

Discussion of  
*The Role of Property Tax in  
California's Housing Crisis*

Carlos Avenancio-León

# Problem

- Proposition 13
  - Cap of 2% (or CPI increase – whatever lowest)
  - Reset at sell or new construction
- Potential incentives to avoid redevelopment
  - Reminiscent of Lock-in effects (Ferreira 2010)
  - Potential reduction in housing supply

# This Paper

- Objective: Evaluate effects of Proposition 13 on redevelopment
  - Overall: Important question in my view

# This Paper

- Objective: Evaluate effects of Proposition 13 on redevelopment

- Measurement:

- Redevelopment defined as changed of use
  - E.g., SFH -> MFH

- Reduced Form:

$$1(\text{Use}_t = \text{Use}_{t+1}) = \alpha_t + \alpha_c + \beta \text{TaxRate}_{i,t} + \delta \log(V_{i,t}) + X_{i,t-3}\kappa + e_{i,t}$$

- Structural model with parameters for a profit parameter (proportion of bedrooms x price level going to rents)

# Interpretation of Variables: Use

- Measurement:
  - Paper: redevelopment defined as changed of use
    - E.g., SFH -> MFH
- California Revenue and Taxation Code, Sec. 70:
  - Any addition to real property, whether land or improvements, including fixtures [...]
    - ADUs included
  - Any alteration of land or of any improvement [...] that converts the property to a different use
  - Any rehabilitation, renovation, or modernization [...]
    - Includes extending property's economic life
- Intersection with zoning

# Interpretation of Variables: Use

- Measurement:
  - Paper: redevelopment defined as changed of use
    - E.g., SFH -> MFH
- Auxiliary analysis - Renovations:
  - Real Capital Analytics (RCA)
  - history of renovations on the transacting property, and its location
  - Several limitations

# Interpretation of Variables: TaxRate

- Reduced Form:

$$1(\text{Use}_t = \text{Use}_{t+1}) = \alpha_t + \alpha_c + \beta \text{TaxRate}_{i,t} + \delta \log(V_{i,t}) + X_{i,t-3}K + e_{i,t}$$

- Why TaxRate?
  - Variable of interest is expected difference between old assessment and new reassessment
    - $\delta \log(V_{i,t})$  does not fully recover difference
    - Public good provision varies which affects use, land price, demand...
    - Exemptions
  - Suggestion: Use  $\log(\text{assessment ratio})$  with taxing jurisdiction-year fixed effects. Then recover effective taxation.

# Empirical Strategy

- Regress:

$$1(\text{Use}_t = \text{Use}_{t+1}) = \alpha_t + \alpha_c + \beta \text{TaxRate}_{i,t} + \delta \log(V_{i,t}) + X_{i,t-3} \kappa + e_{i,t}$$

- Instrument:

$$\widehat{\text{TaxRate}}_{\underline{i,t}} = \psi_t + \psi_c + \delta \log(\text{Prior Local Prices}_{i,s(i,t)}) + X_{i,t} \rho + \mu_{i,t}$$

- Identifying assumption: Probability of redevelopment only affected by tax rate



# Challenges

- Identifying assumption: Probability of redevelopment only affected by tax rate
- Land Values:
  - $\log(\text{Prior Local Prices}_{i,s(i,t)})$  capture relative differences in neighborhood valuations
    - Amenities, etc.
  - Cost side: High land values relative to construction => incentives to build multifamily
  - Revenue side: High land values where housing supply is low relative to demand => demand for multifamily

# Zoning

- Exclusionary zoning regulations:
  - minimum lot sizes
  - restricted multifamily development
- Building restrictions affect pricing
  - increase local house prices
  - Cheshire and Sheppard (2002); Glaeser and Gyourko (2003); Hilber and Vermeulen (2016)
- Large racial and wealth differences
  - Lower priced homes correlate with financial constraints to afford switching cost.
- Zoning differences within census tract
  - Block group analysis

# Interpretation of Variables: Market Value

- Hedonic regressions using only structural characteristics
  - neighborhood attributes important for redevelopment
  - Structural x time x neighborhood
- Add comparison with transaction level data?

# Conclusion

- Important question for our understanding of effective property tax implementation
- Empirical refinements might help to make paper more clear or convincing