

Immigration and Entrepreneurship in the United States

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Abstract

Immigration is often viewed as expanding the labor supply and creating greater competition for domestic workers. But immigrants may also play important roles in innovation, including starting new firms, that may both drive productivity growth and expand labor demand. This paper uses newly available U.S. administrative data to study the role of immigrants in entrepreneurship. We ask how often immigrants start companies, how many jobs these firms create, and how often these firms appear in high-tech sectors and achieve explosive growth. The findings suggest that immigrants are as much “job creators” as “job takers” and that non-U.S. born founders play outsized roles in U.S. high-growth entrepreneurship.

JEL Codes: L26, F22, M13, L11, J23

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March 2020

For submission to NBER Entrepreneurship Program

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Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census. All results have been reviewed to ensure that no confidential information is disclosed.

One economic narrative

“Immigrants take jobs”

- They expand labor supply
- Compete for jobs with native-born workers
- Wages fall

This narrative underpins policies that seek to limit immigration.

Existing Literature

- Mariel Boatlift “puzzle” (Card 1990; Borjas 2017)
- Absence of negative wage effects on natives in many additional studies (Hunt 1992, Friedberg 2001, Fogel and Peri 2016, Tabellini 2018)
- Long-run economic advantages to U.S. regions with more historical immigration (Sequiera et al. 2017)
- What is going on...?

A different narrative

“Immigrants create jobs”

- For example, they start firms (e.g., Kerr & Kerr 2019)
- They increase demand for workers
- Wages rise

In this narrative, immigrants may improve welfare for native-born workers

This Paper

- Which immigration effect is stronger -- the labor demand or the labor supply effect?
- If immigrants start businesses at high rates, but these tend to be small businesses, then this labor demand effect is weak and immigration may still depress wages.
- But perhaps immigrants start lots of big firms...?

Theory: Put both forces together in general equilibrium

Empirics: Examine in comprehensive U.S. data

Theory

- You can be a worker or an entrepreneur
- Workers receive a wage, w .
- Entrepreneurs start firms with production technology

$$y_i = a_i l_i^\beta$$

where

a_i is the entrepreneurial acumen of the founder,

l_i is the amount of labor employed at the firm, and

$\beta \in (0,1)$ indicating decreasing returns to scale

Theory

- Firms maximize profits.
- This pins down size of firm (employment and output)
- Increased founder acumen means larger firms, and more profit
- Potential founders weigh these profits against the prevailing wage. They start a firm if

$$a^*[g(\beta)] \geq w$$

Determining a^* , the threshold value of entrepreneurial acumen for entry to entrepreneurship

Theory (building on Lucas 1978)

- Two forces for thinking about labor demand
 - 1) What share of individuals start firms?
 - 2) Conditional on starting these firms, how big are they?
- Example: Pareto distribution of entrepreneurial acumen.

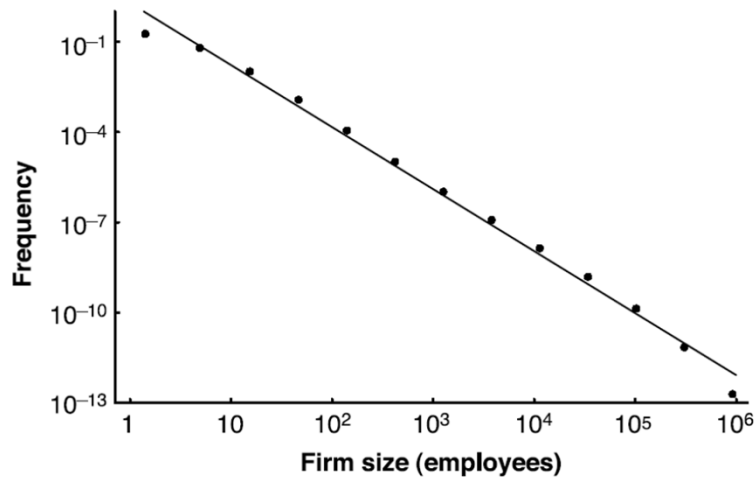
$$f(a) = \frac{\gamma a_{min}^\gamma}{a^{\gamma+1}}$$

Then, in general equilibrium

- 1) Entrepreneur rate, worker rate, and wages pinned down
- 2) Zipf's Law for the firm size distribution

Zipf's Law

Axtell (2001)



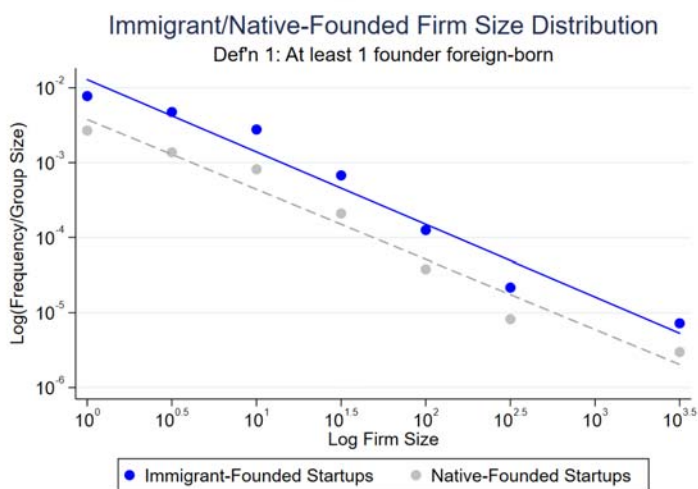
Theory – Add Immigrants

- Let there be N native-born individuals, who have entrepreneurial acumen distributed $f(a)$.
- Let there be N^I immigrant individuals, who have entrepreneurial acumen distributed $f^I(a)$.
- These individuals compete with each other for jobs and for employing workers.
- Wages of native-born will be increasing with immigration (N^I) if the immigrant entrepreneurial acumen distribution is right-shifted ($f^I(a)$) compared to the native distribution ($f(a)$).

Empirics - Data

- 1) All new firms in the U.S. founded 2005-2010
 - 2) Representative sample of U.S. businesses today
 - 3) Fortune 500 companies
- Consider alternative ways of defining an immigrant founded firm

Findings, All New Firms

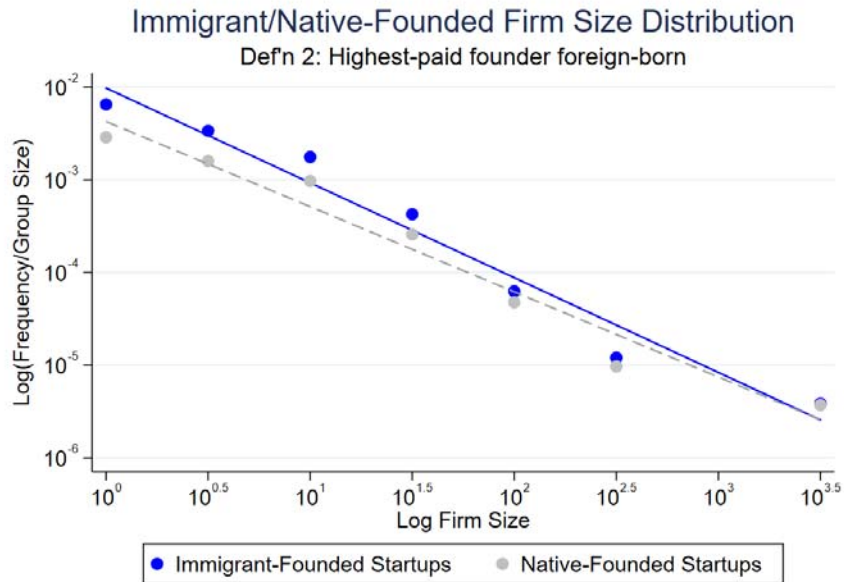


- Similar slopes! But immigrant distribution is right shifted.

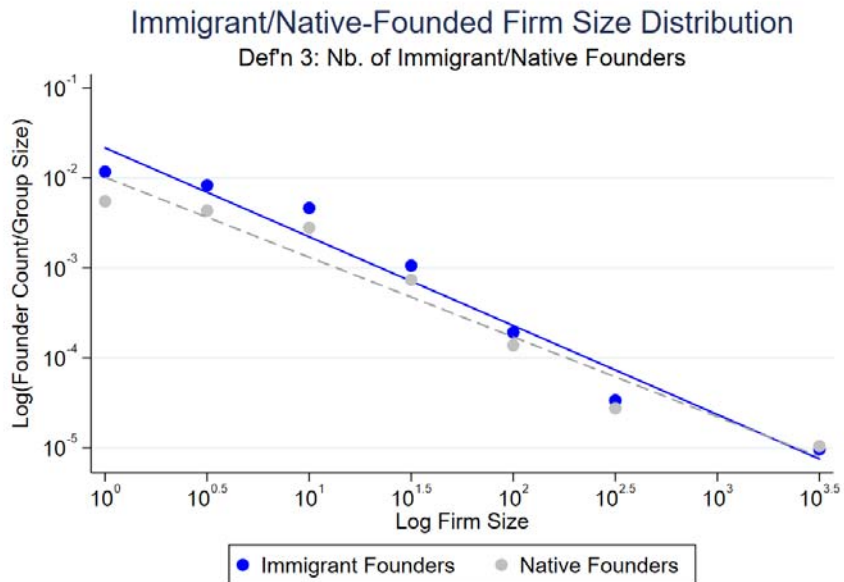
$$\gamma^I \approx \gamma$$
$$a_{min}^I > a_{min}$$

- Essentially, immigrants start firms with similar size distribution as those of native-born entrepreneurs.
- But they start firms at higher rates. Immigrants are “more entrepreneurial”.

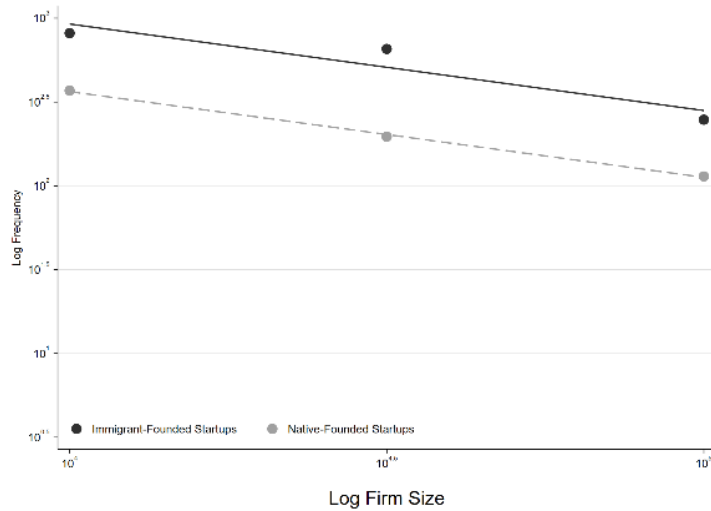
Findings, All New Firms - Robustness



Findings, All New Firms - Robustness



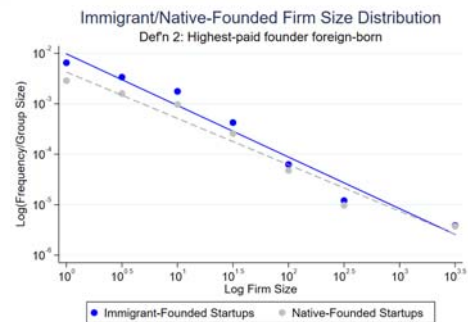
Findings, Fortune 500 Firms



- Hand-collected data on founders of today's Fortune 500 companies
- Normalize founding rate by % of U.S. population that was foreign-born in founding year
- Similar results: immigrants to U.S. start eventual Fortune 500 firms at higher rates than native born do.

Summary

- Integrating "immigrants take jobs" and "immigrants create jobs" perspectives, adding the force of founding firms.
- Develop simple model that shows conditions under which immigrants are net job creators and thus improve wages of native-born workers (labor demand effect dominating labor supply effect)
- Comprehensive Census data to study all new firms. Also SBO data and Fortune 500 data. Find labor demand side dominates.
- If new ventures have technology spillovers, gains for domestic workers would further \uparrow
- Can help resolve the puzzles in studies of mass migration events (Mariel Boatlift, etc.)



Thank You