

## IMMIGRATION, INCOME AND PRODUCTIVITY OF HOST COUNTRIES: A CHANNEL ACCOUNTING APPROACH

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## NON-TECHNICAL SUMMARY

During the last decade immigration has increased in most of the OECD countries. Yet, some countries have been receiving significant inflows of immigrants starting already from the 1960s. Immigration has become an important component of the OECD labor force, shaping its structure and dynamics over a relatively long period of time.

Despite the fact that immigration is at the forefront of the economic and political arena, the real impact of immigration on the host economy is still hotly debated. There is a strong literature tradition to focus on the immigrants' impact on employment and wages of natives; however, it seems important to understand the economy-wide impact of immigration, as well as various channels, in addition to and beyond employment, through which the effect of immigration can be propagated. European countries have different patterns and histories of immigration; it thus also seems important to understand whether immigration has been one of the sources of cross country income and productivity differences.

In order to investigate these issues, we construct a new and unique dataset on migrant characteristics by age and education level in 20 OECD countries, decomposing total shares of migrants over natives by three age and two skill groups, by five-year intervals, in the period from 1960 to 2005, using individual country-year censuses and labor force surveys. Our data set on migrants by age and schooling show that immigrants have demographics and educational characteristics complementary to those of natives, even in countries that are traditionally non selective. Moreover, the share of immigrants within groups defined by age and education has significant variation over time and across countries.

Using these data, we study the impact of heterogeneous migration on income and labor productivity, as well as its main components: total factor productivity, physical capital, human capital, and employment, thus analyzing though which channels the migration impact is diffused.

The main findings of this paper are that, on average, immigrants have a positive impact on income and labor productivity in host countries, which works primarily through the TFP, and mostly in the long run. We show that this aggregate result can be explained by complementarities in age and education dimensions of immigrant relative to native population.

Decomposition of immigration rate by age reveals negative short-term effect of immigration on income and TFP, and a positive impact on overall employment; however, in contrast, these effects are outweigh by large positive long-term effects on income, labor productivity, and TFP, and an equal negative long-term effect on employment. Controlling for both age and education reveals other finer, local, complementarities between immigrants and natives. Wherever negative effects are found on some channels of productivity, they are compensated by positive effects on others. For example, we observe negative impact on capital accumulation of larger groups of skilled immigrants in the short run, while a positive adjusting impact on capital accumulation of larger groups of skilled immigrants in the medium run, as well as the positive impact of unskilled immigrants in the long run. Similarly, there are employment effects that point in different direction in the short and in the long run. These results suggests that studies which focus uniquely at one type of effect, such as impact on employment, overlook other channels through which economy adjusts to immigration, and also that studies that look at one-point-in-time effect of immigration underestimate potential adjustment effects.

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