

Discussion of *Moon and Suh* (2022): Who Finances Disparate Startups?

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Change in High-Tech Startup Density: 1990-2010

- Hathaway (2013, Kauffman Foundation)

Rank	Largest Increases	Largest Decreases
1	Kansas City, MO-KS	San Jose-Sunnyvale-Santa Clara, CA
2	Seattle-Bellevue-Everett, WA	Dallas-Plano-Irving, TX
3	Denver-Aurora-Broomfield, CO	Santa Ana-Anaheim-Irvine, CA
4	Lake County-Kenosha County, IL-WI	Bethesda-Frederick-Rockville, MD
5	Jacksonville, FL	Houston-Sugar Land-Baytown, TX
6	Washington-Arlington-Alexandria, DC-VA	Nassau-Suffolk, NY
7	Richmond, VA	Oakland-Fremont-Hayward, CA
8	Charlotte-Gastonia-Rock Hill, NC-SC	Warren-Troy-Farmington Hills, MI
9	Raleigh-Cary, NC	Fort Worth-Arlington, TX
10	Palm Coast, FL	Newark-Union, NJ-PA

- Are we observing **diseconomies of agglomeration**?

Costs and Benefits of Industry Clusters

- Martin and Sunley (2003)

Claimed advantages	Potential disadvantages
Higher innovation	Technological isomorphism
Higher growth	Labor cost inflation
Higher productivity	Inflation of land and housing costs
Increased profitability	Widening of income disparities
Increased competitiveness	Over-specialization
Higher new firm formation	Institutional and industrial lock-in
High job growth	Local congestion and environmental pressure

- What are driving the formation of new startup hubs?
- Depends on which school of thought...

Old Debate on Causes of Agglomeration

- Sources of spillovers and predicted regional impact

(within/across industries)	Marshall-Arrow-Romer	Jacobs	Porter
Specialization	+	—	+
Diversity	—	+	—
Competition	—	+	+

- Empirical literature is vast (see survey by Beaudry and Schiffauerova, 2009) with no definitive answer
- What is missing in the literature is an understanding of possible mechanisms
- Moon and Suh (2022) fills this gap: Angel investors serve as a conduit for (knowledge) spillovers to flow between “disparate” startups in their portfolios

Empirical Strategy: Firm-MSA-Year Panel

- Industry Dissimilarity + Angel Investors = \uparrow MSA Entry
- Angel Tax Credit + Industry Dissimilarity + Angel Investors = $\uparrow\uparrow$ MSA Entry
- **COMMENTS/SUGGESTIONS:**
 - Use of 2019 industry categories may exacerbate selection issue
 - Startups can “pivot” (e.g., blitzscaling, Uber) since being founded (nontraditional \rightarrow traditional)
 - Some industries did not exist far in the past (e.g., blockchain)
 - Narrow the window (<10 years) to construct the similarity score, use broad industry groups, or use vintage industry groups (like Table 8) as baseline

Empirical Strategy: Firm-MSA-Year Panel

- Industry Dissimilarity + Angel Investors = \uparrow MSA Entry
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- **COMMENTS/SUGGESTIONS:**
 - To provide further support, include average similarity scores derived from adjacent MSAs as controls (relevant info of substitutes)
 - Can also be used to perform falsification test by interacting it with Angel Tax Credits and High Angel/VC

Empirical Strategy: Firm-Year Panel

- Industry Dissimilarity → ↑Angel Financing
- **COMMENTS/SUGGESTIONS:**
 - Natural follow-up question: Do startups that enter into dissimilar MSAs perform better than those that enter into similar MSAs?
 - Relate average similarity score at the time of founding and future startup performance rather than allowing it to change over time.
 - Reflect choice of startup as opposed to external confounding factors
 - You can plot evolution of performance over time as well

Empirical Strategy: Investor Cross-section

- Angel Investor + Proximate + Dissimilar = Better Portfolio Performance
- **COMMENTS/SUGGESTIONS:**
 - Setting to highlight mechanism through interacting Angel characteristics (exploit Table A3 more)
 - Past work experience
 - Past investor experience with different startups in different industries
 - MBA degree (generalist background)
 - #Academic degrees/majors
 - Etc.

Entry Decision Model: Fit

- $Entry_{imt} = \alpha + \beta Similarity_{imt} + \dots + \epsilon_{imt}$
- Ideal experiment:
 - Each startup is offered a random MSA to enter (x416)
 - Average similarity score for only that MSA is observed
 - Startup decides whether to enter
 - **Binary choice model**
- Reality:
 - All MSAs are offered to the startup
 - Average similarity scores for all MSAs are observed
 - Startup must decide to enter only 1 MSA
 - **Multinomial choice model**
 - Independence of Irrelevant Alternatives likely violated: use nested/mixed logit

Entry Decision Model: Design Implications

- $Entry_{imt} = \alpha + \beta Similarity_{imt} + \dots + \epsilon_{imt}$
- Binary outcomes are mechanically negatively correlated within startup clusters
 - Mean of outcome variable is very small due to many 0's and few 1's
- May not be a big deal if economic magnitudes roughly align with logit estimation

Concluding Remarks

- Makes a significant contribution to the agglomeration literature by highlighting a **financing mechanism**
 - **Paper should make stronger effort to emphasize this contribution**
- Important policy implication:
 - Angel investors comparative advantage is regional and having diverse experience/industry exposure
 - Fiscal incentives should be designed to attract disparate firms into Angel hubs
- Things to think about: Are there startups that open multiple offices across different MSAs or relocate? Do their performance improve as well?

Very Minor Comments

- Tables 3 and 4: Where is High Angel/VC dummy? Absorbed?
- “deferentially” on pg. 20 should be “differentially”?
- “G Index and EG Index” on pg. 18 refers to what? Not defined in Appendix C or table captions either.

References

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