

ENTREPRENEURIAL MIGRATION

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Discussion by

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THIS PAPER: NEW FACTS ABOUT YOUNG FIRM MIGRATION

1. 6.6% of young corps. and 3.2% of young LLCs move to CBSAs in a new state
 2. Well-known hubs (e.g. Silicon Valley; Boston) lose more startups than they gain
 3. Top personal income tax rates predict cross-section of CBSA-level net migration rates
- Implications for theories of firm/labor sorting
 - ▶ Most startups founded in small handful of cities \implies skewed distribution of location-specific endowments (“location fundamentals”)
 - ▶ Some cities really good at attracting entrepreneurs \implies **limited role of idiosyncratic preferences in sorting condition** (no extreme value firm “productivity shocks”)
 - **My comments mostly focused on exploring mechanisms behind facts**

PRELIMINARIES: WHO ARE THE STARTUPS IN THIS PAPER?

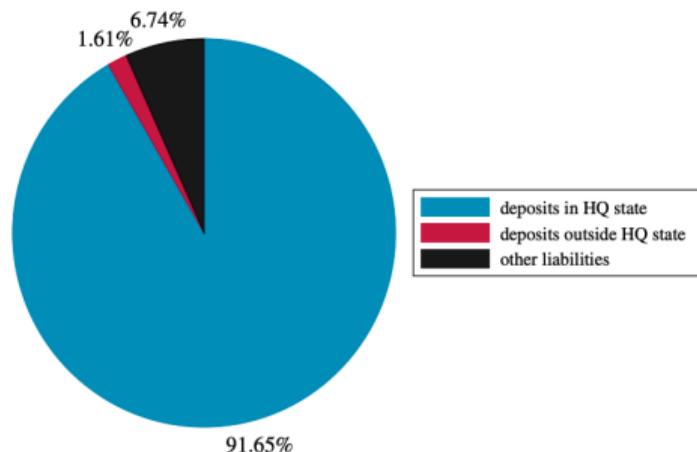
- Sample definitions:
 - ▶ Young → founded less than 5 years ago (migration rate \approx constant after age 5)
 - ▶ Includes spinouts/subsidiaries of existing firms
 - ▶ Companies in 36 states with separate principal vs. local office (no PA, WI, MD, MI)
 - ▶ Growth-oriented → Delaware registration + exclude holding companies
 - ▶ Firms born between 1988 and 2014 (includes Dot-com VC boom)
- **My interpretation: all we can say is that firms here are newly founded**
 - ▶ Limitations: no info on factor inputs, industry classification
 - ▶ Firm name string might be useful for fuzzy matching with other registries
 - ▶ Multi-office firms can be identified by listing several addresses

TAXONOMY OF THEORIES

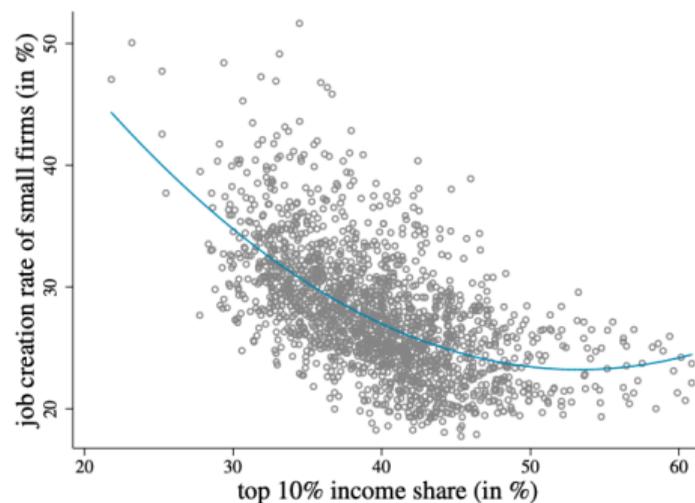
- Authors consider several strands of firm location sorting theories:
 1. Marshallian/ecosystems: agglomeration externalities matter
 2. Nursery: industry diversity important for young firms
 3. Amenities/Bohemia/taxes: Rosen-Roback sorting to max amenity-adjusted real wage
- Other possibilities not mentioned...
 - ▶ Access to financing beyond VCs → many young firms rely on founder's collateral to get bank loans (Bahaj, Foulis, Pinter 2021 BOE)
 - ▶ For multi-office firms, "span of control costs" may have bite → larger workforces become harder to manage as they get geographically disbursed (Oberfield et al. 2020)
- Evidence most consistent with entrepreneurs caring about taxes + weather

DEPOSITS CHANNEL MAKES FINANCING EASIER IN SOME PLACES

(a) Sources of US bank funding



(b) Across states



Source: Doerr, Drechsel, Lee (2021): "Income Inequality, Financial Intermediation, and Small Firms"

- Income inequality $\uparrow \implies$ bank deposits $\downarrow \implies$ small firm hiring \downarrow (Bartik IV)
- Use state top income shares as reduced form proxy for financing environment

SPAN OF CONTROL PROBLEMS: EVIDENCE FROM WFH ERA

Here are all the ways your boss can legally monitor you

As remote work gets prolonged because of the delta variant, more companies are tracking what employees do at home

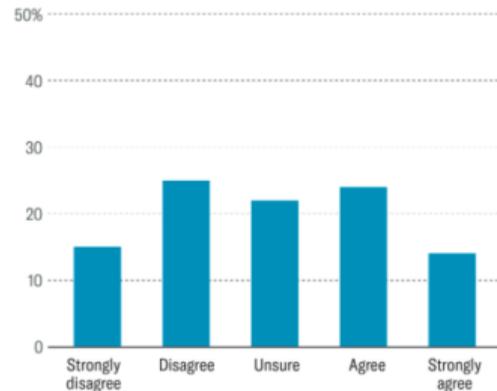
 Listen to article 7 min



Your employer probably has the right to the data from your keyboard, webcam, email and instant messages. (iStock/Washington Post illustration)

What Managers Believe About Remote Worker Performance

Percentage of managers who agree/disagree with the statement: "The performance of remote workers is usually lower than that of people who work in an office setting."



Source: Centre for Transformative Work Design survey of 215 global supervisors between April 21, 2020, and May 5, 2020



COMMENT #1: PERSONAL VS. CORPORATE INCOME TAX BASES

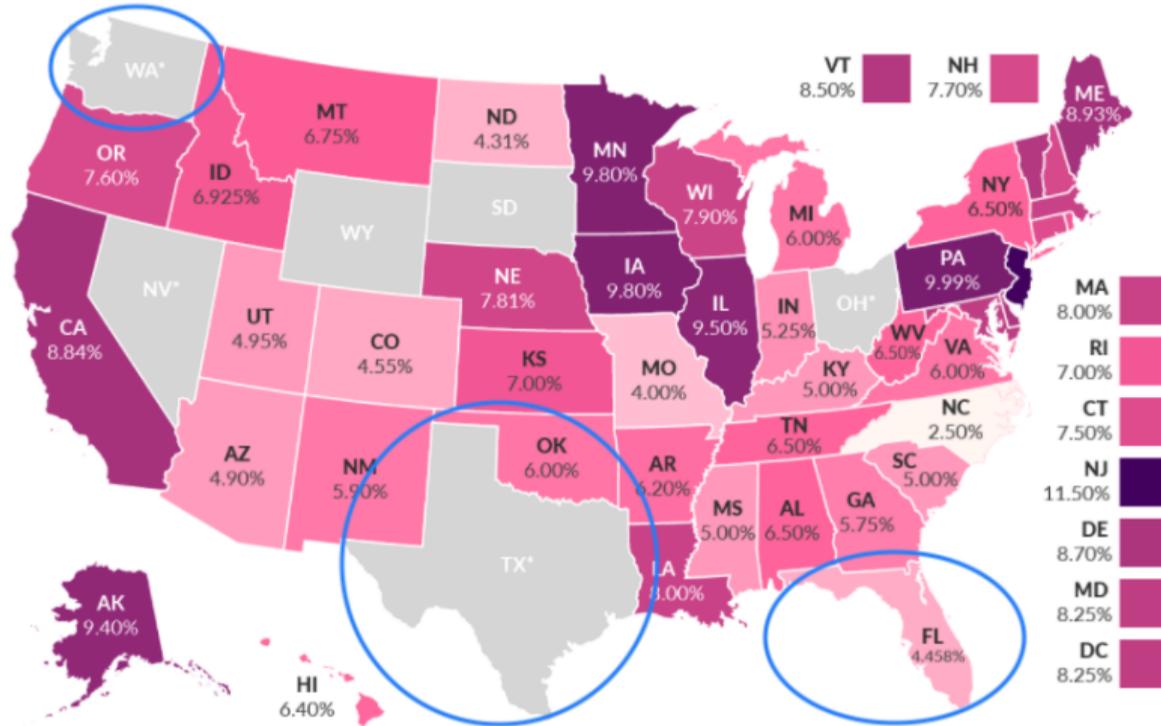
- Migration decisions depend on tax filing status
 - ▶ CIT base for corporations
 - ▶ For LLCs depends on filing status: PIT for pass-throughs (e.g. S-corps), but can elect to be taxed as a corp.
- FL becomes very important in revealed preference ranking for LLCs
 - ▶ For WA, TX, FL, $\tau^{CIT} > 0\%$ but $\tau^{PIT} = 0\%$
 - ▶ Isolating within state moves would hold fixed the regulatory environment

What is the tax base that matters for migration decisions?

For corps. check variation in local CIT rates. Variation in PIT rates informative about incentives of the owners.

How High are Corporate Income Tax Rates in Your State?

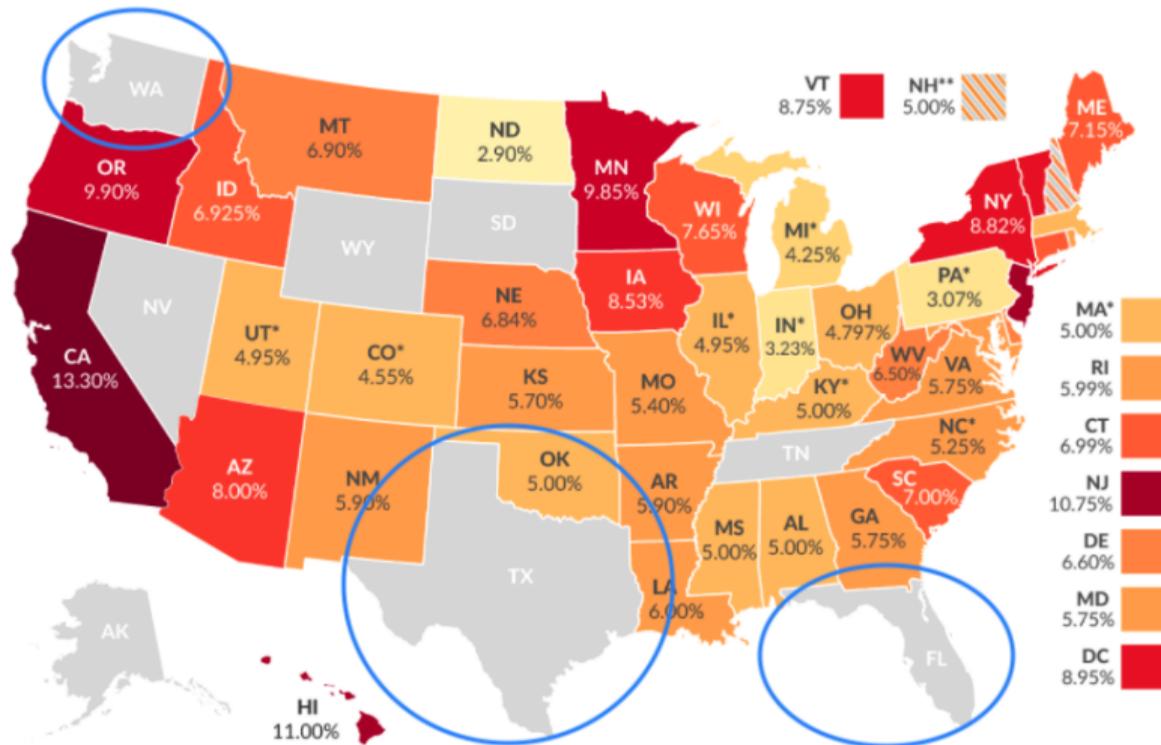
Top Marginal Corporate Income Tax Rates as of January 1, 2021



Source: Tax Foundation via Bloomberg Tax. WA and TX have gross sales receipts of 0.484% and 1%, respectively. These rates apply to gross sales revenue before cost deductions.

How High Are Individual Income Tax Rates in Your State?

Top State Marginal Individual Income Tax Rates, 2021



Source: Tax Foundation via Bloomberg Tax. States in grey have no personal income tax base.



$\beta = 0.47$
 $N = 45$
 $R\text{-squared} = 0.2201$

- FL, TX, WA all highly ranked for young corporate migration
- Several cities in CA top of list for LLCs despite highest PIT rate
- \implies loading on non-pecuniary benefits in sorting condition higher for LLCs

Note: Based on authors' calculations reported in their Table 4.

COMMENT #2: ARE PEOPLE OR FIRMS MOVING?

- Personal interstate migration literature has shown...
 - ▶ 8% 5-year HH interstate migration rate vs. 6.6% rate for corp. startups (as of 2005)
 - ▶ → consistent with founders moving to avoid PIT or improve QoL
 - ▶ New info about amenities explains migration decline (Kaplan & Schulhofer-Wohl 2017)
- Parallel literature in trade/urban looks at agents' sorting problems
 - ▶ Labor sorting condition: amenity-adjusted (after-tax) real wage matters
 - ▶ Extensive margin firm sorting: max profits net of transport + span of control costs

Are corporations people here?

Merge with establishment registry (e.g. Dun & Bradstreet) and pickup employment, manager info. Also helps with within state moves!

SEPARATING PECUNIARY AND NON-PECUNIARY BENEFITS

Albouy QoL Index

Non-pecuniary *Total QoL*

City Utility

Corps.

-0.06

-0.04

LLCs

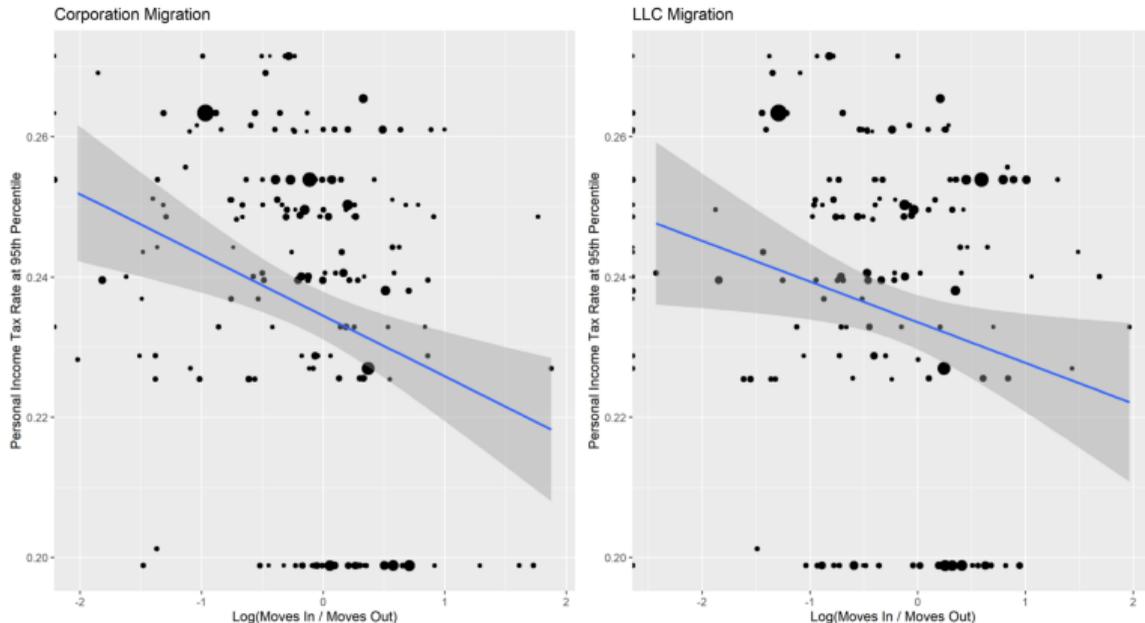
0.25

0.26

Sources: Correlations based on authors' calculations in Table A1; amenity indexes from Albouy (2016 *ReStat*).

- Table 9 shows Albouy total amenity value only matters for utility of LLCs (true also for non-pecuniary value)
- Should re-run at MSA level to match geographies
- Ideally, compare to personal inter-state migration rates (tricky, but can use CPS)
- \implies **these are people not firms moving w.r.t. amenities**

Figure 4: Net Migration Rates and Taxes



Notes: This figure compares the net migration rate of firms, estimated as the log of the ratio of in moves over out moves, to the average personal income tax rate in that state, estimated by Moretti and Wilson (2017). We observe a large negative correlation between both variables.

- Almost identical relationship between PIT rates and net migration for LLCs vs. corps.
- \implies **these are people not firms moving w.r.t. taxes**

COMMENT #3: “NO INDUSTRIAL SORTING” ASSUMPTION

- Revealed preference approach assumes migration decisions not driven by city clusters
 - ▶ Fine if there is geographic clustering of startup *births* on industry (there isn't, cf. Table 6)
- **Can we empirically test this?**
 - ▶ Already regress utility index on employment HHI → neg. relationship for corps., nil for LLCs
 - ▶ Alternative: intangible capital HHI using patents, or stratify by ownership/size
 - ▶ Employment HHI may not pick up clustering for ideas-intensive startups
- Framing: if we make this assumption, then can agglomeration matter?
 - ▶ Revealed preference index is not going to take into account these forces
 - ▶ Residual of net migration on the index then contains externality component

FINAL THOUGHTS

- Super interesting take on early firm lifecycle decisions
 - ▶ Revealed preference approach nice way to tackle data limitations
 - ▶ **Can (almost) think of this as a QoL index for startup locations**
- Explicitly link evidence to trade/urban models with location sorting
 - ▶ **Test which sorting condition describes young firms which are harder to define**
 - ▶ Firms (real profit max) vs. labor sorting condition (real wage max)
 - ▶ Agglomeration occurs through accumulating factor inputs in space, but young firms don't have much of either labor or physical capital

Is there a bigger prize here?

Decomposing how much startup founders care about pecuniary vs. non-pecuniary incentives (taxes vs. sunshine). Lessons for COVID-induced migration?

THE WALL STREET JOURNAL.



HOMES

Wealthy City Dwellers Seek Refuge From Coronavirus at Remote Ranches

Urbanites are riding out the pandemic in shared ranch communities in low-density states like Montana, Wyoming and Utah, despite pleas from local and state officials to stay away

The Mummerts' guesthouse, a 3,600-square-foot barn-style home on 23 acres in Ulery's Lakes, at Montana's Moonlight Basin resort. JANIE OSBORNE FOR THE WALL STREET JOURNAL



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THANKS!
