

# Urban exodus: housing market structure and interregional migration revisited

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## Abstract

This paper revisits the impact of home-ownership and social renting rates on intercity residential migration in the Netherlands. The application of a Bayesian multilevel gravity model allows me to control simultaneously for (i) both city-specific effects of origin and destination, (ii) dyad-pair specific effects, and (iii) the impact of the housing market structure in both the city of origin and the city of destination. I find positive and high elasticities of social renting (0.8) and homeownership (1.8) rates on out-migration, while homeownership rates have a smaller and negative impact (−0.5) on in-migration. Moreover, city specific in- and out-migration flows are highly correlated (0.88) just as dyad-specific flows (0.8). Finally, I show that my probabilistic model is able to accurately predict both within and out-of-sample.

## Keywords

Gravity model — housing market — interregional migration — multilevel model — cities

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## 1. Introduction

In the recent decade cities have been proclaimed to be the overall “winners” within the regional economic landscape (Glaeser, 2012). Indeed, there is a large empirical literature that finds that especially large cities exhibit relatively more employment, more innovation and produce overall more added value (see, e.g., Balland et al., 2020). Most of this success of (large) cities can be attributed to positive regional and urban agglomeration economies (see for a recent overview of the size, scope and nature of these urban economies Duranton and Puga, 2020; Rosenthal and Strange, 2020)

Arguably, however, urban success does not accrue to everyone and recent research has shown as well the negative aspects of this success.

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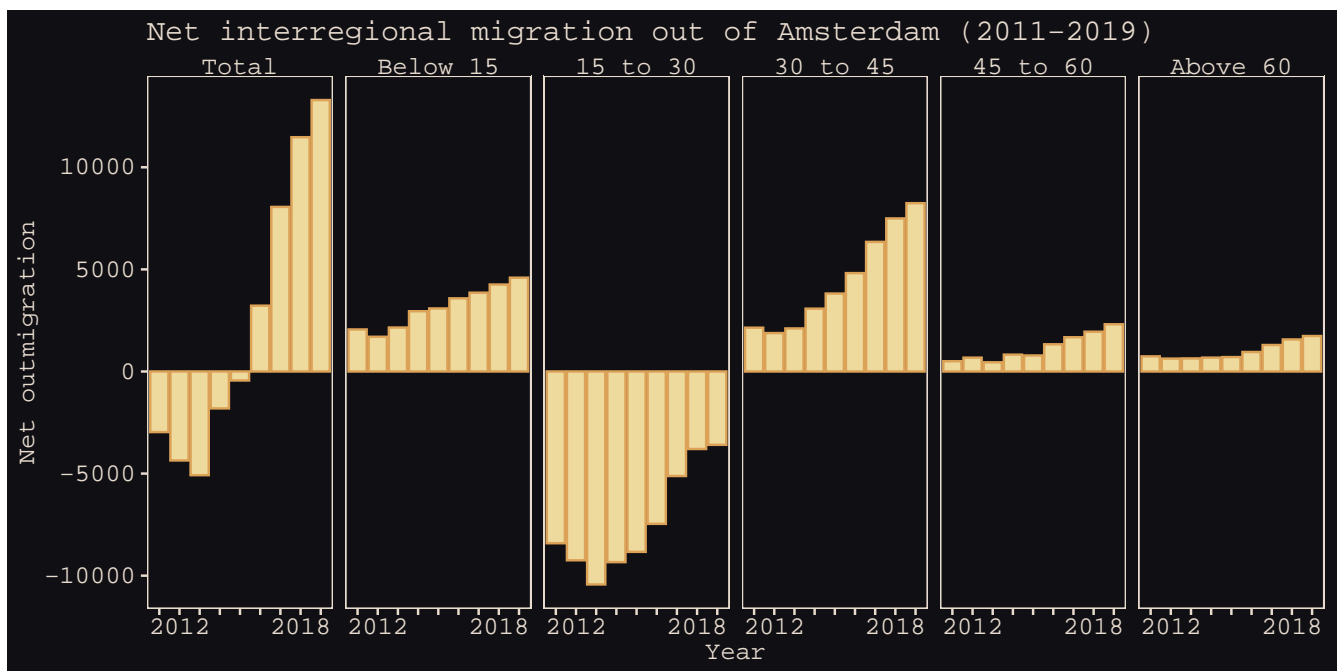
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[https://github.com/Thdegraaff/migration\\_gravity](https://github.com/Thdegraaff/migration_gravity).

## References

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**Figure 1.** Interregional migration out of Amsterdam in the period 2011-2019 for various age cohorts (including total out-migration in the most left-panel)