Comments on

Housing Market Externalities of Startup Success

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Overview

- Clear research question: ***how does startup success affect the local housing market?***
  ↳ Startup success is measured by having a ***patent granted***
- Challenge: Startup's location may be correlated with chances of success
  ↳ IV strategy: ***patent examiner leniency*** (Sampat and Williams, 2019)
- Results: Having ***at least*** one successful startup within a 5-mile radius increases a house *annualized unlevered return* in 18.25 p.p.
  ↳ marginal effect is stronger when more firms become successful

Strengths

- Interesting question and clear empirical exercise
- Convincing instrumental variable
- Rich datasets: patents (***PatEx***) and properties (***ATTOM***)

Data: We want more!

- The data is very interesting and detailed; it would be nice to have a more spatial description of the data.
  - ↳ E.g., are successful startups spatially concentrated?
  - ↳ What is the distribution of industries among the startups?
- About the location of firms: Do you know if the *assignee address* is the same as the location where the startup runs the business?
- It would be interesting to know more about the patent examiners as well
  - ↳ Why does leniency change over time? Examiners change behavior between years?
  - ↳ Are we talking about the same examiners during the entire sample period?
  - ↳ How many reviews each examiner make per year?

Empirical Strategy

- Main model:

$$\text{(Second Stage)} \qquad r_i = \beta_0 + \beta_1 \text{Treat}_i + \beta_2 N_{firms,i} + \text{Fixed Effects} + \varepsilon_i$$

$$\text{(First Stage)} \qquad \text{Treat}_i = \gamma_0 + \gamma_1 \text{Avg. leniency}_i + \gamma_2 N_{firms,i} + \text{Fixed Effects} + \tilde{\varepsilon}_i$$

- Treat_i is a dummy variable $= 1$ if number of successful startups > 1 within 5-mile radius
  - ↳ Instead of Avg. leniency, use $\max\{\textit{leniency}\}$ since one very lenient examiner in the area would be enough to make property treated
  - ↳ Why not $\log N_{firms,i}$? Coefficients are significant but too low
  - ↳ First-stage F $> 400,000$! This value is incredibly high, especially given the adj-R^2. Is this the F-statistic of the excluded instrument? ***(Kleibergen-Paap F)***

- : How many firms have received patents in recent years? It would be an interesting heterogeneity exercise

Contribution and Mechanism

- Although the research question is clear, the contribution can be better explained
  ↳ You mention Greenstone and Moretti (2003) show similar effects for large industrial plants. What type of industries do they study, and do you study? How do your coefficients compare with them?

- It would be nice to explain the mechanism through which successful startups increase property values
  ↳ Do they hire more workers after patents are accepted? Would this be enough?
  ↳ Do they attract other startups?