

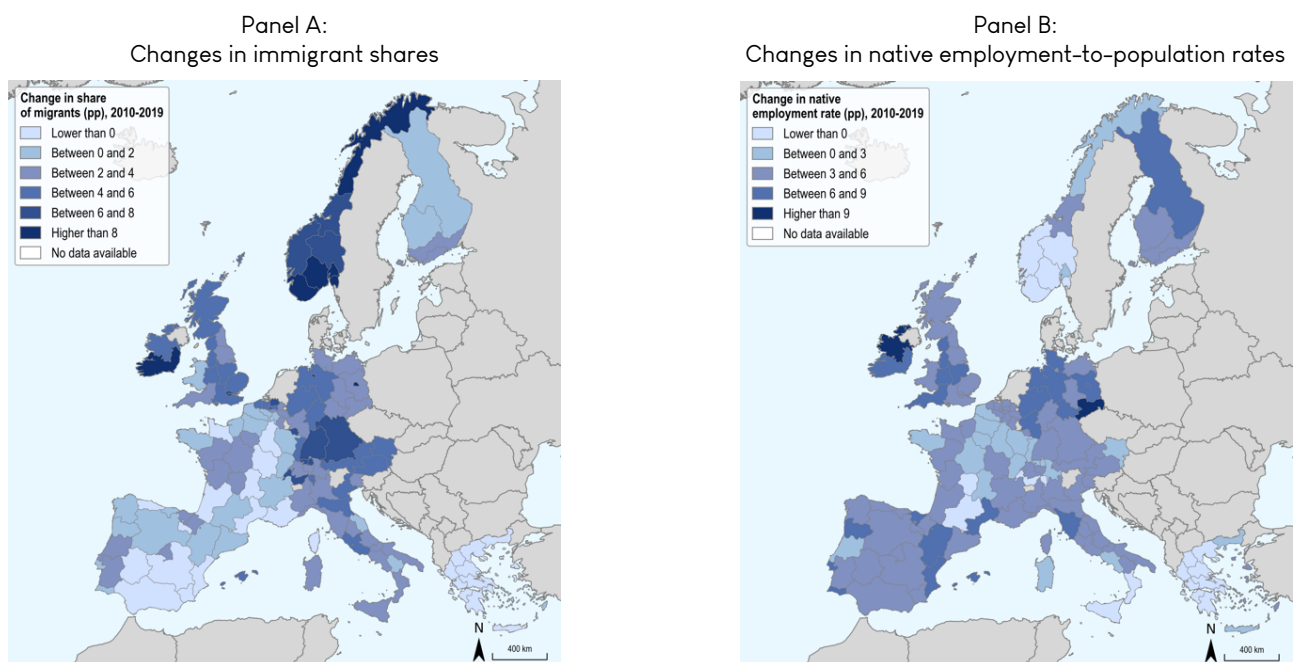


# Do immigrants take the jobs of natives? Migration and employment dynamics across European regions

Migrants are becoming a larger part of host country populations in Western European countries. The share of the foreign-born labour force in these countries increased by 3.4 percentage points over the last decade, from 12.8% in 2010 to 16.2% in 2019 which is twice as large as that in the United States, where the share of foreign-born people in the labour force rose by 1.6 percentage points only (from 15.8% in 2010 to 17.4% in 2019). Importantly, this increase was uneven across European regions (*Figure 1*).

Figure 1.

The changes in the employment rates and immigrant shares for Western European countries between 2010 and 2019



Source: Eurostat (2022<sub>[2]</sub>), European Labour Force Survey

Note: Sample of countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Norway, Portugal, Spain, Switzerland and the United Kingdom. The share of immigrants is defined as  $M/(M+N)$ , where  $M$  and  $N$  give the number of foreign-born and native labour force participants, respectively. Panels B and D respectively show the difference in native employment-to-population rates and immigrant shares for each region between 2019 and 2010.

In a recent paper (Özgüzel and Edo, 2023), we exploit these variations and present the first empirical evidence on the regional impact of immigration on native employment across Western European countries. Our analysis relies on the European Union Labour Force Survey (EU LFS) covering 13 European countries over the 2010–2019 period. The richness of the data allows for estimating the impact of immigration on the employment rate of natives at the regional level. Specifically, this perspective provides a wealth of information to identify the labour market effects of immigration and understand whether these effects are more pronounced in regions with more protective labour market institutions (e.g., higher employment protection, collective bargaining or higher union density)<sup>1</sup> or in regions experiencing stronger economic growth during the period of analysis.

In order to address the potential bias arising from the endogeneity of immigrant location choices, our analysis relies on the past distribution of immigrants (i.e., shift-share instrument) by country of origin across European regions as an instrument for current migrant penetration (Altonji and Card, 1991; Card, 2001). More precisely, we collect and harmonize census data for 13 countries to measure

the historical distribution of migrants in 1990, and use this past distribution to predict the actual distribution of immigrants during the period of analysis. Therefore, the instrumental variable (IV) strategy relies on the fact that the presence of earlier migrants partly determines future immigrant settlement patterns, while the historical distribution of immigrants in 1990 should be uncorrelated with contemporaneous changes in regional economic conditions. In fact, we perform a series of tests to address issues raised by Jaeger *et al.* (2018) and Goldsmith-Pinkham *et al.* (2020), which confirm the validity of our IV strategy.

We uncover four important findings. First, the employment opportunities of native workers declined in the first years in response to immigration and then returned to their pre-shock level after five years. In the short run, a 1 percentage point increase in the size of the labour force due to immigration leads to a 0.81 percent slower increase in the employment rate of the native-born population (Figure 2). Furthermore, our analysis shows that natives' employment response is always larger in the short run when exploiting 1-year (or annual) variations than when exploiting 2-year and 3-year variations. The analysis even

shows that immigration does not affect native employment in the longer run when exploiting 5-year or 10-year variations. Taken together, our results indicate that native employment opportunities declined in the early years in response to immigration and then returned to their pre-shock level after 5 years.

Second, the labour market effects of immigration differ at different education levels. To decompose the average impact of immigration by education groups, we run two separate regressions for the highly-educated natives (those with tertiary education)<sup>2</sup> and for those with less than tertiary education. We find that the effects on the employment rate of highly-educated natives are zero in the short run and even positive in the longer run, while the effects are negative among low-educated natives in the short run and tend to zero in the longer run (see Figure 2).

Third, the employment impact of immigration is smaller in regions where labour market institutions are stricter. We examine the role of labour market institutions using three measures obtained from the OECD database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (OECD/AIAS, 2021) with the share of migrants in the region.

<sup>1</sup>We did not consider the presence or level of minimum wages due to the little variation observed among European Countries on this dimension. See however Edo and Rapoport (2019) for an investigation of this question in the US context.

<sup>2</sup>Unfortunately, further disaggregation, e.g., for high-school dropouts, is not possible as the data are available for two groups only.

Specifically, we interact regional share of immigrants with three dummies that indicate whether the region is located in a country with a high level of employment protection or union density (i.e., in the top 50% in 2010), or whether

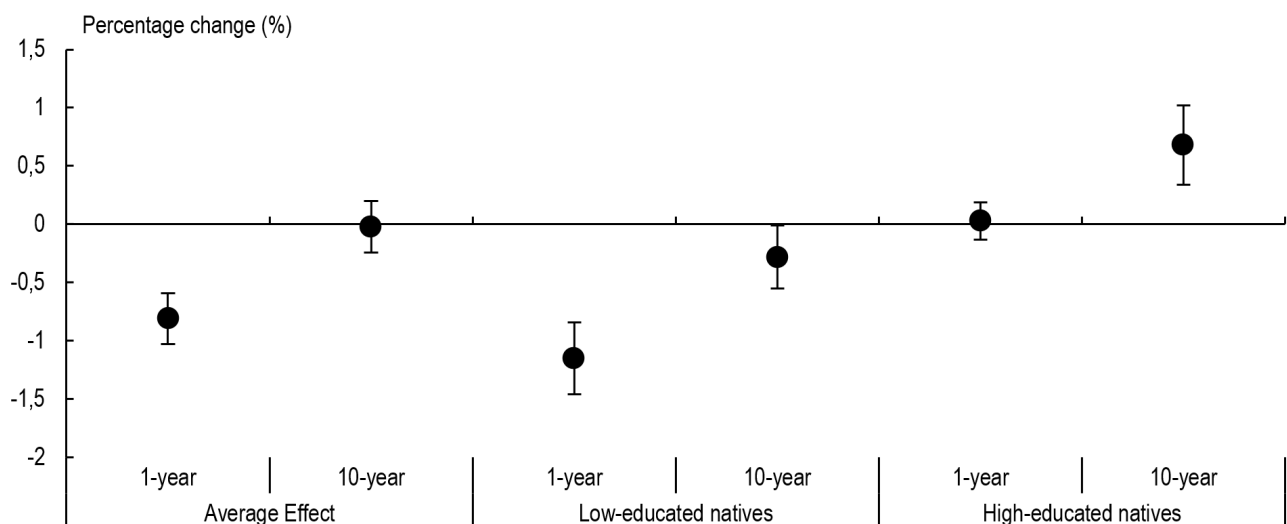
wage bargaining takes place predominantly at the sectoral/ country level (as opposed to the firm level). We find that higher levels of employment protection and collective bargaining coverage dampen the employment effect of

immigration by shielding native workers both in the short and longer run. In contrast, a higher degree of union density does not matter in determining the employment impact of immigration.

Figure 2.

The regional labour market effects of migration are uneven across workers with different levels of education

Estimated effect of a 1% increase in the labour supply due to migration on the native-born employment rate by level of education, European countries, 2010–19, NUTS2 regions



Finally, regions experiencing strong GDP growth can better absorb an increase in labour supply due to immigration. We categorize European regions into two groups based on their economic dynamism, using a "High GDP growth" dummy to distinguish regions with strong and weak economic performance. This categorization is determined by ranking regions based on their GDP changes between 2010 and 2019 obtained from OECD Regional database (OECD, 2022), with the top 25% being labelled as "High GDP growth" regions and the remaining 75% as regions with relatively weak economic

dynamism. The fastest-growing regions experience modest employment effects in response to immigration in the short run, whereas they experience employment gains in the longer run. This result suggests that economic dynamism plays a crucial role in shaping the labour market impact of immigration.

These results show that the impact of immigration on the employment of native workers in Western European countries is complex and varied. While the short-term effects on the employment rate of natives are negative, the paper finds that these effects dissipate

in the longer run. Moreover, the effects are uneven across different education levels, regions, and labour market institutions.

Overall, our study underscores the need for a nuanced and targeted approach to immigration policies that considers the varying impacts of migration on different groups of workers and regions. By doing so, policymakers can ensure that the entire population benefits from the positive economic gains associated with migration while minimizing any adverse effects on specific groups of workers or regions.

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