

People more likely to migrate from small cities than large ones

September 21 2018



Credit: Lara Jameson from Pexels

Migration continues to be a frequently debated subject, with 68 percent of the world population projected to live in urban areas by 2050, according to a U.N. report. Although well-managed migration could be

beneficial for economies and societies, it could also create challenges for policymakers in areas such as housing, education, health services, infrastructure and social cohesion. Therefore, it's crucial to predict the flow of migrants. A study, partially supported by the EU-funded SoBigData and CIMPLEX projects, has shown that people from smaller cities are more likely to migrate than those from larger ones.

The findings were published recently in *PLOS ONE* journal. The researchers said: "We observe that individuals from small cities tend to migrate more frequently, tending to move to similar-sized cities, whereas individuals from large cities do not migrate so often, but when they do, they tend to move to other large cities."

Internal migration and city size

Summarising the research, a press release by University College London (UCL) states that "the size of origin and destination cities play a crucial role in the behaviour of people who move from one place to another." Quoted in the same press release, UCL Ph.D. student and lead researcher Rafael Prieto Curiel said: "The results could have an impact on future integration policies as governments can more accurately predict where citizens are likely to move from and to within their country." He emphasised that migrants contribute to the prosperity of their destination with skills and activities, "but [migration](#) requires integration policies and social support systems to allow newcomers to settle into a new environment and therefore fully contribute locally."

In the press release, co-author Prof. Steven Richard Bishop from the Department of Mathematics at UCL explained: "The new scaling model has not previously been used to identify migration patterns. It applies a mathematical formula to migratory patterns relative to city size." Prof. Bishop also noted that the model could be used to "more accurately predict population movement as it corrects biases which occur in other

methods. This is an important, data-led development in revealing how communities and regions will grow and develop in the future."

The study focused on [internal migration](#) patterns across the United States. It considered a [city](#) as having a population of over 50,000. Anything less than this figure was referred to as a rural area.

The ongoing SoBigData (SoBigData Research Infrastructure) aims to create a research infrastructure "for ethic-sensitive scientific discoveries and advanced applications of social data mining to the various dimensions of social life, as recorded by "big data", " according to the project website. It provides facilities for large-scale social data analysis and simulation experiments.

SoBigData's vision of examining various aspects of societal complexity from a data- and model-driven perspective is also shared by CIMPLEX (Bringing Citizens, Models and Data together in Participatory, Interactive Social EXploratories). One of the objectives of CIMPLEX, which ended in 2017, was to produce fundamental theoretical, methodological and technological advances. It also aimed at combining these on a broadly usable ICT platform, the project website states.

More information: Rafael Prieto Curiel et al. Gravity and scaling laws of city to city migration, *PLOS ONE* (2018). [DOI: 10.1371/journal.pone.0199892](https://doi.org/10.1371/journal.pone.0199892)

Provided by CORDIS

Citation: People more likely to migrate from small cities than large ones (2018, September 21) retrieved 10 April 2024 from <https://phys.org/news/2018-09-people-migrate-small-cities-large.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.