The Effect of Government Mortgage Guarantees on Home Ownership
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Discussed by Felipe Severino - Dartmouth College
Main Result:
Changes in government guarantees have:
1. A small or zero effect on homeownership
2. Significant effect on financing choices
Main Comments

1. Interpretation of the contribution
2. Empirical strategy and identifying assumption
3. Other comments
Comments: Interpretation of the contribution

Government guarantee and home ownership?
- Interesting question.
- But not sure this is the right question to ask in this context

1. Homeownership rates and sample period
2. House transactions distribution
Historical homeownership rates

- Small decline during sample period
- From 67.2% in 2007 to 66.6% in 2008

Source: American Community Survey
Comments: Historical homeownership rates

Historical homeownership rates

- Limited variation during the sample period
- Potentially more variation by income areas

Source: American Community Survey
House transactions associated with the government guarantee threshold

- Magnitude of the shock is small and distribution raises concerns about external validity

Source: Dataquick Sample Period 2000-2006
Comments: House transaction distribution

House transactions associated with the government guarantee threshold

- No variation in homeownership rate around the threshold

Source: Dataquick Sample Period 2000-2006
Suggestions: Different Sample Period

Use an earlier sample period, where owner occupancy is increasing
Historically 2000-2006 a more “favorable” period
Also, period where change in CLL “more” exogenous
1. Is the change in owner occupancy the only relevant outcome?
- Currently looking at net flows, look at inflows and outflows

2. Household level characteristics?
- Are buyers moving to bigger houses, better neighbors, better schools, etc?

Potentially very interesting to understand housing choices, not only ownership

How it affected the rental markets, Gete and Rether 2017
Empirical strategy

\[ y_{i,ym} = \beta_1 Post_{ym} + \beta_2 \Delta CLL_{c(i)} \times Post_{ym} + \Gamma X_{iym} + FE_{c(i)} + \varepsilon_{i,ym} \]

Identifying assumptions:
- Treated and control behave similar in the pre-period (parallel trend)
- Treatment definition is uncorrelated with variables that affect the outcome (exogenous treatment)
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- Deaton (2009) critique: “external” is not the same than “exogenous”

1. Treated vs. Controls define as “high cost” vs. “normal” counties

- Unobservable differences between counties

<table>
<thead>
<tr>
<th></th>
<th>Estimation Sample</th>
<th>Entire Sample</th>
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<tbody>
<tr>
<td></td>
<td>(1) Untreated</td>
<td>(2) Treated</td>
</tr>
<tr>
<td>Avg sale price in 2006 and 2007 (before 2007m9)</td>
<td>3.94e+05</td>
<td>4.09e+05</td>
</tr>
<tr>
<td>% jumbo loans in 2006 and 2007 (before 2007m9)</td>
<td>0.114</td>
<td>0.188</td>
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<tr>
<td>% PLS loans in 2006 and 2007 (before 2007m9)</td>
<td>0.281</td>
<td>0.432</td>
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<tr>
<td>Avg CLTV in 2006 and 2007 (before 2007m9)</td>
<td>0.826</td>
<td>0.877</td>
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<tr>
<td>Δ$CLL ($100K)</td>
<td>0.000</td>
<td>2.201</td>
</tr>
<tr>
<td>N. Obs.</td>
<td>3,979,870</td>
<td>6,648,338</td>
</tr>
</tbody>
</table>

**Identifying assumption:** high cost and normal counties are equivalent in other dimension that may affect homeownership
Treatment definition is uncorrelated with variables that affect the outcome (exogenous treatment)

- Deaton (2009) critique: “external” is not the same than “exogenous”

2. $\Delta CLL$, intensity of treatment, uncorrelated with zipcode house prices

- Change is defined by county-level house price, which is likely to be correlated with zipcode level house prices.

**Identifying assumption**: changes in county-level house prices are uncorrelated to zipcode ownership status
Suggestion: Identifying assumption

1. Treatment vs Controls

Assess the validity of the underlying assumption:

- Show similarities based on observable characteristics (statistically)
- Control for house prices levels

Run similar regression but controlling for neighboring zipcodes (nz) across county border (Severino and Brown, 2017)

\[ y_{i,ym} = \beta_1 Post_{ym} + \beta_2 \Delta CLL_{c(i)} \times Post_{ym} + \Gamma X_{iym} + FE_{c(i)} + FE_{nz(i)} + \varepsilon_{i,ym} \]
2. $\Delta CLL$, intensity of treatment

Assess the validity of the underlying assumption:

How correlated are zipcode level house prices in the regression sample with county-level house prices?

- Directly control for house price levels

  caveat: are there other variables affecting ownership?

- Focus on a robust sample, where correlation between counties and zipcodes are weak

  caveat: may induce a different type of selection
Other comments

1. Make sample comparable
   - It is hard to tract the samples across tables, fixed sample of houses included in the regressions
   - Show county plot for regression sample

2. Generate placebo test to assess validity of the estimates
   - Randomly assigned counties and redo the analysis, compare the results to “real” regression

3. Potentially explore income heterogeneity
   - Conditional on having enough variation
Interesting paper that aims to answer an important question

Need to do more to increase the contribution

- Explore a richer set of outcomes
- Refine robustness of identifying assumptions

Looking forward to reading the new version.
Thank you!