



The Impact of Mexican Immigration on U.S. Native Workers



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Research Question / Background



We study the economic impact of Mexican immigration in the United States on the labor market outcomes of native workers. Specifically, low-skilled workers at the city level across the United States.



Our sample consists of males between the ages of 16 and 64 that obtain a high school degree or less.



In order to estimate the real impact of Mexican immigration on U.S. workers, we calculate the effect that immigration may have on U.S. wages and the native unemployment rate.



We compare our findings to Borjas (2003) who finds a significant negative impact on natives' wages and employment, while Ottaviano and Peri (2008) and Card (2001) capture a slightly negative effect on wages.

Model

$$y_{c,t} = \beta_0 + \beta_1 x_{1ct} + \beta_2 x_{2ct} + \beta_3 x_{3ct} + \beta_4 x_{4ct} + \beta_5 x_{5ct} + \beta_6 x_{6ct} + \dots + \beta_{11} x_{11ct} + a_c + u_{ct}$$

c = city
 t = year

x_1 = proportion of Mexican immigrants

x_2 = average age

x_3 = average agesq

x_4 = proportion married

x_5 = average children in household

x_6 = average White native

x_7 = average Black native

x_8 = average American Indian or Alaska native

x_9 = average Asian or Pacific Islander native

x_{10} = average other race native

x_{11} = average two or more major races native

Impact on U.S. Unemployment Rate

y = average unemployment rate of low-skilled male native workers

Impact on U.S. Wages

y = average annual wages of low-skilled male native workers

Data / Observations

Summary Statistics of the Effect of Mexican Immigration on low-skilled U.S. Male Natives – Table 1					
Variable	Obs	Mean	Std. Dev.	Min	Max
Unemployment rate native	2,875	0.1076662	0.0464981	0.0091743	0.297619
Average wage native	2,875	9.975202	0.2029921	9.179852	10.87167
Proportion Mexican Immigrant	2,875	0.0614059	0.0846656	0	0.4274047
Proportion other Immigrants	2,875	0.0653027	0.0599128	0	0.4619565
Average age	2,875	38.39626	2.026786	28.13927	44.94248
Average age squared	2,875	1478.379	152.5262	791.8185	2019.826
Proportion married	2,875	0.4046253	0.0519266	0.1666667	0.5838509
Average children in household	2,875	0.5540076	0.1265037	0.1602564	1.148313
Average number of White natives	2,875	0.764855	0.1274869	0.198064	0.9859649
Average number of Black natives	2,875	0.122492	0.1100537	0	0.5959302
Average Indian or Alaska native	2,875	0.013215	0.0404828	0	0.6235294
Average Asian or Pacific Islander natives	2,875	0.0253884	0.0397639	0	0.5022727
Other races	2,875	0.0478322	0.0582404	0	0.4961039
Two or more major native races	2,875	0.0262173	0.0214608	0	0.2916953

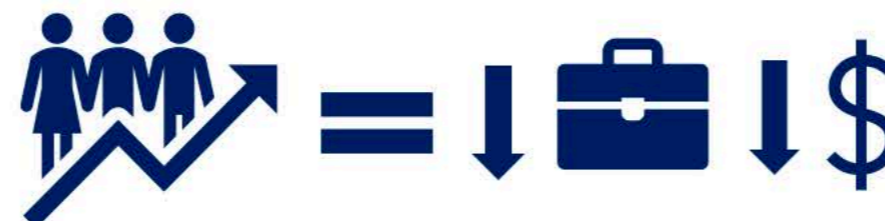
Interpretations

Unemployment Rate of Natives

- A 10% increase in the proportion of Mexican immigrants in a city will result in the unemployment rate of natives to decrease by .25%.

Wages of Natives

- For every 10 percentage point change of Mexican immigrants living in the metropolitan area, the average native income decreases by 4.1%. **



Results

Results: The Unemployment Rate and Wages Regression of the Effect of Mexican Immigration on U.S. Male Natives – Table 2		
Variable	Effect on Unemployment Rate	Effect on Wages
	(N = 2,875)	(N = 2,875)
	R-squared = 0.4851	R-squared = 0.3570
Proportion Mexican Immigrant	-0.0253397 (.0470485)	-0.411425** (0.1664933)
Proportion Other Immigrants	-0.0425660 (.056048)	0.2023627 (0.1504298)
Age	0.0147524 (.012678)	0.1503483*** (0.0384539)
Age Squared	-0.0002255 (.0001653)	-0.0018037*** (.0005025)
Married	-0.0873484 (.0283821)	0.8667934*** (.0885655)
Number of Children	-0.0064675 (.0153984)	0.1930502*** (.0473724)

*: 10% significance

** : 5% significance

***: 1% significance

Conclusion

We find **no statistically significant relationship between the proportion of Mexican immigrants and the unemployment rate of natives.**

Though significant, **the impact of Mexican Immigration on natives' wages is relatively small.**

Our findings in equation 1 infer a complementary relationship whereas equation 2 notes a substitutable relationship. However, because of the lack of statistical significance in equation 1, **we can suggest that the substitution effect dominates over the complementary in our results.**