

## Immigration and emigration: wages gained and lost

Immigration is a highly charged issue in many developed countries. A leading thesis is that immigrants depress the wages of native workers, especially the low skilled. In a paper titled “The Wage Effects of Immigration and Emigration” (Working Paper 16646, National Bureau of Economic Research, December 2010), Frédéric Docquier, Çağlar Özden, and Giovanni Peri not only rebut this notion, but also find that *emigration*, a little-studied phenomenon in developed countries, has exactly the effect wrongly attributed to immigration.

Using an aggregate production model well known in the literature, the authors simulate the wage effects of both immigration and emigration, apart from other changes in the economy, to assess the impact of global labor movements during 1990–2000 on the wages of those who do not migrate. The chief focus is on Australia, Canada, the United States, Belgium, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. In each country, wage effects are examined separately on highly educated and less educated nonmigrants so that distributional effects become apparent.

The main results of the authors’ analysis are threefold. First, in the countries studied, the long-run effect that *immigration* had on the average wages of nonmigrants ranged from no effect in Italy to a 1.7-percent increase in Australia. The effect, however, was different for the highly educated and the less educated, with

the former exhibiting a small percent decrease in wages (except in the United States) and the latter finding their wages increased by a small or large percentage, depending on the country.

Second, the effect that *emigration* had on the averages wages of nonmigrants ranged from no effect in the United States (chiefly because few emigrate from that country) to a statistically significant –0.8 percent in the United Kingdom. As with immigration, however, the effect differed for the highly educated and the less educated, and in fact was just the opposite of the effect of immigration: those with more education saw their wages rise somewhat with emigration, while those with less education saw their wages fall, sometimes considerably, again depending on the country.

Third, *immigration* tended to improve, whereas *emigration* tended to worsen, the income distribution during 1990–2000 in the countries selected for study. That is, immigration generally decreased the wage gap between highly educated and less educated nonmigrants, and emigration generally increased the gap. The United Kingdom, Portugal, and Belgium showed declines due to emigration of 2.5 percent, 2.3 percent, and 1.3 percent, respectively, in the wages of less educated nonmigrants and increases due to immigration of 2.8 percent, 0.2 percent, and 1.1 percent, respectively, in the wages of less educated nonmigrants. Those same countries exhibited increases due to emigration of 1.3 percent, 1.6 percent, and 0.5 percent, respectively, in the wages of more educated nonmigrants and declines due to immigration of 1.2 percent, 0.11 percent, and 0.2

percent, respectively, in the wages of more educated nonmigrants.

The model used by Docquier, Özden, and Peri makes four key assumptions: that aggregate labor is combined with physical capital to produce output, that there is constant elasticity of substitution (CES) at a value ranging from 1.3 to 2.0 between the labor of the highly educated and that of the less educated, that immigrants and nonmigrants with roughly the same education are imperfect substitutes within a CES structure, and that human capital intensity has a productivity externality that arises as immigration and emigration alter the ratio of the highly educated to the less educated. All of these assumptions are tested for sensitivity, and it is shown that the results remain essentially unchanged.

Finally, the authors address five potential shortcomings of the model: that it fails to account for (1) undocumented immigrants, (2) differences in the quality of education between immigrants and nonmigrants with the same degree, (3) both the positive and negative effects of density (crowding) externalities on the efficiency of production, (4) the different employment rates of immigrants and nonmigrants, and (5) short-run effects due to imperfect capital adjustment. Taking these circumstances into account yields the following results: (1) adding into the model even the highest estimates of undocumented immigrants leaves the original conclusions unchanged, except as regards Greece and Italy, which now suffer small immigration costs of 0.2 percent and 0.1 percent, respectively; (2) taking into account differences in immigrants’ and nonmigrants’

quality of education does not change the original results (with the caveat that education quality is based on U.S. and Canadian, and not European, schooling); (3) accounting for positive (negative) crowding externalities *marginally* increases (decreases) the average wage effects of immigrants; (4) incorporating

the different employment rates of immigrants and nonmigrants into the model leaves the original results essentially unchanged; and (5) allowing for sluggish capital adjustment in the short run produces a small negative effect of immigration in some European countries in the short run, *but the original long-run*

*positive effects still obtain.*

In sum, for a number of North American and European countries, immigration produces, on average, wage gains for nonmigrants and emigration produces, on average, wage losses for nonmigrants—and the losses are generally larger than the gains. □