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New Apartment Construction: The Impact on Existing Apartments

Evan Mast
Economist

NMHC Research Forum
Webinar Series
May 12, 2020

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Mark Obrinsky

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Agenda

- **Welcome and Overview**
- **New Market-Rate Housing and Housing Affordability**
 - Evan Mast, Economist, Upjohn Institute
- Questions
- Closing Remarks

Speaker



Evan Mast

Economist

Upjohn Institute

New Market-Rate Housing and Housing Affordability

Evan Mast
Upjohn Institute

How does new housing construction affect the broader housing market?

- Standard view: it lowers prices
 - In the short run, people live in the new units instead of somewhere else—reduces demand for where “somewhere else” is
 - In the long run, the new units (usually) depreciate and become cheaper
- But this view is often challenged in current housing policy debate

Alternative theory 1: New construction does not affect regional housing prices

- Theories basically involve “the wrong people” moving in
 - It’s all investment properties (that aren’t rented out)
 - It just attracts people from other cities, so it doesn’t benefit the area
 - It doesn’t affect low-cost units because the market for luxury units is totally separate from the regular or affordable market
- If these ideas are true, there’s no benefit to building. Just the perceived costs of congestion, blocked views, ugly buildings

Alternative theory 2: New housing raises nearby prices

- New building could change the neighborhood in a way that makes more people want to live there
 - More rich people in area attracts high-end amenities
 - New amenities directly in the building
 - Signal that area is attractive/up-and-coming/safe
 - Start of a snowball effect
- If this effect is big enough, it could increase demand by more than it increases supply, driving up prices

Today: Discuss two recent related papers

- Regional effects of new construction
 - Focus on multifamily buildings in high-income city neighborhoods
 - Show that they loosen the market for cheaper housing units through a chain of migration
- Local effects of new construction
 - Focus on multifamily rental buildings in low-income city neighborhoods
 - Show that it seems like they reduce nearby rents

This debate is important, and we need more research

- Construction of new apartments is really contentious and really decentralized
- No federal policy or standard guidelines
- Need lots of research studying new housing in various contexts

Part 1:

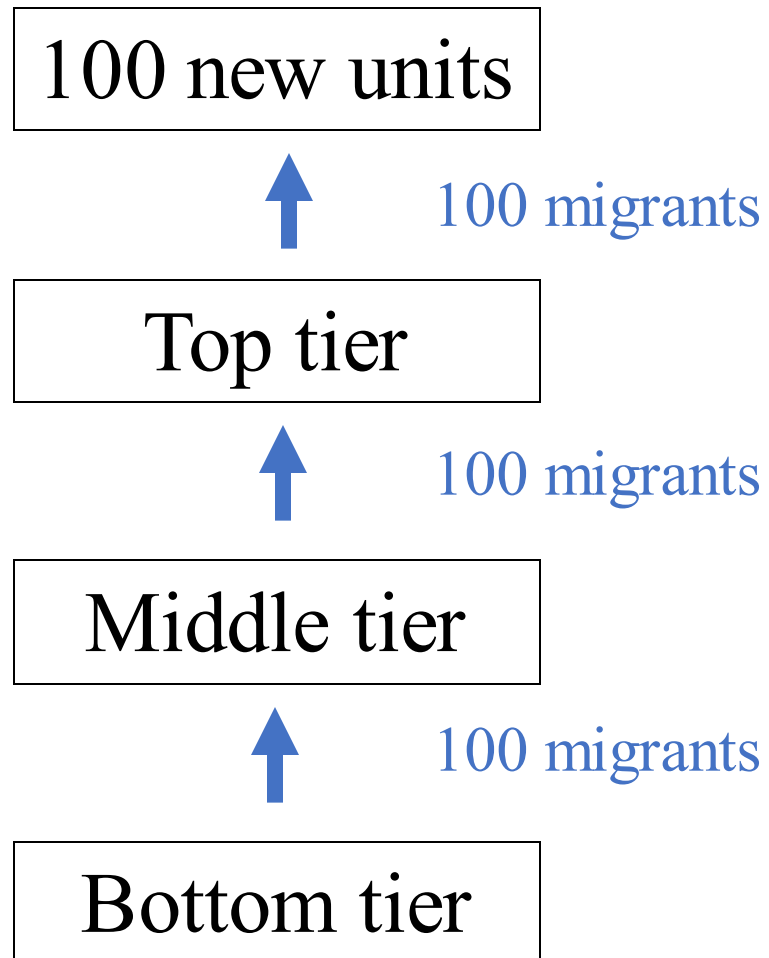
Regional Effects of New Housing

How does expensive new housing affect regional market?

1. **Depreciation (long run):** New units slowly become cheaper (“filtering”)
2. **Migration (shorter run):** Migration chain could lower prices in other areas
 - a. Households in new building leave some other units vacant
 - b. Another set of households move into the units the first round vacated...

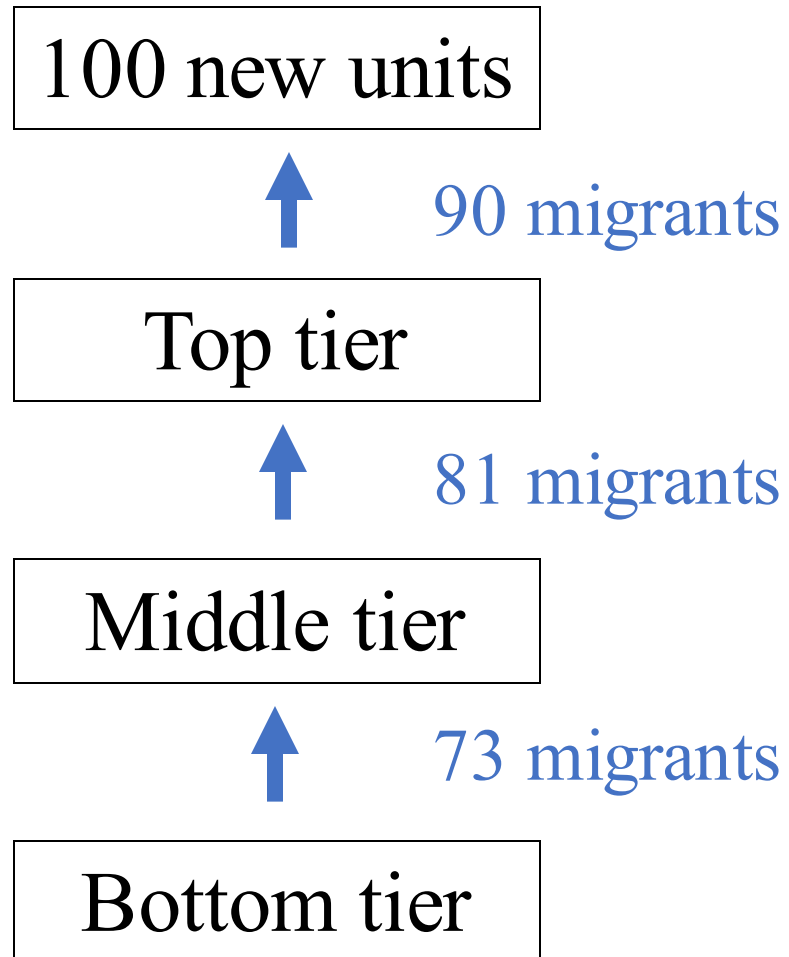
Focus on migration mechanism in this paper

Simplest example of migration chain



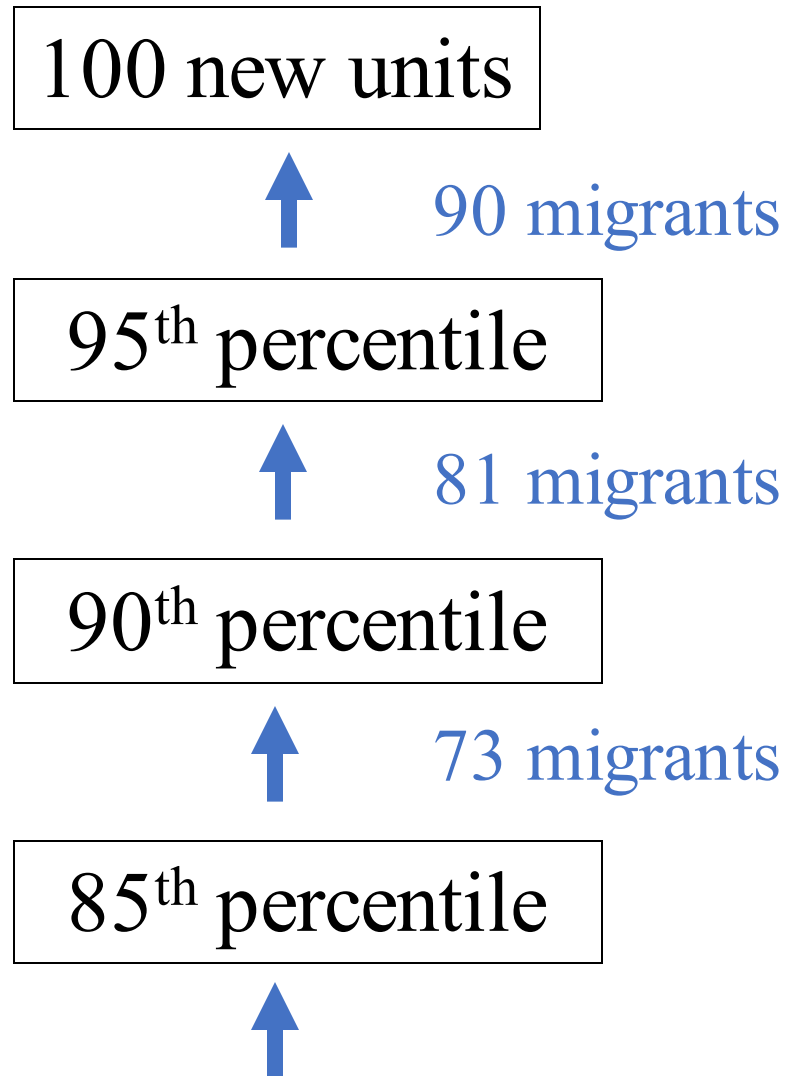
- Migration chain leads 100 people in each tier to move up
- Should lower rent in every tier by reducing demand
- Ignores real-world complications

Some chains should end in each round



- Chains could end because:
 - A new household forms
 - Unit is a second home
 - Migration from another city

There may be a lot of tiers of the housing market



- How big of a step does the chain take in each round?

Use address history data to directly study chain

Directly observe chain in data:

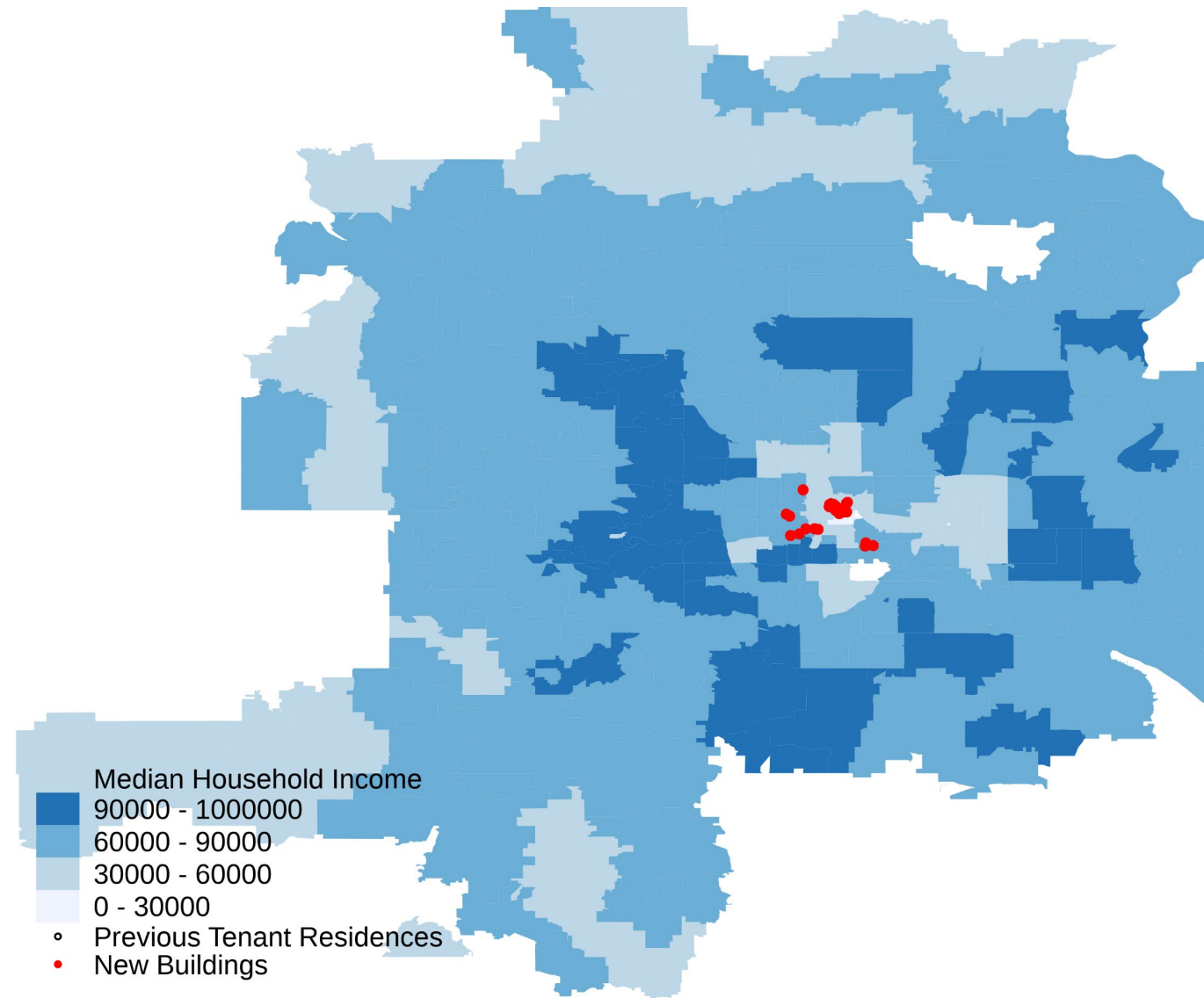
1. Identify people living in new buildings
2. Use data to find their previous address
3. Identify people living in those previous addresses
4. Use data to find their previous address...

Start by just considering Minneapolis

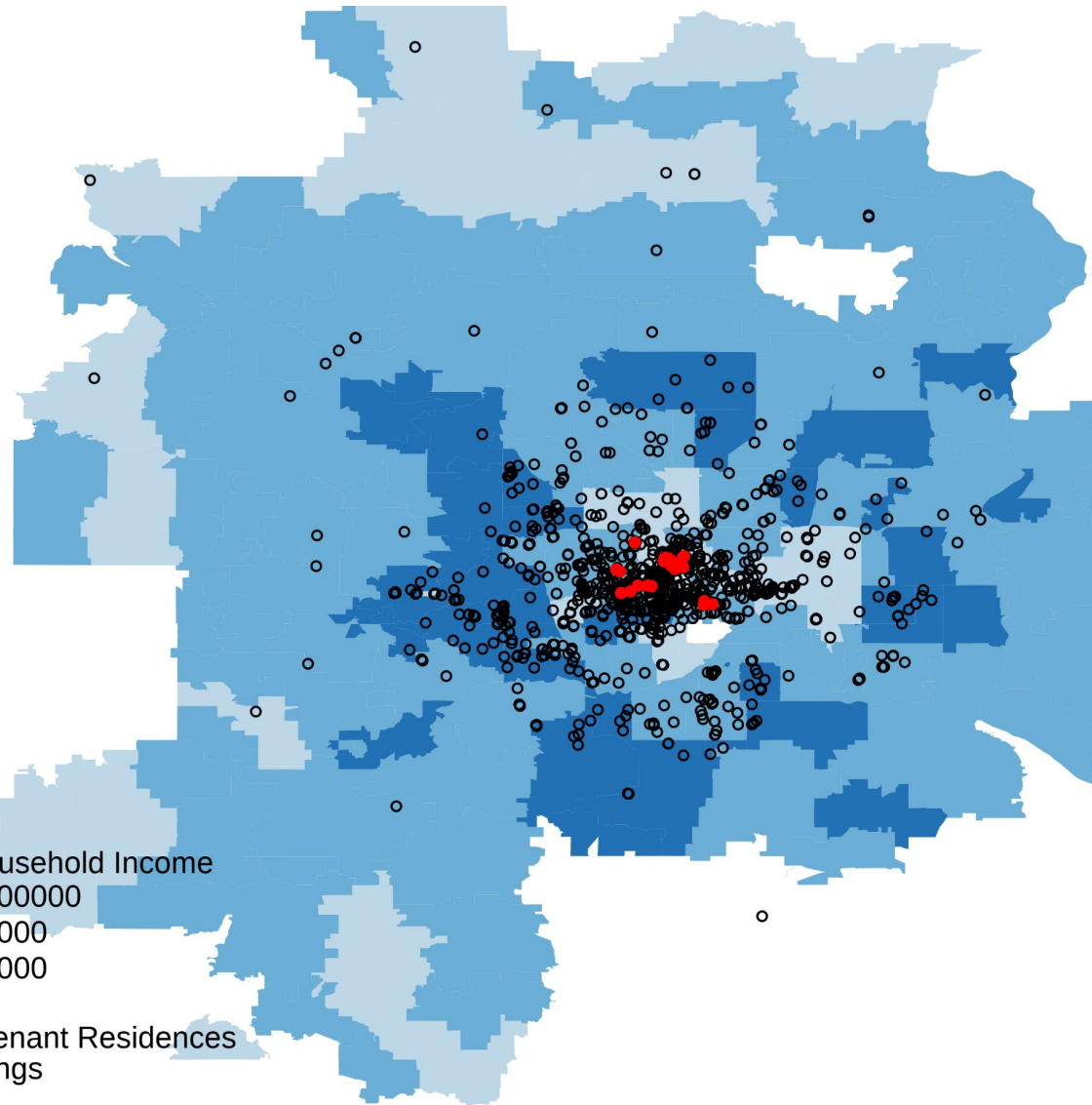
- Focus on large central-city buildings

Round 1: New multifamily buildings in Minneapolis

- Red dots are new buildings
- Polygons are zip codes colored by median household income



Round 2: Old home of new building residents

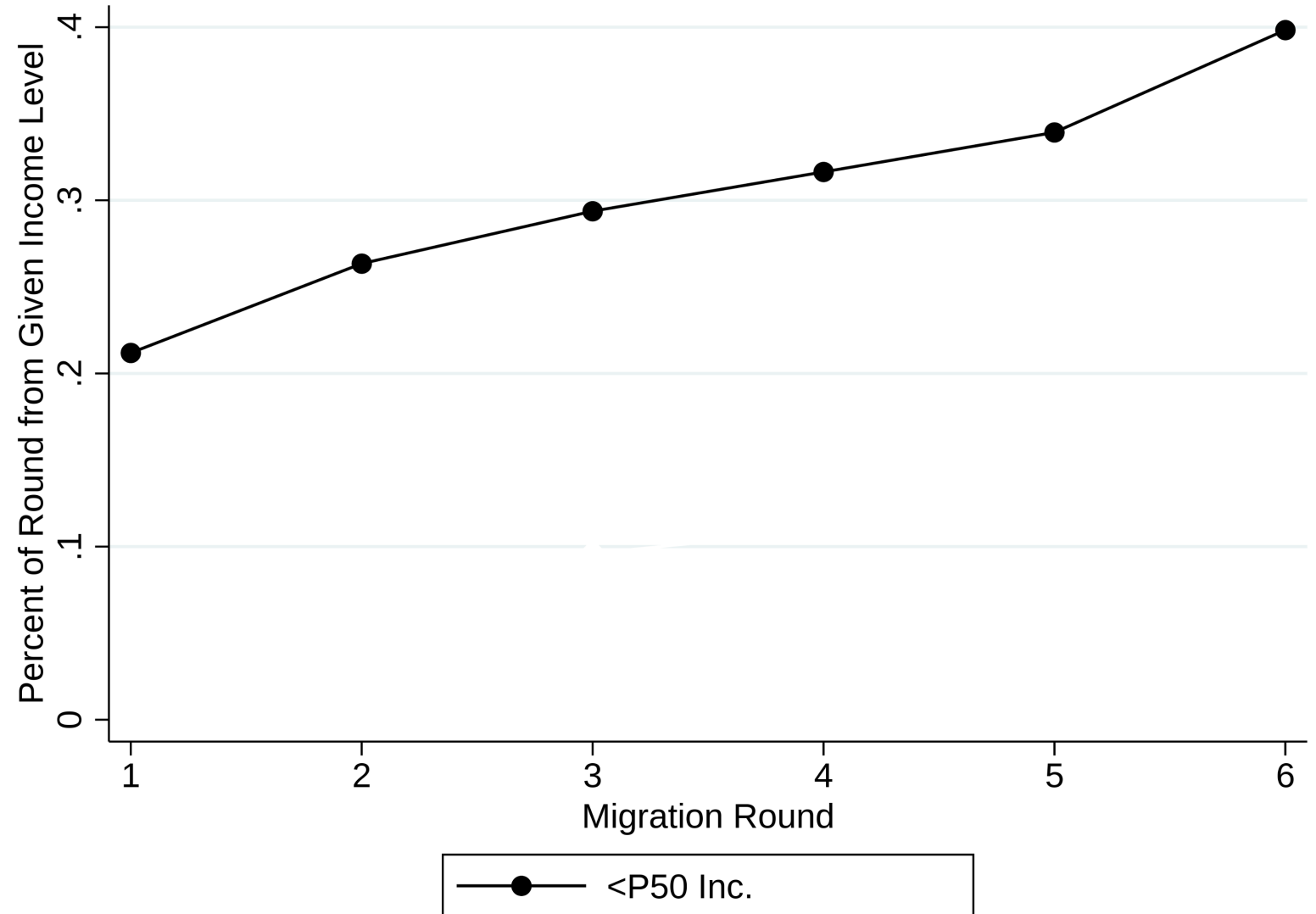


- Red dots are new buildings
- Polygons are zip codes colored by median household income
- Black circles are origin addresses of current tenants of new buildings

Repeat for five more rounds...

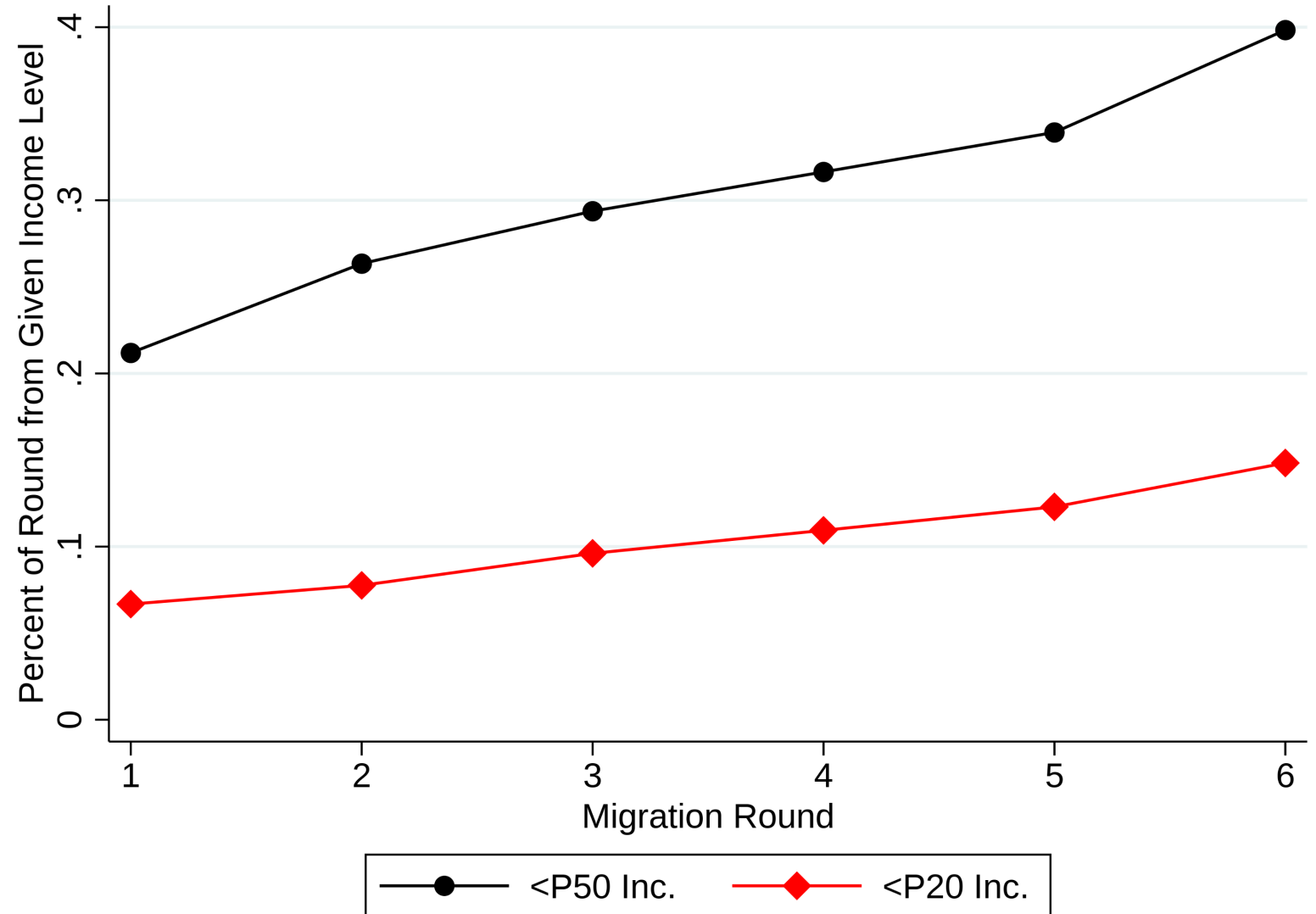
Origin locations gradually become more diverse

- More and more below-median income neighborhoods are included in each round
- (This graph includes 12 major cities, not just Minneapolis)



Origin locations gradually become more diverse

- Similar story for lowest 20% income neighborhoods
- (This graph includes 12 major cities, not just Minneapolis)



Use a simulation model to quantify effects

1. 100 new market-rate units lead about 45-70 people to move out of below-median income areas, loosening housing market in such areas
 - a. About 17-39 from bottom 20% income
2. Effects take about 3-5 years

These numbers are hard to pin down—tried to use variety of assumptions to get a range of estimates

Part 2:

Local Effects of New Housing

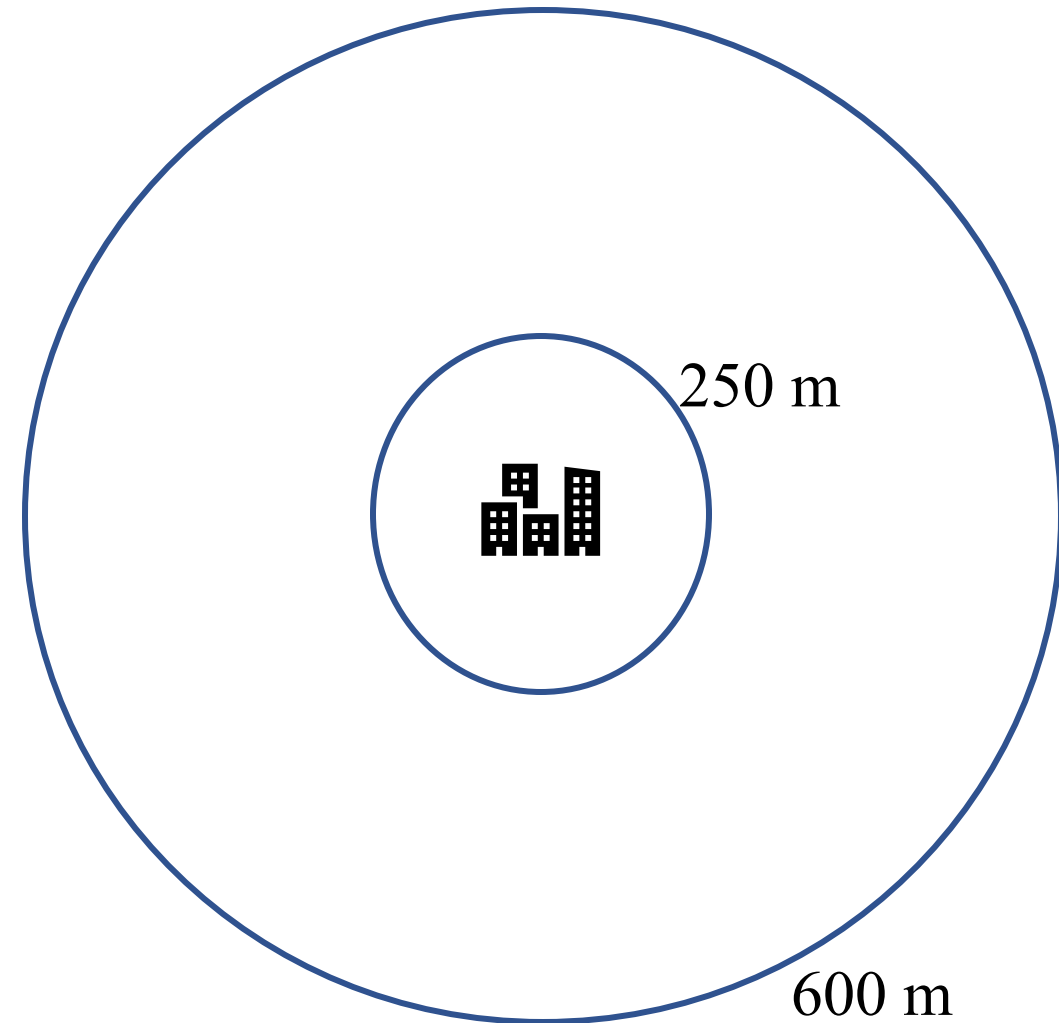
(with Brian Asquith and Davin Reed)

How does new housing affect nearby prices?

1. **Supply effect:** People move into the new apartments instead of a nearby unit
 - Pushes prices down—those people would have bid up nearby prices
2. **Demand effect:** New building could make more people want to live nearby
 - Pushes prices up—this new demand bids up nearby prices
 - Have to assume that new building makes nearby area more attractive

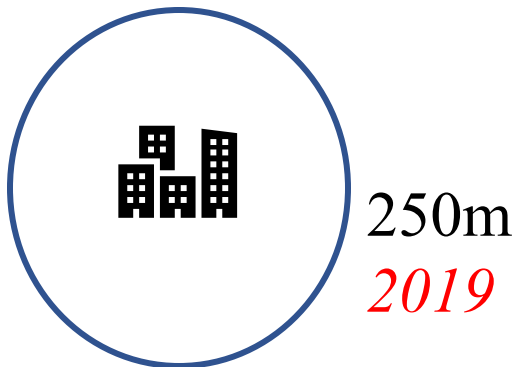
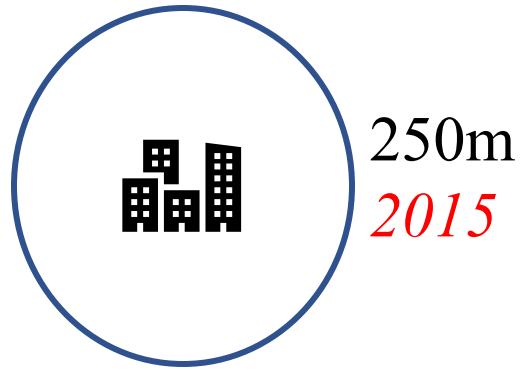
Both stories probably hold some water. Study with quasi-experiment.

Quasi-experiment 1: Doughnut comparison



- Compare change in rents near new building to change slightly farther away
- Requires assumption that inner circle and outer ring are similar
- May be true within small areas—developers face some constraints in building placement

Quasi-experiment 2: Variation in building timing



- Compare changes in rents near 2015 building to changes in rents near 2019 building.
- Requires assumption that these two areas are similar
- May be true within small timeframe—
developers can't precisely time buildings

What buildings do we study?

1. Market-rate rental buildings with over 50 units
2. Built in 2015 or 2016
3. City neighborhood with income below the MSA median
4. “Pioneer” buildings
 - a. Later buildings constructed nearby are counted as part of pioneer’s effect

Rent results

- Rent data is from Zillow and includes only buildings with <50 units
- After new building's completion, nearby rents are 5-7% lower than they would have been in the absence of construction
 - This is based on comparison to the control groups in quasi-experiments
- Note this not mean that rents fell in absolute terms—it's relative to hypothetical
 - Common point of confusion

Migration results

- Zillow rents may overrepresent high-end units
- Use this data to see how **migration** from low-income areas changes
- Similar results—arrivals from low-income areas increase near new building
 - Implies that new building also lowered rents in cheaper units

Which low-income areas receive new buildings?

Table 1 Building Neighborhood Characteristics

	No building	Some building
Household income		
2000 (\$)	47,190	44,998
2010 (\$)	45,097	48,181
2017 (\$)	47,129	63,771
2000–2010 (pct)	−4.4	7.1
2010–2017 (pct)	4.5	32.4
College degree		
2000 (pct)	18	33
2010 (pct)	23	44
2017 (pct)	27	55
Observations	2,459	1,094

NOTES: Means of the characteristics of the neighborhoods (census tracts) which received new buildings or not.

“Some building” column means are weighted by the number of buildings in each neighborhood. Samples of buildings and neighborhoods are described in detail in the working paper: https://research.upjohn.org/up_workingpapers/316/.

SOURCE: Real Capital Analytics, Census 2000 Long Form (“2000”), American Community Survey 2006–2010 5-Year Estimates (“2010”), and American Community Survey 2013–2017 5-Year Estimates (“2017”).

Some caveats to this analysis

- We study one type of housing that adds a lot of units
 - Compare to tear-downs or deconversions...
- These neighborhoods effects probably vary a lot across locations
 - Maybe some buildings do cross a tipping point?
- It's not a perfect approach—need more research!

The Big Picture

Summary

- Big new market-rate buildings seem to be good for affordability
- There are some caveats and probably some exceptions
- But, in general, if you build housing and people live in it, it should lower prices

Possible questions for discussion

- Does there have to be tension between encouraging construction and beefing up voucher and subsidy programs?
 - Inclusionary zoning has this tension—but could it be funded differently?
- How important are price effects to the question of whether we should build?
- Who should decide whether new housing in a particular location is approved?

Questions



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