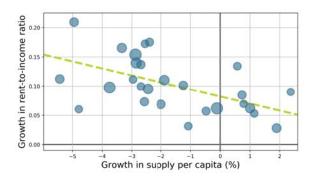# Redevelopment and housing prices

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Federal Reserve System Community Development Research Conference
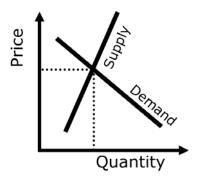May 10, 2019

Housing prices and supply
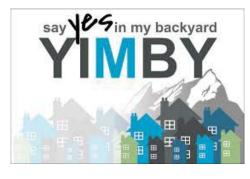
Biggest metro areas, 2008–2012 vs 2013–2017:

- 🏠 Housing getting less affordable everywhere
- 🏠 Slower increase where supply is growing
- 🏠 Does supply generate affordability?

Conventional policy response

🏠 Allow more construction to promote affordability

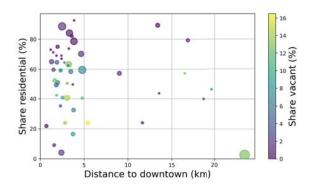🏠 Supply goes up and equilibrium price goes down

🏠 Make sense if housing identical, no redevelopment

🏠 What kind of housing does market actually provide?
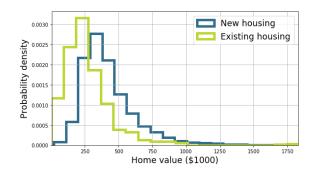
What does new housing replace?

New housing by tract in greater Philadelphia, 2011–2016:

🏠 24% in tracts $\geq$ 75% residential, $\leq$ 5% vacant

🏠 77% in tracts within 5 km of downtown

How much does new housing cost?

New vs existing housing in Philadelphia, 2005–2017:

- 🏠 Three-bedroom single-family house: +33%
- 🏠 Three-bedroom rowhouse: +111%
- 🏠 Two-bedroom high-rise apartment: +61%

Market-driven supply outcome

🏠 New housing stock necessary for growing cities
- 🏠 Economic theory: more supply will moderate price increase
- 🏠 Empirical evidence: higher rent in constrained cities

🏠 Market response: expensive units in desirable locations
- 🏠 New housing often replacing existing stock
- 🏠 More profitable to build higher-quality units

🏠 Unclear net impact on price distribution

How to think about this tradeoff?

Our approach

Fit a model of redevelopment to data from Philadelphia

- 🏠 Residents care about housing quality and quantity

- 🏠 Landowners own lots which may have housing already

- 🏠 Three different costs to (re)development:
    - 🏠 Fixed cost of changing anything
    - 🏠 Per-unit cost to new quantity
    - 🏠 Per-unit cost to new quality

- 🏠 Market-clearing sets housing prices

- 🏠 Find cost and preference parameter values to match data

Use this to understand quality and quantity changes

Key findings

Three scenarios from fitted parameter values:

- 🏠 Lowering fixed cost of development
    - 🏠 Drastically increases rate of development
    - 🏠 New units rapidly replacing existing ones
    - 🏠 Supply and rent both increase

- 🏠 Lowering the cost of adding density
    - 🏠 Small increase in rate of development
    - 🏠 More density than quality — rent decreases

- 🏠 Raising cost of adding quality
    - 🏠 Decrease in rate of development
    - 🏠 Lower supply and lower rent

Conclusion

🏠 Supply matters for access to housing

🏠 Allowing market supply may not solve problem

🏠 New supply replaces lower-cost stock

🏠 Potential policy response: discourage luxury condos?

Thank you for the opportunity to share this research