

# MUNICIPAL HOUSING MARKET STRUCTURE AS BARRIER TO WITHIN-COUNTRY MIGRATION

A MULTILEVEL ANALYSIS FOR THE NETHERLANDS

---

Thomas de Graaff

February 19, 2019

Vrije Universiteit Amsterdam  
Department of Spatial Economics

# The problem

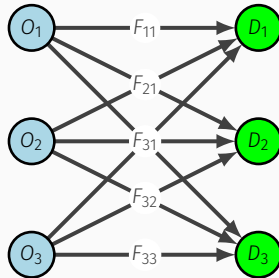
---

# Contemporary applied spatial economic research

- 50–70% of all research questions in spatial economics evolve around policy **evaluation** or **explaining** impact of **isolated** variables
- Huge demand (firms & government) for research dealing with **prediction** and **assessing** total model performance
- But, more than 90% of all statistical analysis is done with basic applied econometrics using **linear** models and **fixed** effects

# Prediction in gravity models

Origin specific variables



**Figure 1:** Variables that can affect flows  $F_{ij}$  between origins  $O_i$  and destinations  $D_j$

# Multilevel modeling

---

# What is it?

Used in many disciplines, except economics

Simultaneous modeling at various levels (e.g., cities, regions, flows, individuals)

Many definitions:

- mixed effects models
- varying intercepts/parameter models
- shrinkage models

Data

---

## Results

---



Thank you!