



The long-term effects of national residential planning policy: the case of VINEX

Trond Grytli Husby (PBL), Christian Lennartz (PBL), Wolter Hassink (UU)

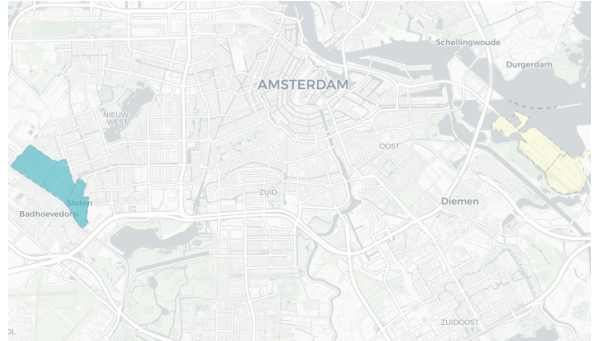
ODISSEI Community Conference

`trond.husby@pbl.nl`

24 November, 2020

Background ¹

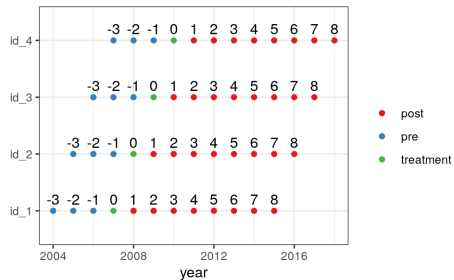
- VINEX (1995 - 2005): supplement to the Fourth National Policy Document on Spatial Planning
- Goals: create living environment with high level of urban amenities, reduce mobility and protect nearby rural areas → compact city
- Vinex locations: large-scale residential development projects (mostly) on the urban fringe



¹ Van der Wouden (2015). "De ruimtelijke metamorfose van Nederland 1988–2015."

Research question and design

- What were the long-term effects of Vinex? Were the goals of less commuting and high quality housing achieved?
- Focus on buyers of newly built dwellings
- Variables of primary interest: commuting distance and estimated home value
- Difference in difference design
 - ▶ Treatment: moved to a Vinex neighbourhood
 - ▶ Control: moved to a non-Vinex neighbourhood





Data and OSSC

- We use a range of municipal registry data (address, person, household)...
- ...coupled with building registry data..
- ...and data on monthly employment status and location of work municipality
- OSSC: create basic data set of all address changes of every person in the Netherlands between 1995 - 2018, find household number and members around date of move
- Pilot project: tried out new software (Apache Spark), monitored performance, compared timings between OSSC and RA



Why OSSC?

Action shot of an R-user during a session with the normal RA



<https://www.unibetcommunity.com/t5/image/serverpage/image-id/21516i0C3F0F5C000AA38F/image-size/large?v=1.0&px=999>

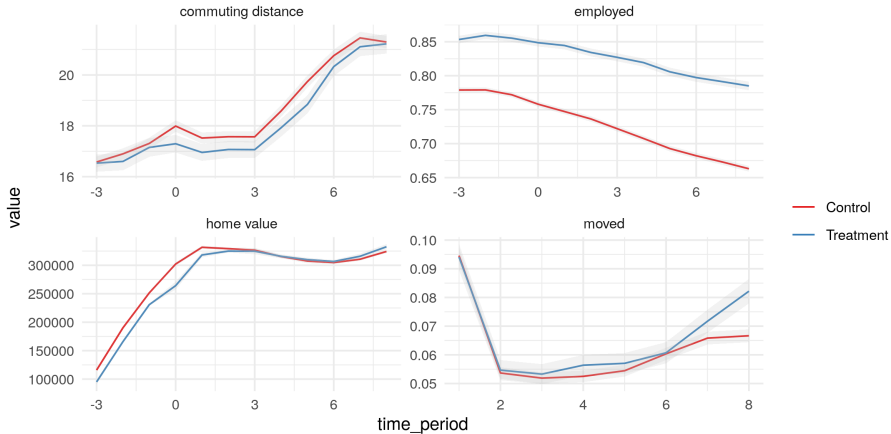


Summary statistics, time period 0

	Control		Treatment	
	mean	sd	mean	sd
single family home	0.62	0.49	0.79	0.4
m2	168.27	626.19	154.96	287.41
age	42.38	12.8	38.46	10.88
household size	2.42	1.33	2.55	1.74
spouse	0.61	0.49	0.6	0.49
dutch	0.92	0.27	0.89	0.31
children	0.27	0.45	0.36	0.48
density	1623.52	1455.85	1307.46	440.36
distance to agglomeration (centre)	16.36	13.15	9.53	6.3
move distance	11.19	25.32	12.1	22.47
N	59473		24423	



Mean of dependent variables





Conclusions and further work

- Work in progress: refine identification strategy, matching on individual, dwelling and regional level
- OSSC: used interactively for computations that could have been done on RA (but would have been much slower)
- Many quirks from the Pilot environment have been removed
- Less developed than AWS or Azure, compensated with good user support
- Still a fairly steep learning curve. My two cents: either improve communication between OSSC and RA, or invest in user-friendly interface of OSSC