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SUM MAR IES!

CITY-WIDE EFFECTS OF NEW HOUSING SUPPLY: EVIDENCE FROM MOVING CHAINS

Cristina Bratu, Oskari Harjunen & Tuukka Saarimaa

URBARIA
HELSINKI INSTITUTE OF URBAN AND REGIONAL STUDIES

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City-wide effects of new housing supply: evidence from moving chains

Cristina Bratu
Postdoctoral researcher
Aalto Univeristy

Oskari Harjunen
Senior researcher
VATT Institute of Economic Research

Tuukka Saarimaa
Assistant professor
Aalto Univeristy

Summary

- New market-rate housing built in central locations can trigger moving chains that reach middle- and low-income areas and individuals.
- We find evidence that this happens in the Helsinki Metropolitan Area.
- More research is needed to study the effects of new construction on the immediately surrounding neighborhoods.

Moving chain mechanism

Housing affordability issues are a reality in many cities across the world. One solution that is often put forward is increasing the supply of market-rate housing by building more. **New market-rate construction is generally expensive and most likely out of reach for middle- and low-income households. However, it does have the potential to reach these households via a moving chain mechanism:** new buildings attract high-income individuals, who leave their previously occupied units vacant, effectively increasing supply by one in the areas they leave. Slightly less high-income individuals move into these units, thus leaving behind their units vacant, reducing demand in their own neighborhoods. The process repeats itself and lower-income households eventually become part of the moving chain.

However, the extent to which this process is successful at reaching lower-income areas depends on several factors.

First, the chain may break, that is, no new vacancy is created by those occupying a unit in the moving chain. This can happen if, for example, a vacancy is filled by a newly formed household; a vacant unit is used as a second home or is filled by someone from outside the region.

Second, the neighborhoods where the new construction is located may be so different from other areas that little movement occurs between neighborhoods. The effectiveness of the moving chain therefore relies on there being strong connections across neighborhoods.

Those that oppose building more market-rate housing reject the idea that it may have an effect on lower-income areas or believe it would take too long for effects to materialize, and advocate for building affordable housing instead, in order to reach lower-income individuals more directly (Been et al. 2019). There is very little empirical evidence that informs this debate, and even then, it comes from a small number of contexts (see Mast 2021 for evidence from US cities). Our paper aims to fill this gap and contribute to the conversation.

Using administrative data to reconstruct the moving chain

We investigate the moving chain mechanism in the Helsinki context. We study what happens when new, market-rate construction is built close to the city center (within a 3 km radius). We use rich administrative data from Statistics Finland on individuals' locations at the unit-level over time. This allows us to reconstruct the moving chain. We consider new buildings built between 2010 and 2019.

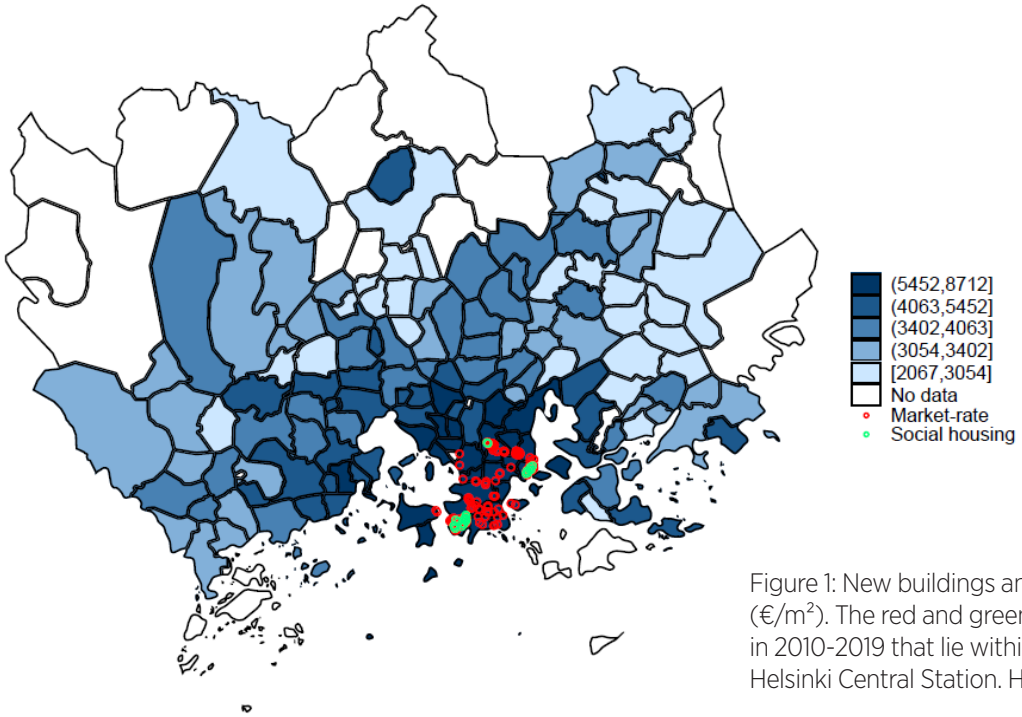

Figure 1: New buildings and zipcode mean housing prices (€/m^2). The red and green dots denote new buildings built in 2010-2019 that lie within a three-kilometer radius from the Helsinki Central Station. Housing prices are from 2019.

New market-rate construction loosens middle- and low-income housing markets in the HMA

As we can see from the map in Figure 1, many of these buildings are located in the new residential areas of Jätkäsaari and Kalasatama, which is not surprising given the time period we look at. We nonetheless see many buildings in the Vallila and Pasila areas as well.

One argument against building new market-rate housing, especially in centrally located areas, is that they cater to the rich. We therefore start by studying **how different the movers to these new buildings are.** We compare them to two different groups: i) the group of what we call stayers, that is, people that never leave a market-rate unit throughout our time period, and ii) the group of movers to other market-rate units than the new, centrally located ones. Table 1 shows that movers to the new buildings have higher-incomes and are more highly educated than both of these groups. **Individuals that have access to new market-rate units are indeed predominantly higher-income.**

	Stayers	All movers	Movers to new building
Median household disposable income	27,617 [60,730]	24,216 [55,910]	33,841 [50,782]
In MA or above household	0.329	0.279	0.460
Number of observations	3,730,715	1,134,761	5,170

Table 1: Summary statistics for movers and stayers. Stayers are defined as those that did not move over the 2009-2019 time period from their market-rate units. All movers exclude movers to new, centrally located market-rate units.

We next want to understand **who takes up the units that these individuals leave behind**. We classify them in two ways: i) by characterizing the neighborhoods they leave and ii) by characterizing the households they belong to. The former is useful in telling us the kinds of neighborhoods the movers originate from. But neighborhoods are of course heterogeneous, and there can be pockets of richer and poorer areas within the same neighborhood. The latter addresses that and tells us which part of the neighborhood distribution households that move come from.

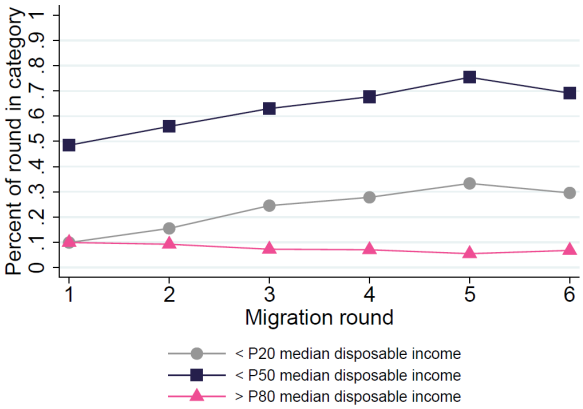

Figure 2: Share of movers originating from bottom quintile (grey line), bottom half (purple line) and top quintile (pink line) of the grid-level median disposable income distribution.

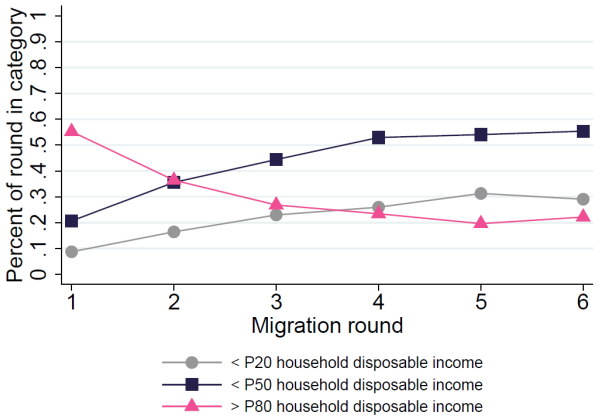

Figure 3: Share of movers originating from bottom quintile (grey line), bottom half (purple line) and top quintile (pink line) of the household-level median disposable income distribution.

Figure 2 shows how the moving chain unfolds when we categorize origin neighborhoods in terms of median disposable income. The neighborhood concept we employ is a 250 square meter grid. As expected, the share of residents originating from the bottom quintile grids is only 10% in the first round. However, **this share increases gradually in subsequent rounds, reaching 30% by rounds five and six.**

A similar, albeit steeper increasing pattern can be observed when movers are classified into deciles based on household income at the national level (Figure 3). Only 10% of new market-rate building residents are from the bottom quintile of the national household income distribution, but this share reaches roughly 30% by round five. Taken as a whole, **new and expensive market-rate buildings trigger moving chains that reach middle- and low-income housing markets and households even in the short run.**

Concluding remarks

Our findings provide evidence in support of the claim that new market-rate construction can loosen middle- and low-income housing markets in the Helsinki Metropolitan Area. However, our results do not shed light on the potential effect of new construction on the immediately surrounding neighborhoods. In the presence of local positive spillover effects, any supply effect from new construction may or may not be dampened by a demand effect. If neighborhoods become more desirable as a result of the new construction, incumbent residents may be displaced and neighborhoods may change in character (see also the Urbaria summary on the effects of new construction). In that case, the role of transfers via, for example, the housing allowance, becomes important.

Acknowledgments

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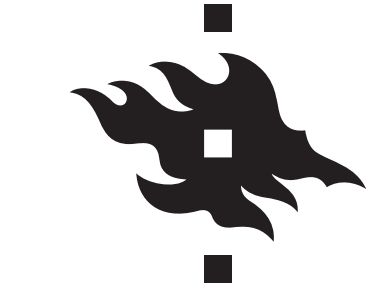

UNIVERSITY OF HELSINKI

TOIMITUS / EDIT

Iiris Koivulehto
Kaupunkitutkimusinstituutti Urbaria

OTA YHTEYTTÄ / CONTACT

urbaria@helsinki.fi
0294150056 / 0504719810

PL 4 (Yliopistonkatu 3)
00014 Helsingin Yliopisto

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@urbariahelsinki
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