# Did the Affordable Care Act reduce job lock and expand self-employment?

Julie Miller and Ryan Kurtzman

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## Outline

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#### Introduction

- ► The purpose of this analysis is to evaluate:
  - Affordable Care Act Medicaid Expansion on Health Insurance Job Lock Self-Employment
    - ▶ Diff in Diff using CPS data from 2008 to 2018
    - Result: Yes: There is evidence of health insurance job lock relief.
- What is Health Insurance Job Lock?
  - The reduction in worker job mobility from perceived risk of losing health coverage
- Why should we care?
  - Free labor mobility enables workers to choose better financial outcomes
  - Optimal skill match
  - Higher productivity
  - Increased labor supply

## Background: ACA Medicaid Expansion

- ► Affordable Care Act (ACA) signed in 2010, early Medicaid Expansion implementation in 2014
  - ▶ Medicaid income eligibility set at 138% Federal Poverty Line
    - For individuals: \$12,490 in 2019
    - Families: \$21,330 for family of three

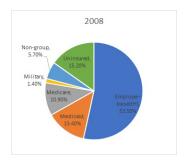


Figure 1: Percentages by insurance category, 2008

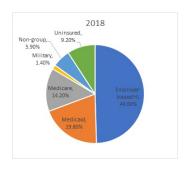
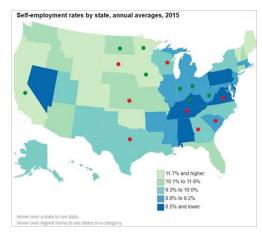


Figure 2: Percentages by insurance category, 2018

#### States Divided

- States were divided on Medicaid expansion adoption: opportunity for natural experiment
- 8 states that implemented expansion in 2014
- 8 states that never adopted expansion

Figure 3:



## Research Question and Knowledge Gap

- Is there evidence of health insurance job lock among self-employed workers and
- ► Is there evidence that the ACA Medicaid expansion alleviated job lock for low-income self-employed workers?

#### Data

- Integrated Public Use Microdata Series (IPUMS) compilation of the Current Population Survey (CPS):
  - Employee Tenure and Occupational Mobility Supplement (January)
    - ▶ Job Tenure & Occupational detail
- Annual Social and Economic Supplement (ASEC) (March)
  - Health Insurance source
  - Household Demographic Characteristics
- Years: biennial (2008, 2010, 2012, 2014, 2016, 2018)
- Removed NILF, part-time workers and unemployed

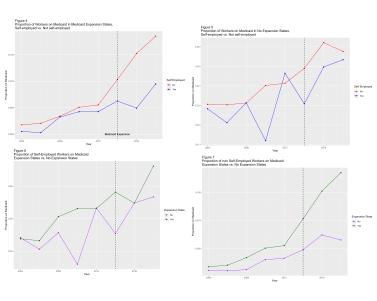
# Summary Statistics:

- Self-employed workers include
  - freelance workers,
  - entrepreneurs, and
  - workers with alternative work arrangements
- Self-employed workers
  - ► Tend to be older
  - Male
  - Smaller family size
  - More likely to be married

Table 1: Summary Statistics

Statistic	N	Mean	St. Dev.	Min	Max
HHINCOME	214,501	93,897.110	80,795.790	-18,800	1,409,645
AGE	214,501	40.539	13.411	15	85
FAMSIZE	214,501	3.594	1.651	1	13
NCHILD	214,501	1.245	1.327	0	9
HEALTH	214,501	2.066	0.912	1	5
self_emp	214,501	0.103	0.304	0	1
medicaid	214,501	0.049	0.216	0	1
married	214,501	0.670	0.470	0	1

# Trends in Self Employment & Medicaid Participation



Self employed workers use Medicaid proportionally less than the other workers, but there are clearly economic trends that influence participation.

## **Empirical Model**

- ▶ A difference-in-difference approach, with 2014 as the policy implementation year.
  - After-ACA-implementation period is interacted with the Medicaid expansion state dummy to capture the difference between year segments across state groups.

#### Equation 1: DD regression

```
Self — Employment<sub>i,s,t</sub> = \alpha + \beta_1(After ACA)<sub>t</sub> + \beta_2(Expansion State)<sub>i,s</sub> + \beta_3(After * Expansion)<sub>i,s,t</sub> + \delta X_{i,t} + \varepsilon_{i,s,t}
```

- ▶ Medicaid Expansion States, a dummy variable that identifies the eight states that implemented Medicaid expansion policies in 2014;
- ▶ After ACA, a dummy variable that captures the years following the implementation of Medicaid expansion (2014 through 2018); and
- $X_{i,t}$ , a vector of demographic characteristics including age, sex, education level, number of children present in household, self-rated health status, Medicaid participation, and a marital status dummy.

# Empirical Model Cont.

Equation 2: Fixed Effects for State and Year to adjust for economic factors

$$\begin{aligned} \textit{Self} & - \textit{Employment}_{i,s,t} = \alpha + \gamma_t + \lambda_s + \beta_1 (\textit{After ACA})_t + \\ \beta_2 (\textit{Expansion State})_{i,s} & + \beta_3 (\textit{After * Expansion})_{i,s,t} + \delta X_{i,t} + e_{i,s,t} \end{aligned}$$

 $ightharpoonup \gamma_t$  for year and  $\lambda_s$  for state

#### Results

- The interaction of After ACA and Expansion states shows a small but significant relationship in self-employment
  - 0.2% of self employment has increased as a result of Medicaid expansion – evidence of job lock alleviation
  - Age and Marriage are positively related to self employment – Marriage Lock?
  - Family Size inversely related with Self-employment – Job lock, but what kind?
  - Fixed effects increased the R<sup>2</sup>, had no effect on the analytical coefficients

Table 2: Regression Results

Self Em (1) -0.010*** (0.002) -0.005*** (0.002)	(2) -0.018*** (0.003) -0.040*** (0.004)
-0.010***	-0.018***
(0.002)	(0.003)
-0.005***	-0.040***
(0.002)	(0.003)
-0.005***	-0.040***
0.004***	0.004***
(0.0001)	(0.0001)
0.028***	0.027***
(0.002)	(0.002)
0.005***	0.005***
(0.001)	(0.001)
-0.001	-0.00000
(0.001)	(0.001)
-0.006***	-0.005***
(0.001)	(0.001)
0.007** (0.003)	0.009*** (0.003)
0.004	0.004
(0.003)	(0.003)
-0.050***	-0.040***
(0.003)	(0.004)
214,501 0.034	214,501 0.038 0.038
	0.028*** (0.002) 0.005*** (0.001) -0.001 (0.001) -0.006*** (0.003) 0.004 (0.003) -0.050*** (0.003)

Each entry represents OLS coefficients with standard errors in parentheses. Column 1 shows coefficients for the normal DD equation, column 2 includes state and year fixed effects.

### Limitations & Future Work

- ► Future work:
  - Additional work narrowing the population sample (age, income group) and expanding the sample size to more states could provide additional insight
  - Inclusion of job tenure indicators, longitudinal data to get individual effects, primary/secondary job fields identification, occupation or industry, may provide further insight

#### Limitations:

- We only capture the effect of Medicaid expansion on the self-employed, which limits findings to low-income self-employed.
- Marketplace health insurance data may provide more information in the future with other income groups
  - With marketplace insurance is available for up to 400% the FPL during pandemic years
  - ▶ 31% of Marketplace users are self-employed
- ► Alternative data sources may provide additional insights
  - ► ACS 1-year survey is heavily used by the KFF