3,584	3,584	3,584	3,584
Year-Quarter FE	No	Yes	Yes	Yes	Yes	Yes	Yes
Education FE	No	No	Yes	No	No	Yes	Yes
State FE	N/A	N/A	N/A	No	Yes	Yes	Yes
Educ-Time Interaction	No	No	No	No	No	No	Yes
Avg. Migration Rate (%)	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Stdev. Migration Rate (%)	0.17	0.17	0.17	0.42	0.42	0.42	0.42

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Note: Coefficients on the OLS estimate on the net migration rate by education. In the first columns the migration rate and wage averages are at the education and quarter-year level. Given 6 educational categories, this yields 192 observations. In the second set of columns the migration rate and wage averages are at the education-state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the ENE, and INEGI.

Table A6: Second Stage Coefficients from Figure 3

	Less than Tertiary		Tertiary	
	(1) Men	(2) Women	(3) Men	(4) Women
PANEL A: In Labor Force				
Net Migration Rate	1.209 (0.946)	-3.338** (1.591)	-1.263 (1.659)	-1.030 (1.635)
PANEL B: Employed				
Net Migration Rate	2.538** (1.117)	-3.281** (1.508)	-0.742 (1.810)	0.744 (1.657)
PANEL C: Formally Employed				
Net Migration Rate	3.085*** (1.169)	-5.232*** (1.718)	-2.698 (2.130)	-0.825 (2.599)
PANEL D: Salaried				
Net Migration Rate	-3.765*** (1.422)	-9.387*** (2.455)	-5.348** (2.077)	-0.412 (2.106)
PANEL E: Self Employed				
Net Migration Rate	3.825*** (1.425)	4.414** (1.881)	5.392*** (2.073)	0.940 (1.985)
PANEL F: Unpaid				
Net Migration Rate	-0.061 (0.447)	4.973*** (1.326)	-0.043 (0.674)	-0.528 (0.939)
PANEL G: Hours Worked				
Net Migration Rate	55.329 (60.283)	-72.300 (81.424)	-19.251 (94.386)	75.800 (100.976)
PANEL H: Log Income				
Net Migration Rate	4.942* (2.928)	1.986 (4.045)	-7.544* (4.333)	-1.042 (4.312)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

Note: Coefficients on the IV estimate on the net migration rate over the previous four quarters are shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the EMIF, and INEGI.

Table A7: OLS Coefficients by Sex and Education

	Less than Tertiary		Tertiary	
	(1) Men	(2) Women	(3) Men	(4) Women
PANEL A: In Labor Force				
Net Migration Rate	-0.635** (0.313)	-0.700* (0.413)	-1.224*** (0.405)	-0.544 (0.445)
PANEL B: Employed				
Net Migration Rate	-0.454 (0.319)	-0.660* (0.396)	-1.413*** (0.463)	-0.059 (0.442)
PANEL C: Formally Employed				
Net Migration Rate	0.952*** (0.347)	-1.234*** (0.359)	-0.784 (0.744)	0.200 (0.796)
PANEL D: Salaried				
Net Migration Rate	-0.331 (0.438)	-2.023*** (0.561)	-1.070 (0.671)	0.269 (0.645)
PANEL E: Self Employed				
Net Migration Rate	0.553 (0.400)	1.212** (0.474)	0.580 (0.616)	-0.440 (0.581)
PANEL F: Unpaid				
Net Migration Rate	-0.222 (0.164)	0.810** (0.401)	0.490** (0.208)	0.171 (0.277)
PANEL G: Hours Worked				
Net Migration Rate	-4.914 (18.244)	30.864 (23.922)	1.289 (32.355)	-3.679 (28.306)
PANEL H: Log Income				
Net Migration Rate	-0.547 (1.098)	-0.213 (1.769)	-1.892 (1.698)	0.839 (1.142)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

Note: OLS Coefficients on the net migration rate over the previous four quarters are shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the EMIF, and INEGI.

Table A8: Robustness Checks Men, Other

	Of Those Who Are Employed							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	In Labor Force	Employed	Formal Employment	Salaried	Self Employed	Unpaid	Hours Worked	Log Wage Income
PANEL A: Additional Controls								
Net Migration Rate	1.107 (1.663)	5.802** (2.758)	8.104** (3.521)	-0.162 (2.402)	1.709 (2.381)	-1.546 (1.039)	216.511 (147.669)	4.411 (5.848)
A-P F statistic	9	9	9	9	9	9	9	9
PANEL B: EMIF Net Migration								
Net Migration Rate	0.142 (0.441)	0.798 (0.535)	1.594** (0.558)	-2.077*** (0.745)	2.112*** (0.710)	-0.035 (0.223)	19.650 (31.420)	0.692 (1.509)
A-P F statistic	70	70	72	72	72	72	72	77
PANEL C: ICE Detainers								
Net Migration Rate	0.981* (0.570)	1.477** (0.677)	2.207*** (0.778)	-3.140*** (0.857)	3.063*** (0.877)	0.077 (0.283)	-20.175 (41.525)	2.431 (2.345)
A-P F statistic	62	62	63	63	63	63	63	61
PANEL D: Min. Wage Zone Control								
Net Migration Rate	0.170 (0.814)	1.363 (1.000)	3.497*** (1.146)	-3.454*** (1.285)	3.589*** (1.293)	-0.135 (0.417)	51.314 (57.474)	2.000 (2.823)
A-P F statistic	37	37	38	38	38	38	38	40

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

Note: Coefficients on the IV estimate on the net migration rate over the previous four quarters are shown. Results for men only shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the EMIF, and INEGI.

Table A9: Correlation of Industrial Employment

	Industry Employment Share		Industry Employment Trends	
	(1) Same Quarter	(2) 1 Quarter Lag	(3) Same Quarter	(4) 1 Quarter Lag
<i>Average Receiving State</i>				
Employment Share	0.020*** (0.002)	0.020*** (0.002)		
Employment Trend			-0.013*** (0.002)	-0.013*** (0.002)
Observations	9,856	9,504	9,856	9,504
R ²	0.01	0.01	0.00	0.00

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

Note: Regressions include state, quarter and year fixed effects.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the ENE, and INEGI.

Table A10: Correlation of Occupational Employment

	Occupation Employment Share		Occupation Employment Trends	
	(1) Same Quarter	(2) 1 Quarter Lag	(3) Same Quarter	(4) 1 Quarter Lag
<i>Average Receiving State</i>				
Employment Share	0.029*** (0.002)	0.029*** (0.002)		
Employment Trend			0.001 (0.001)	0.001 (0.001)
Observations	6,272	6,048	6,272	6,048
R ²	0.05	0.05	0.00	0.00

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Standard errors in parentheses.

Note: Regressions include state, quarter and year fixed effects.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the ENE, and INEGI.

Table A11: Second Stage IV Results Men, Alternative Instruments

	Of Those Who Are Employed							
	(1) In Labor Force	(2) Employed	(3) Formal Employment	(4) Salaried	(5) Self Employed	(6) Unpaid	(7) Hours Worked	(8) Log Wage Income
PANEL A: ENE Weights								
Net Migration Rate	-0.422 (0.722)	0.460 (0.856)	2.913*** (0.953)	-5.018*** (1.294)	4.519*** (1.233)	0.499 (0.391)	40.241 (54.666)	1.913 (2.742)
PANEL B: EMIF Return								
Net Migration Rate	0.346 (0.788)	1.260 (0.942)	4.184*** (1.138)	-2.048* (1.110)	2.497** (1.153)	-0.449 (0.448)	90.132 (56.571)	2.838 (2.795)
PANEL C: Total Employment								
Net Migration Rate	0.457 (0.838)	1.617 (1.043)	3.582*** (1.172)	-2.490** (1.248)	2.745** (1.263)	-0.254 (0.427)	31.568 (62.106)	0.657 (2.972)
PANEL D: Native, Non-Mover Potential Jobs								
Net Migration Rate	-0.020 (0.814)	1.171 (1.010)	3.117*** (1.164)	-4.318*** (1.432)	3.849*** (1.366)	0.469 (0.422)	22.249 (54.048)	3.315 (2.806)
PANEL E: Main Industry Out								
Net Migration Rate	-0.646 (0.984)	0.838 (1.194)	3.890** (1.536)	-4.365** (1.804)	5.087*** (1.854)	-0.722 (0.580)	175.582** (86.409)	1.526 (3.684)

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Note: Coefficients on the IV estimate on the net migration rate over the previous four quarters are shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the ENE, and INEGI.

Table A12: Robustness Checks Men, Movers

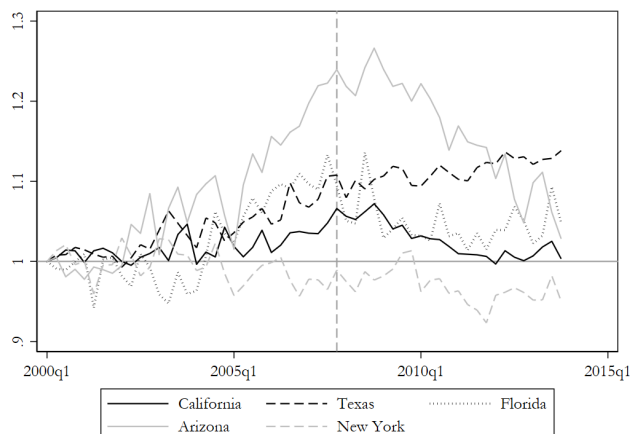
	Of Those Who Are Employed							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	In Labor Force	Employed	Formal Employment	Salaried	Self Employed	Unpaid	Hours Worked	Log Wage Income
PANEL A: Non Movers Men								
Net Migration Rate	0.256 (0.829)	1.703 (1.036)	3.360*** (1.256)	-3.584*** (1.323)	3.926*** (1.331)	-0.343 (0.497)	-17.934 (59.238)	3.803 (2.883)
Observations	1,958,353	1,958,353	1,616,301	1,616,301	1,616,301	1,616,301	1,616,301	1,285,789
A-P F statistic	35.19	35.19	36.48	36.48	36.48	36.48	36.48	39.45
PANEL B: Movers Control								
Net Migration Rate	0.173 (0.818)	1.384 (1.004)	3.265*** (1.124)	-3.729*** (1.306)	3.816*** (1.314)	-0.086 (0.416)	44.165 (57.386)	2.212 (2.804)
Observations	2,490,416	2,490,416	2,059,720	2,059,720	2,059,720	2,059,720	2,059,720	1,641,338
A-P F statistic	36.66	36.66	38.02	38.02	38.02	38.02	38.02	40.34
PANEL C: Comp. Potential Jobs								
Net Migration Rate	1.017 (1.057)	3.517** (1.434)	6.906*** (1.757)	-2.143 (1.531)	2.104 (1.496)	0.039 (0.469)	208.921** (85.364)	13.285*** (3.904)
Observations	2,490,416	2,490,416	2,059,720	2,059,720	2,059,720	2,059,720	2,059,720	1,641,338
A-P F statistic	26.42	26.42	26.92	26.92	26.92	26.92	26.92	27.91

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Note: Coefficients on the IV estimate on the net migration rate over the previous four quarters are shown. Results for men only shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

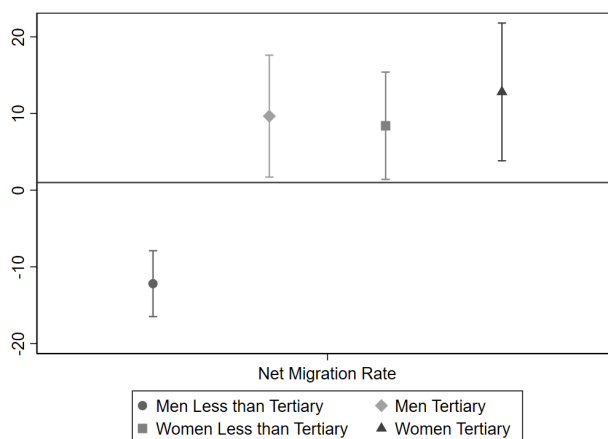
Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the EMIF, and INEGI.

Figure A1: Potential Jobs Trajectory, Main Receiving States



Note: Potential jobs are relative to Q12000. Horizontal Line Placed at 1= Employment in Q12005.
Source: CPS and U.S. 2000 Census.

Figure A2: Aggregate Employment Response to Net Migration Rates
 Total Employment, EMIF Weights



Note: Dots represent second stage IV coefficient on net migration rates. Lines show the 95% confidence intervals, with standard errors clustered at the state-quarter-year level. Controls include state, quarter and year fixed effects, individual-time varying controls and state-time varying controls. In all cases population weights are used.
Source: ENOE, INEGI, EMIF, CPS and U.S. 2000 Census.

Table A13: Second Stage IV Results, 2Q Migration Plus One Period Lag

	Of Those Who Are Employed							
	(1) In Labor Force	(2) Employed	(3) Formal Employment	(4) Salaried	(5) Self Employed	(6) Unpaid	(7) Hours Worked	(8) Log Wage Income
PANEL A: MEN								
Net Migration Rate	10.141 (6.585)	14.566* (8.263)	2.760 (4.833)	-20.657* (10.972)	21.909* (11.504)	-1.252 (1.850)	234.951 (231.738)	-10.176 (14.876)
Net Migration Rate, Q-2	-4.621* (2.573)	-4.915 (3.247)	3.209* (1.893)	4.479 (4.260)	-5.013 (4.450)	0.534 (0.702)	-62.421 (99.558)	7.274 (6.009)
Observations	2,490,416	2,490,416	2,059,720	2,059,720	2,059,720	2,059,720	2,059,720	1,641,338
A-P F statistic	2.04	2.04	2.13	2.13	2.13	2.13	2.13	1.91

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Note: Coefficients on the IV estimate on the net migration rate over the previous two quarters are shown. Not shown are coefficients on a one period (2 quarter) lag in net migration rates. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. Population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the ENE, and INEGI.

Table A14: OLS Results, Women

	Of Those Who Are Employed							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	In Labor Force	Employed	Formal Employment	Salaried	Self Employed	Unpaid	Hours Worked	Log Wage Income
PANEL A: Net								
Net Migration	-0.840** (0.369)	-0.699** (0.342)	-0.641* (0.357)	-1.267*** (0.464)	0.621* (0.373)	0.646** (0.321)	23.215 (20.557)	-0.035 (1.390)
Observations	2,661,890	2,661,890	1,310,309	1,310,309	1,310,309	1,310,309	1,310,309	1,030,278
PANEL B: Out								
Out Migration	-0.716** (0.342)	-0.715** (0.314)	-1.018*** (0.339)	-1.957*** (0.450)	0.873** (0.382)	1.084*** (0.285)	-12.553 (19.285)	-0.776 (1.238)
Observations	2,661,890	2,661,890	1,310,309	1,310,309	1,310,309	1,310,309	1,310,309	1,030,278
PANEL C: Return								
Return Migration	0.192 (0.702)	-0.245 (0.634)	-1.424** (0.709)	-2.632*** (0.851)	1.004 (0.721)	1.627*** (0.458)	-112.453*** (38.021)	-2.461 (2.013)
Observations	2,661,890	2,661,890	1,310,309	1,310,309	1,310,309	1,310,309	1,310,309	1,030,278

* p < 0.1, ** p < 0.05, *** p < 0.01. Standard errors in parentheses.

Note: Coefficients on the OLS estimate on the net migration rate over the previous four quarters are shown. Controls include state, quarter and year fixed effects, marital status and household size, and state-year real GDP per capita and state-quarter homicide rates and industrial activity. In all cases population weights are used and standard errors are clustered at the state-quarter-year level.

Source: ENOE, CPS and the US Census 2000, as accessed through IPUMS, the EMIF, and INEGI.