

## **ETHNIC DIVERSITY BOOSTS INNOVATION: Evidence from across Europe**

European countries where the skilled labour force is more ethnically diverse perform better in terms of both high quality patent applications and citation-weighted scientific publications. What's more, countries that are relatively more efficient in allocating highly educated foreigners to highly skilled occupations truly gain in innovative capacity.

These are among the findings of research by **Cristina Cattaneo** and colleagues, to be presented to the NORFACE migration conference at University College London this week. They note that while patents indicate the number of technological blueprints available in any given market, publications are more strictly related to basic research and therefore to 'public' knowledge. This implies that ethnic diversity boosts both the private and public faces of the knowledge within a country.

The analysis reveals that diversity is associated with more high quality patent applications and more highly cited publications in countries that display low over-qualification rates among migrants. Countries that design pro-skilled migration laws also display a positive relation between diversity and the number of citations.

What are the underlying factors that could explain the positive effect of ethnic diversity on innovation? Cristina Cattaneo says:

'There are two main explanations for our results. First, problems and technical bottlenecks are characterised by an increasing level of complexity. Diversity in the research team is therefore beneficial as the ability to tackle such problems and overcome them exceeds the capacity of a single brain.

'Second, by increasing diversity, foreigners positively affect natives' productivity, as new ideas are likely to arise through the interaction of diverse cultures and diverse approaches in problem-solving.

'In this study, we reinforce the hypothesis that complementarities rather than substitutability exist between natives and foreigners, with the complementarity arising through the different cultures and different attitudes that foreigners display with respect to natives and with respect to one another.'

Does the interaction of different ethnicities hamper or facilitate the creation of new ideas? Extending the standard framework of the determinants of knowledge creation beyond the number of researchers and the available knowledge stock, the research sheds light on the importance of the composition of the research team and in particular its ethnic composition.

The results emerging from this analysis suggest that the ethnic composition of the skilled workforce is an important input of the innovation process in general. But each single host country can influence the effectiveness of this relationship.

The positive contribution of skilled migrants to domestic innovation can be enhanced, for example, by reducing the mismatch between foreigners' education attainment and occupation or by investing in the design of pro-skilled migration laws.

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