

The labor market effects of immigration dissipate rapidly over time and space

● Joan Monras, *Universitat Pompeu Fabra, Spain*

on *'The timing and geographic spread of the economic impact of immigration'*

A number of scholars and policy makers alike wonder about the effects of immigration on the labor market outcomes of natives. The classic literature on the topic has not reached an agreement. Some renowned economists, such as recent Nobel Prize winner David Card, suggest that the effects of immigration are minimal. By comparing cities (and occupations) exposed to higher and lower levels of immigration, Card (2001) concludes that immigration did not affect substantially the labor market outcomes of natives. Harvard economist George Borjas reaches different conclusions. He argues that local labor markets in the US are well integrated, which implies that the shocks affecting one local labor market also translate to others nearby. As a result, comparing outcomes across different cities reveals little or nothing about the effects of immigration. Instead, he suggests comparing workers with different skills and experience levels is a more relevant approach (Borjas, 2003). His estimates differ radically from those of David Card. They suggest that immigration harms natives' employment and wages, particularly among the least educated.

In this literature, the labor market response to immigration is often thought to be a single number: By how much a one-percent increase in labor supply due to immigration changes the wages or employment rates of the natives. Now, is this the right question? In this policy brief, I argue that the best answer to this fundamental question is perhaps not a single number but rather a set of new questions: If there is an effect, does it dissipate over time and space? How long does this diffusion process take? What are the economic mechanisms explaining it?

Empirical lessons from the Mexican crisis of 1995

One of the main challenges when estimating the labor market effects of immigration is that immigrants likely chose their local destination in the host country based, at least in part, on how local labor markets are performing. It is thus difficult to disentangle the labor market response to immigration from the immigration response to wage and employment disparities. Previous works have tried to isolate the causal impact of immigration on the labor market by



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using the fact that some migrants decide to move to certain locations for reasons unrelated to how the local economy is doing – e.g., because they value living close to their network (say relatives or friends who migrated in earlier times). This approach, referred to as the network-based instrumentation strategy, consists of replacing actual local immigration shocks by predicted values (using the network) in the statistical models. This strategy, however, is often seen as inaccurate when the performance of local labor market outcomes is highly persistent over time, implying that the reasons why former network members decided to settle in a city may still be influencing the location decisions of new migrants.

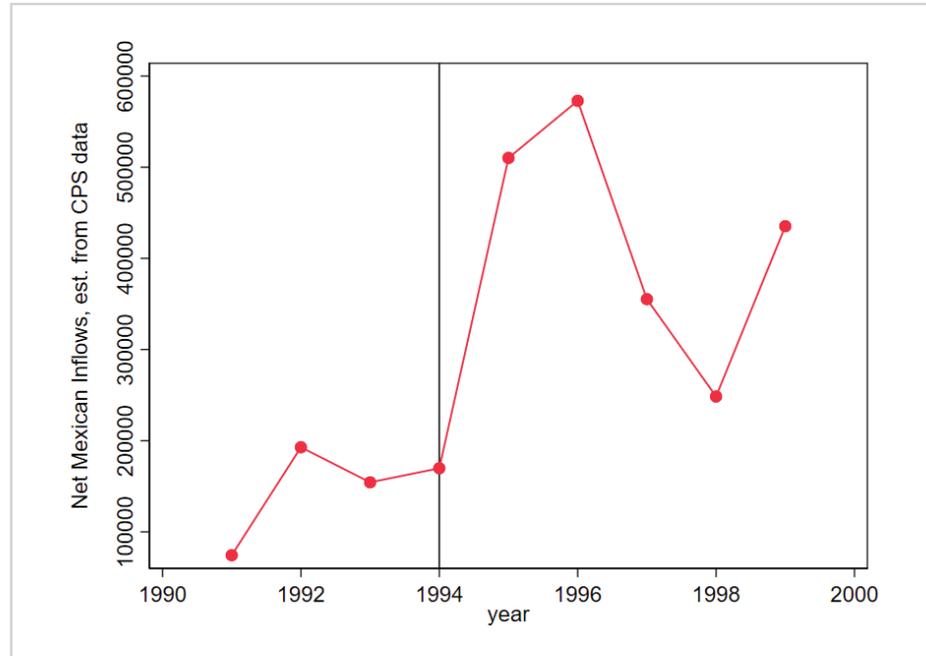
In my work, I claim that even when the labor market outcomes are persistent over time, we can learn about the short-run effects of immigration when there is a large and unexpected arrival of immigrants. These large unexpected shocks are usually termed “natural experiments.” In particular, I use the large increase in Mexican immigrant flows into the US resulting from the crisis that hit Mexico in early 1995 to document how immigrant shocks affect local labor markets. My analysis highlights two important facts. First, wages of native low-skilled workers decreased as a result and, if anything, wages and employment rates of high-skilled workers improved. Second, the share of the low-skilled population in high-immigration locations (i.e., states or metropolitan areas exposed to higher levels of immigration) instantaneously increased one-to-one with the inflow of Mexican low-skilled immigrants. However, around two years after the initial shock, the share of low-skilled population in those high-immigration locations returned to its previous trend. This suggests that either some low-skilled workers moved to low-immigration locations or that the

patterns of internal migration of high-skilled natives also changed. The fact that there is some internal relocation responding to local shocks creates spillovers from high-immigration areas (the “treated” locations) to low-immigration areas (the “control” group). Such indirect movements of population limits the usefulness of comparisons across locations to examine the effects of immigration in the medium term.

Census data for the years 1990 and 2000 support this finding. They allow me to compare the labor market outcomes across locations and across education-experience groups over a decade, as David Card and George Borjas did before. As in previous studies, and despite the fact that in 1995, there was an unexpectedly large inflow of Mexican immigrants that affected “treated” local labor markets, differences across locations are very small within a period of 10 years (covering 5 years after the shock). This confirms that internal mobility responses induce spillovers across local labor markets. When internal migrants move away, or avoid moving to locations that receive unexpectedly large inflows of Mexican migrants, locations that were not directly “treated” gradually experience the effects of the immigration shock (Topel, 1986). Over time, this tends to dissipate local shocks across local labor markets.

Figure 1: Mexicans in the US in 2000, by year of arrival

Note: The figure plots the number of Mexicans in the US in 2000 by their year of arrival.



Going beyond the spatial correlation approach

To investigate more in depth what happens over longer-time horizons, I embed this relocation mechanism into a multi-location, macroeconomic model. In this model, the various locations of the US economy are linked through internal migration. I also allow the housing market and firms to react to immigration flows. To parameterize the model, I rely on the short-run variations in wages and population responses induced by the initial immigration shock following the Mexican crisis of 1995. I complement these estimates with proxies of the underlying productivity and amenity levels in different locations, as well as estimates of the effect of housing prices on the supply of housing taken from existing literature (Saiz, 2010). The model replicates very well the observed evolution of wages of both high- and low-skilled workers

as well as the rental and housing prices across locations. I thus use it to simulate several hypothetical scenarios to gain understanding of the mechanisms through which different types of immigration shock spread over time and across locations, and of the effectiveness of migration policies.

Internal mobility vs. technological changes.

A first lesson from the model is that the economy adapts differently to *expected* versus *unexpected* inflows of foreign immigrants. In the case of a massive *unexpected* shock (such as the inflow due to the 1995 Mexican Peso Crisis), internal migration is the mechanism contributing to dissipate local shocks across locations. In the medium-run (i.e., a few years after the shock), internal mobility implies that (i) wages of low-skilled workers are almost identical across locations, and (ii) many internal movers relocate from high- to low-immigration locations. Furthermore,

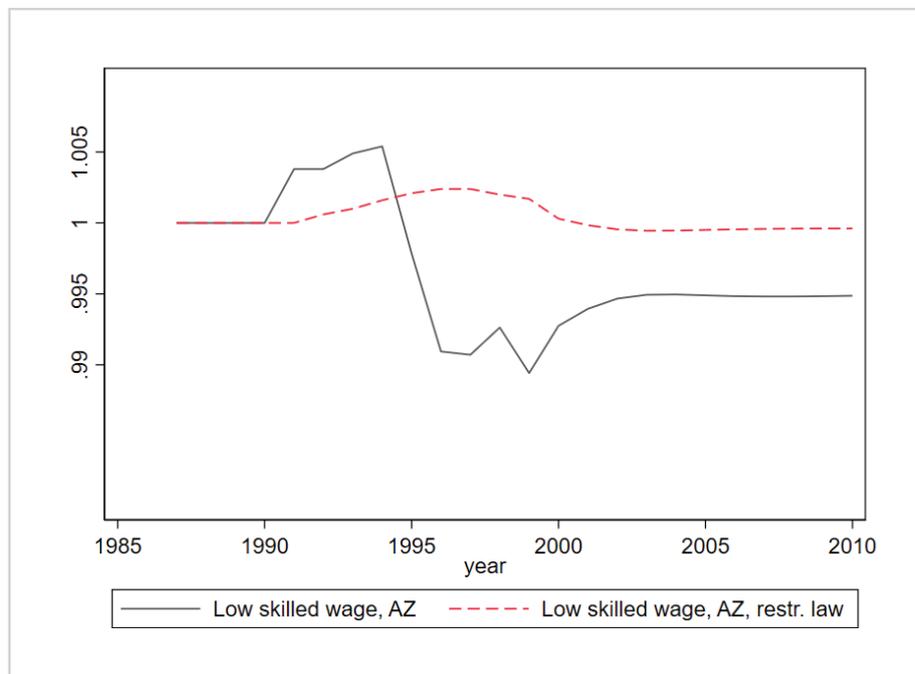
the initially high-immigration areas that receive large numbers of low-skilled migrants do not end up with higher shares of low-skilled population than initially lower-immigration locations. Consequently, wage responses to *unexpected* immigration shocks are short-lived.

When changes in immigration are gradual and foreseeable, firms can anticipate that immigration flows persistently concentrate into some locations. Firms shift the local technologies to take advantage of the abundance of a certain type of labor. Let me take a concrete example of this. Year after year, California experiences large inflows of low-skilled Mexican workers, while Massachusetts does not. At the same time, gardening services in California are a lot more intensive in low-skilled labor than in Massachusetts, while a native worker in the gardening service industry in California does not earn (in real terms) significantly less than in Massachusetts. In other words, gardening firms are using machines more intensively in Massachusetts to deal with parks and private gardens than in California (Lewis, 2012). This example can be generalized to the entire US economy. We see that high-Mexican immigration locations experienced substantial inflows of low-skilled population during the 1990s. Yet, wages of low-skilled workers are not substantially lower than in low-Mexican immigration locations. This suggests that local technologies adapt to gradual and *expected* inflows of immigrants. It is only when more immigrants than expected arrive suddenly that wages decrease for some time, before recovering and inducing internal labor reallocation.

Effectiveness of state-level immigration restrictions. Another insight that comes from my model is that unilateral state-level immigration policies are unlikely to be very effective in protecting low-skilled workers. State-level restrictions induce a sudden and permanent drop in cross-border immigration flows, which induces internal movements in the medium-term and possible technological adaptation in the longer term. In Monras (2020), I analyze the consequences of implementing a policy that effectively manages to stop all Mexican migration into a state. The fact that local labor markets are linked through internal labor mobility, and that wage dynamics return quite fast to being equalized across space, means that the gains from implementing a protective policy for low-skilled natives in a given state is likely to have very limited and short-lived effectiveness. Again, to put it in a concrete example: Arizona recently introduced a highly restrictive immigration policy towards illegal (low-skilled) immigration in 2010 (i.e., the Support Our Law Enforcement and Safe Neighborhoods Act). This does not mean that, in the medium term, low-skilled workers in Arizona are more protected from immigrant competition than other states. There may be some differences in labor market outcomes in the short run, but these are likely to be short-lived according to my estimates. This is illustrated in the figure below, where I simulate the wage evolution of low-skilled natives in Arizona with and without a restrictive law that completely halts Mexican migration to Arizona over the 1990s.

Figure 2: Evolution of wages after an immigration shock

Note: The figure plots the predicted evolution of wages for low-skilled workers in a setting in which there is an immigration shock (solid line) and a counterfactual scenario in which immigration is halted by a policy (dashed line).



Conclusions

My analysis suggests that it may be at least as important to know what mechanisms do labor markets have to absorb immigration-driven shocks, as to know what is the effect of immigration on labor market outcomes – which has been the focus of previous literature. Two key insights arise from my study. First, time horizons are crucial. It seems that the US has various mechanisms in place so that the short-run effect of immigration is quite different from the longer-run, and the two are only separated by a few years. Second, analyzing the effect of international migration is informative not just about the effects of immigration, but, perhaps more interestingly, a way to see how the labor and housing markets adjust over time. In my view, this is a more complete and stimulating question than a discussion over a single number.

References

Borjas, G. (2003). The Labor Demand Curve is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market. *Quarterly Journal of Economics* 118(4), 1335-1374.

Card, D. (2001). Immigrant Inflows, Native Outflows and the Local Labor Market Impacts of Higher Immigration. *Journal of Labor Economics* 19(1), 22-64.

Lewis, E. (2012). Immigration, Skill Mix, and Capital-Skill Complementarity. *Quarterly Journal of Economics* 126(2), 1029-1069.

Monras, J. (2020). Immigration and Wage Dynamics: Evidence from the Mexican Peso Crisis. *Journal of Political Economy* 128(8), 3017-3089.

Saiz, A. (2010). The geographic determinants of housing supply. *Quarterly Journal of Economics* 125(3), 1253-1296.

Topel, R. H. (1986). Local Labor Markets. *Journal of Political Economy* 94(3, Part 2), S111-S143.

Based on

Monras, Joan (2020). Immigration and Wage Dynamics: Evidence from the Mexican Peso Crisis. *Journal of Political Economy* 128(8), 2017-3089.