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The Association between Immigration and Labor Market Outcomes in the United States

By Gaetano Basso, University of California–Davis, and Giovanni Peri, University of California–Davis

The labor market and, more generally, the economic impact of immigrants in the United States, are highly researched topics. Several influential articles have been written since the 1980s on immigration and native wages and employment, but disagreement persists on whether the association between immigrants and wages is negative, positive, or null. The economics of how immigrants affect native wages and employment can be framed in a simple labor-demand and labor-supply model for homogeneous workers. Such a basic canonical model with a negatively sloped labor-demand curve implies that, in the short run, an increase in supply due to immigration, keeping everything else constant, produces a decline in wages and/or in employment for native workers. In the long run, as capital adjusts, this model predicts no effect on native wages and employment.

For many reasons, however, the simple canonical model described above is an oversimplification; it omits factors that might be crucial for the issue at hand. Immigrants are not homogeneous to natives; technology and capital adjust in response to labor availability; firms create jobs in response to incentives; complementarity arises across different kinds of workers; more workers allow for specialization and division of labor that could enhance efficiency; and so on. All these factors imply that the marginal product of native labor may change when the supply of immigrant changes, and it may change in a direction that offsets or overturns the negative effects implied by the canonical model. In other words, the change in the supply of immigrant workers may correspond to an ambiguous change in the demand for native workers. It could be positive or negative depending on the relative strength of competition and complementarity/productivity effects.

A second issue limiting the relevance of the "supply shift with-everything-else-constant" paradigm is that we rarely observe "sudden and short-lived" changes in immigration rates. The usual scenario is one in which a slow but persistent increase in immigration rates shapes, over decades, the labor markets of the receiving countries. In this context several adjustments take place concurrently with the immigrant inflow. Even the more remarkable examples of immigration booms entailed net inflows only around 0.5 to 1.0 percent of the population each year. One of these immigration episodes took place in Israel during the period from 1990 to 2000, due to Jewish immigrants from the former Soviet Union: in that episode,

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the share of foreign-born increased by 10 percentage points of the population in a decade.

In another episode, from 1995 to 2008, the share of foreign-born in Spain increased by 11 percentage points due to immigration. By comparison, the period of largest U.S. immigration, namely the years from 1990 to 2010, experienced an increase in the share of foreign-born by 5 percentage points, hence an average of 0.25 percentage of the population each year. Most of the other countries have had much smaller yearly rates for a period of a few decades. It is more useful, therefore, to think of a framework in which the inflow of immigrants changes the long-run equilibrium in the labor markets over decades. As both labor demand and labor supply change over the long run, and immigration can affect both dynamics, no clear prediction emerges about the sign of the effects.

For these reasons it is useful to analyze the data in order to learn about the long-run correlations between changes in immigrant population and native wages and employment without a preconceived expectation about their sign. We analyzed these correlations for the United States over the period of 1970 to 2010, considering several different dimensions pertaining to geographical areas and skill groups.

The long-run correlation between immigrant and native demand can be negative if forces of competition, crowding, and decreasing returns prevail. Alternatively, a positive long-run correlation can prevail if agglomeration economies, labor and capital complementarity, specialization, and skill externalities are more significant. By analyzing the long-run correlations between these variables we obtain a picture of their joint movements in equilibrium. While correlations per se cannot reveal what is the driving force, and hence cannot identify the causal effects of immigration, correlations can still suggest some scenarios and rule out others, especially if they are consistent across decades and across geographical units. Moreover, other important long-run forces driving changes in the labor market, such as technology, change in demographic groups, and changes in schooling attainments are, at least in part, observable. Thus, we can absorb their variation and isolate the correlation that survives such controls to better approximate the causal link between immigrants and native wages.

With these caveats in mind we examine the correlation between immigrant supply and native wages or employment across U.S. local labor markets, states, and regions, while progressively controlling for the variation in confounding observable and unobservable factors. Overall we find correlations that are positive or not significantly different from zero and rather stable across different periods, geographical units, and specifications. We also find that, considering inflows of immigrants in education and age groups across labor markets, the more similar natives (in age and education) do not experience negative wage and employment changes associated to those characteristics. Hence, unless specific unobserved factors systematically offset the crowding and competition effects by immigrants, the correlations do not support the existence of negative and significant effects of immigration on native labor demand.

Even the most carefully controlled correlations, however, cannot ensure that we are fully identifying causation from immigration to native labor demand. While the positive correlations are suggestive, and the robustness to controls is encouraging, we need to have a more systematic way to separate the causal link between exogenous changes in immigrant labor supply and native wages and employment.

We then discuss a frequently used empirical method that aims at isolating supply-driven changes in immigrants. This instrumental variable method relies on the assumption that the distribution of foreign born in each location prior to our sample period is uncorrelated with subsequent demand shifts and productivity changes in that location. Applying this method to our analysis, we observe only a small change in the estimates of the correlation between immigrants and average native wages. The precision of the estimates, however, deteriorates. We also discuss recent and promising papers that leverage plausible sources of exogenous variation in immigrant labor supply (e.g., policy changes and their variation across regions, or the discontinuity over time of migratory flows) and obtain similar results.

Finally, acknowledging that most of the simple and sophisticated correlations between immigrant labor supply and native wages are positive or null, we discuss channels and mechanisms allowing absorption of immigrant labor with positive effects on native labor demand. There are three key factors to understanding the potentially positive effects of immigrants on demand for native workers. First, immigrants and natives are different types of workers, with different skills, which complement each other up to a certain degree. Second, immigrants may induce changes in efficiency, specialization, and technology adopted by native firms with positive productivity impact on all workers. Third, immigrants, especially the highly

educated, have positive external effects due to their impact on innovation and new ideas. A growing literature in labor economics and migration supports the importance of these three main mechanisms emphasizing the potential role of immigrants for long-term growth.

NOTE

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