

# There is a positive and significant association between increases in the employment of migrant workers and labour productivity growth

 [blogs.lse.ac.uk/politicsandpolicy/labour-productivity-and-immigration-in-the-uk-whats-the-link/](https://blogs.lse.ac.uk/politicsandpolicy/labour-productivity-and-immigration-in-the-uk-whats-the-link/)

11/27/2013

*New research from **Cinzia Rienzo** and colleagues at the NIESR finds that the increasing presence of immigrants in the labour force is associated with an increase in labour productivity. Specifically, a 1 percentage point change in immigrants as share of initial employment is associated with a change in labour productivity between 0.06 and 0.07 percent.*



The increasing number of [immigrant workers](#) in the UK is a controversial issue amongst policy makers, the media, academics and the general public. Rather than evidence based, the debate is largely unsupported by statistical evidence and research findings, and policy appears to be increasingly influenced by perceptions of public opinion on the effect of immigrants on the UK economy. Those claims and perceptions do not necessarily accord with empirical evidence provided by researchers and experts.

Moreover, while the debate has been widely focused on concerns that immigrants may harm the labour market opportunities of natives, the extent to which the UK economy benefits more widely from the increasing supply of foreign-born workers has received less attention. Few empirical studies have investigated the effect of immigration on labour productivity (and hence prosperity and GDP per capita) in the UK.

In a recent report, I and colleagues at NIESR look at some of these wider impacts on the UK economy, labour markets and workplaces. The reports combine both qualitative and quantitative research.

The quantitative research empirically investigates the relationship between immigration and labour productivity in most of the sectors in the UK from 1997 to 2007. In order to do so, I use a specially constructed dataset that combines firm level (Annual Responded Database) and individual level microdata (Labour Force Survey). The two datasets have been aggregated at region, sector, and year. I adopted a pooled OLS estimation model where the dependent variable is the log of the change of labour productivity, derived as the real Gross Value Added (GVA) over employment size. The main explanatory variable is the change in immigrants as share of initial employment. Controls include a vector of both firm level variables (e.g. expenditure for computer services, percentage of firms with foreign ownership), and workers characteristics. For the latter, the main specifications control for both the quantity (hours worked) and the quality (level of education) of labour supply separately for immigrants and native.

The statistical results confirm some findings from earlier research;

- a) the presence of immigrants has been increasing in most sectors;
- b) immigrants are on average more educated than natives;
- c) immigrants tend to work longer hours than natives.

## **Positive and significant association between immigrants and labour productivity**

In addition, the econometric analysis reveals important new finding, documenting a positive and significant association between increases in the employment of migrant workers and labour productivity growth. Specifically, a 1 percentage point change in immigrants as share of initial employment is associated with a change in labour productivity between 0.06 and 0.07 percent. The estimated coefficients are small but significant and robust to the

inclusion of different controls. Caution in the interpretation of the results is needed, since the econometric approach does not allow to establishing the nature of any causal relationship. As with many studies of productivity, establishing the direction of the causality is problematic. Additionally, establishing causality between immigration and labour productivity is complicated by simultaneity and omitted variable biases.

While the estimates are in line with the idea that the increasing numbers of migrants in the labour force stimulate productivity growth, through different channels, and are also consistent with previous studies (see, for example, work by [Peri](#)), it remains hard to rule out the possibility that results are driven by shocks in productivity.

Despite these limitations, the results still show a positive, significant and robust relationship between immigration and productivity, the main effect, though small, is robust to inclusion of the changes in the skill mix of the workforce implying that between 1997 and 2007 labour productivity in the UK has certainly benefited from the presence of immigrants.

*Note: This article gives the views of the author, and not the position of the British Politics and Policy blog, nor of the London School of Economics. Please read our [comments policy](#) before posting.*

### **About the Author**

**Cinzia Rienzo** is a Research Fellow at NIESR where she carries out applied econometric research in the labour market, migration, education, and development. Previously she worked at the University of Sussex, at the CEP and MES at the London School of Economics. Cinzia is also Research Associate at COMPAS (Centre on Migration, Policy & Society) and is a contributor of the Migration Observatory at the University of Oxford. Cinzia received her PhD in Economics from Royal Holloway, University of London.

