Business Dynamism Patterns of Child Care Establishments in the United States

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Why Study Rural Childcare?

Account

≣ ⊂, U.S.

The New York Times

Why You Can't Find Child Care: 100,000 Workers Are Missing

Where did they go? To better-paying jobs stocking shelves, cleaning offices or doing anything that pays more than \$15 an hour.

[🛱] Give this article 🔊 🗍 🖵 118



- Impacts on female labor force participation & entrepreneurship.
- Impacts on female labor productivity?
- Pandemic experience made clearer the importance of childcare.
- Current context of a labor shortage.

Roadmap

Our study: Descriptive study characterizing childcare availability:

- Measure stock of childcare establishments over time
- Map access to childcare establishments (drive time)
- Measure dynamism of childcare establishments over time
 - "Births" \rightarrow new entries
 - "Failures" \rightarrow new exits
- Multivariate model of county-level post-COVID (2020-21) childcare establishment rates
- Data limitation: establishment type (home vs. center) and capacity

Next steps: survival analysis (and causal model?)

Child Care Establishments Over Time



- NETS data: NAICS 624410
 - Nonemployer Statistics and County Business Patterns likely capture formal childcare providers.
 - NETS may be more inclusive?
 - Potential to compare NETS to state agency roster.
- Per children under age 5
 - Rural areas generally older.
- Childcare establishment declined *before* the pandemic.
- Declined by ~19% between 2014 and 2017.

Child Care Establishments Over Time



- Rural areas have more establishments.
 - Establishments more likely to be small.
 - Size has implications for capacity.
- Larger declines in nonmetro areas but gap persists.
- Small uptick in 2021?
 - Reported in Jan 2021
- NETS suggest minimal net change.
 - Childcare restricted by temporary closures during pandemic?

Disappearing Childcare in Rural Areas

Example: Vernon County, Wisconsin 2014





- Most (90%) of children under 5 are within 10 minutes of a childcare establishment.
- Nearly all children are within 20 minutes of a childcare establishment.

10-minute drive

15.7% of land mass 90.7% of kids under 5

20-minute drive

51.3% of land mass 99.6% of kids under 5

2014





- Similar results in Wisconsin.
- Rural-urban variation
 - Is the share within driving distance lower in rural areas?

10-minute drive 31% of land mass 93% of kids under 5 20-minute drive

71% of land mass 99.9% of kids under 5



2021

Declines in childcare are disproportionately impacting rural families.

8-year change:

1,509 fewer sqmi (66% rural)

5,038 fewer kids (62% rural)

10-minute drive

15.7% of land mass 90.7% of kids under 5

10-minute drive 13.5% of land mass 88.8% of kids under 5





8-year change:

1,945 fewer sqmi (70% rural)

6,368 fewer kids (66% rural)

10-minute drive 31% of land mass 93% of kids under 5

10-minute drive 27% of land mass 91% of kids under 5

Child Care Establishments by County in 2014



- Lots of spatial variation.
- Decline across the U.S.
- No clear spatial pattern:
 - Some clustering
 - State boundaries (i.e., policy discontinuities) are fuzzy

Child Care Establishment Entries and Exits



- Entry = first year establishment first appeared in dataset
- Exit = first year establishment was no longer present in dataset
- Modest increase in exit; includes pandemic but not specific to it
 - Exits decrease during pandemic.
- Entry declining pre-pandemic and persists.
 - Pandemic exacerbated trend but didn't create it?
 - Odd case: Spike in entry in OK in 2020

Child Care Establishment Entries and Exits



- Entry = first year establishment first appeared in dataset
- Exit = first year establishment was no longer present in dataset
- Metro and nonmetro entry track closely.
- Non-metro exits rate exceeds urban for 2020.
 - Why?

Post-COVID Failure Rates (2020-21)



- # of businesses whose final year in the dataset was 2019 or 2020 (divided by total for those years)
- Rural exit rates are higher than urban.
- Spatial variation present, but no clear patterns.
- R² was abysmal in multivariate regression attempts

Post-COVID Entry Rates (2020-21)



- # of businesses whose first year in the dataset was 2020 or 2021 (divided by total for those years)
- Multivariate regressions very weak (R² < 0.1)
- Significant coefficients for higher shares of single parent families and white-collar jobs in the county

Future Research

- Better data: use OK and WI data to identify exit and entry patterns by type and capacity
- Survival analysis: what is associated with longevity for rural childcare providers?
- Ideas for a causal inference paper (e.g., impact of a daycare closure on job loss?)



Thank you!

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Annual Establishment Counts, by Size



What is going on here?



Source: Oklahoma Human Services, Office of Child Care Services