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REVITALIZING POOR NEIGHBORHOODS

GENTRIFICATION AND INDIVIDUAL MOBILITY EFFECTS OF NEW LARGE-SCALE HOUSING CONSTRUCTION

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Introduction

- Countries use various housing policies (new construction, demolitions, and redevelopments etc.) to revitalize poor neighborhoods
- Enhancing conditions in the poorest neighborhoods aims to mitigate the adverse consequences of growing up and living in poverty, thereby addressing spatial inequality
- There are previous studies examining the effects of:
  - Housing demolitions (Almagro et al. 2023)
  - New large-scale housing construction (Diamond and McQuade 2019, Singh 2020, Pennington 2021, Li 2021, Asquith et al. 2023)
  - Renovations of multi-family housing (Dahlberg et al. 2023)
- However, there is no consensus on which housing policy is most effective for different purposes and under different conditions
- Do new large-scale housing constructions affect poor neighborhoods in terms of revitalization, gentrification, and migration patterns in a rent-regulated system?

Introduction

Contribution

- Causal effect of new housing on neighborhood revitalization
- Focus on the effect on neighborhood residential composition
- Individual-level panel data enables the estimation of effects on migration streams

Data

- We use register-based, annual data from the GeoSweden database, administered by the Institute for Housing and Urban Research (IBF) at Uppsala University.
- The database covers the entire Swedish population and all residential estates from 1990 to 2017.
- Focus on neighborhoods in urban areas (4,324 neighborhoods with populations between 700 and 2,700 in 2018)
- Large new multi-family estates are defined as estates with at least 100 residents five years after construction.

Data

Pioneering estates by area income quartile and tenure types

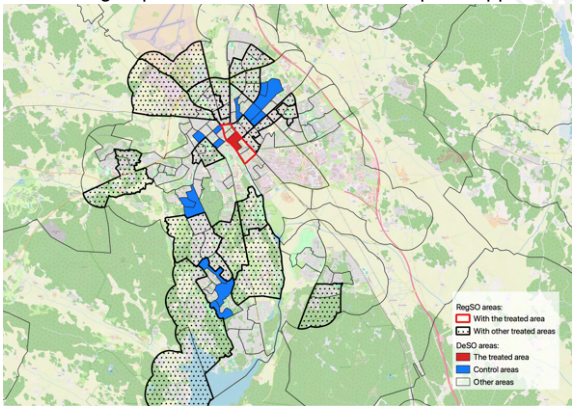
	(1) Q1 areas	(2) Q2 areas	(3) Q3 areas	(4) Q4 areas	(5) All
Co-ops	40	59	43	42	131
Rentals	36	48	24	23	184
All	76	107	67	65	315

Note: Neighborhoods treated 1996-2013. The area income quartile cutoffs are based on area percentile ranks. Owning an apartment usually means possessing an apartment (owning a share) in a housing cooperative (co-op). Rentals can be private or public.

Empirical strategy

- Difference-in-differences strategy
- Control group: neighborhoods with similar income levels within the same municipality

Control group for a Q1 area with new co-ops in Uppsala



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Empirical strategy

- The effect is estimated using a stacked regression design:
  - Static effect:

$$y_{itd} = \beta T_{itd} + \gamma_{id} + \mu_{td} + \alpha_d + \varepsilon_{itd}, \tag{1}$$

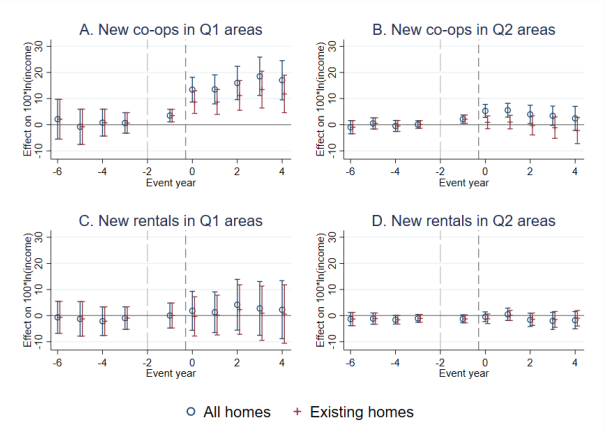
  - Event study:

$$y_{itd} = \sum_{n \neq -2} \beta^n T^n_{itd} + \gamma_{id} + \mu_{td} + \alpha_d + \varepsilon_{itd}, \tag{2}$$

i denotes neighborhood, t year and d dataset. n is event year. T is a treatment dummy. γ_{id} and μ_{td} are dataset-specific entity and time fixed effects, respectively. α_d is a dataset-specific constant.

Results

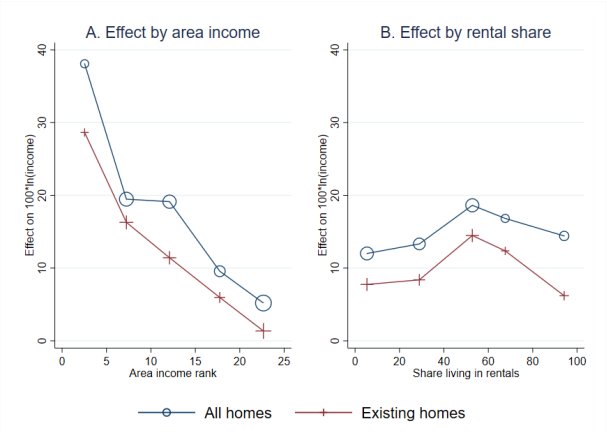
Event-study estimates of effects on area income



Note: We plot point estimates and 95% confidence intervals. Regressions are weighted by pre-treatment population. Standard errors clustered at the area (DeSO) level.

Results: effect heterogeneity

Effects by area income and rental share (new co-ops in Q1 areas)



Note: The size of the marker depends on total population of the areas in the bin.

Results: spillover effects

Effects by area income and rental share (new co-ops in Q1 areas)

Outcome: 100*ln(income)	(1) Treated area	(2) Adjacent area	(3) Wider area
All homes	15.13**	−3.298*	3.255
	(3.094)	(1.601)	(1.727)
Existing homes	10.19**		1.499
	(2.953)		(1.612)

Note: Regressions are weighted by pre-treatment population. Standard errors clustered at the area (DeSO) level are reported in parentheses.

* $p<0.05$, ** $p<0.01$.

Results: additional results

- No evidence of renovations to the existing housing stock
- The in-migration analysis indicates that most gentrification effects result from high-income individuals moving in from richer areas outside a wider neighborhood.
- The out-migration patterns remain unchanged, suggesting that the revitalization does not lead to displacement.

Conclusions

- New large residential developments of co-ops have strong gentrifying effects in the poorest neighborhoods.
- The gentrifying effect is not only driven by richer people moving into the new buildings, but also by an increase in average income in pre-existing homes.
- We do not find any signs of displacement.
- Therefore, building new large market-rate housing in the poorest neighborhoods is a suitable policy if the aim is to revitalize these areas.

References

ALMAGRO, M., E. CHYN, AND B. A. STUART (2023): "Urban Renewal and Inequality: Evidence from Chicago's Public Housing Demolitions," Working Paper 30838, National Bureau of Economic Research.

ASQUITH, B. J., E. MAST, AND D. REED (2023): "Local Effects of Large New Apartment Buildings in Low-Income Areas," *The Review of Economics and Statistics*, 105, 359–375.

DAHLBERG, M., P.-A. EDIN, AND M. STENBERG (2023): "On Gentrification: Renovations of Rental Housing and Socio-Economic Sorting," *Mimeo, Uppsala University, 2023*.

DIAMOND, R. AND T. MCQUADE (2019): "Who Wants Affordable Housing in Their Backyard? An Equilibrium Analysis of Low-Income Property Development," *Journal of Political Economy*, 127, 1063–1117.

LI, X. (2021): "Do new housing units in your backyard raise your rents?" *Journal of Economic Geography*, 22, 1309–1352.

PENNINGTON, K. (2021): "Does building new housing cause displacement?: The supply and demand effects of construction in San Francisco," *Working Paper, June 15, 2021*.

SINGH, D. (2020): "Do Property Tax Incentives for New Construction Spur Gentrification? Evidence from New York City," 2020 Papers psi856, Job Market Papers.