



**JOHNS HOPKINS**  
BLOOMBERG SCHOOL  
*of* PUBLIC HEALTH

# The Long-Term Decline in Small Firms Offering Health Insurance: Drivers, Coverage Dynamics, and Costs

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**Mark Meiselbach, PhD and Jean Abraham, PhD**

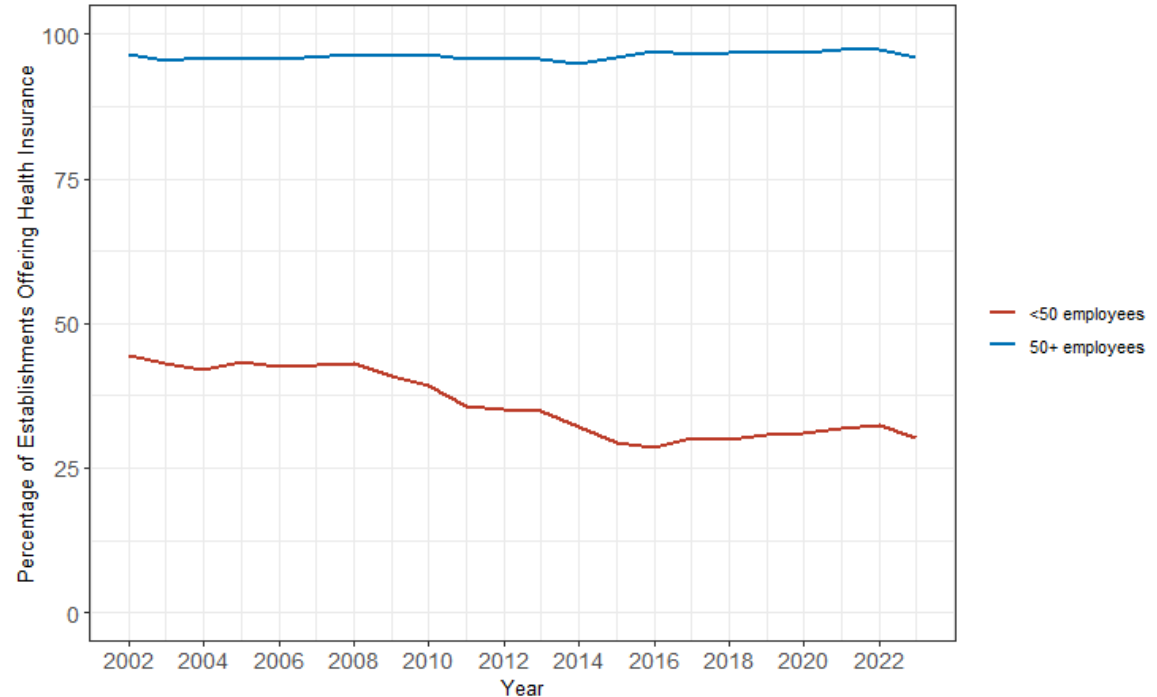
**October 24<sup>th</sup>, 2024**

# *The Long-Term Decline in Small Firms Offering Health Insurance:*

## *Background and Implications*

# Background: long-term decline in small group market

- In the US, the predominant form of health insurance is employer-sponsored health insurance [KFF, 2023]
- Roughly one-third of the private workforce in the US is in small firms [BLS, 2023]
- 12 million people in the US are enrolled in the small group market [MEPS-IC, 2023]
- There is a long-term decline in the percent of firms offering health insurance
- Yet, its drivers and consequences are not well-understood or documented



Source: Author's analysis of 2002-2023 MEPS-IC data

# Research focus of this project

## ➤ Describe trends

- Provide detailed accounting of state-to-state variation in the long-term decline in small firm offer rate
- Investigate relationship between decline in the pre- vs. post-ACA period
- **Findings:** substantial variation across states, pre- and post-ACA changes not correlated

## ➤ Investigate possible drivers of the trend

- Investigate influence of state policies and ACA-related regulations
- Summarize the extent to which these policies explain the decline
- **Findings:** Minimum wage increases, stop loss regulation, and pre-ACA community rating regulations all linked to declines

## ➤ Document dynamics

- Study how declines in small firm offer rates affect people's coverage
- How do changes in coverage translate to state expenditures?
- **Findings:** linked to decreases in employer-sponsored coverages, increased Medicaid (and expenditures) and individual coverage, and increases in uninsurance in non-expansion states

# Prior literature and contributions

- Descriptive evidence of the decline in small group health insurance
  - Long-term decline has been noted by many with concerns and attention towards to ACA [CBO, 2012; Buchmueller et al., 2013; Levin et al., 2015; Vistnes et al., 2017; David and Arensmeyer, 2018; Hall and McCue, 2018; Miller and Keenan, 2021; Banthin and Grazevich, 2022]
  - Mostly, finding that ACA has not led to the total collapse of the small group market
- Policies and regulation and small group health insurance
  - Small firms offers decline in face of price increases, regulation, and wage increases [Gruber and Lettau, 2004; Abraham, Feldman, and Grave, 2016; Hall and McCue, 2018; Meiselbach and Eisenberg, 2023; Meiselbach and Abraham, 2023]
  - Medium-to-large firms avoid regulation by self-funding [Jensen, Cotter, and Morrissey 1995; Park 2000; Garfinkel 1995, Nathenson, 2020; Robinson, 2023] and some evidence that this occurs among small firms as well [Trish and Herring, 2018; Fleitas, Gowrisankaran, and Lo Sasso, 2022; Meiselbach and Eisenberg, 2023]
- Market interactions between employer-sponsored insurance and Medicaid
  - Mixed evidence on whether Medicaid expansion has led to crowd out of employer-sponsored insurance [Wagner, 2015; Abraham et al., 2019; Ellis and Esson, 2021; Lennon, 2023]

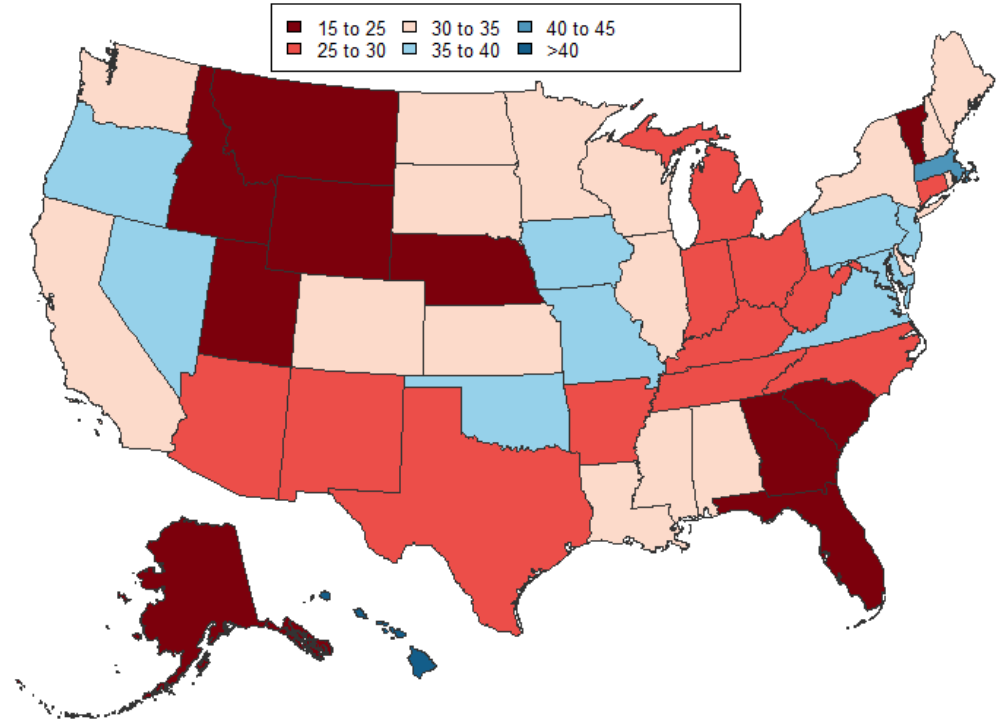
# *The Long-Term Decline in Small Firms Offering Health Insurance:*

## *Trends*

# Data: Medical Expenditures Panel Survey – Insurance/Employer Component

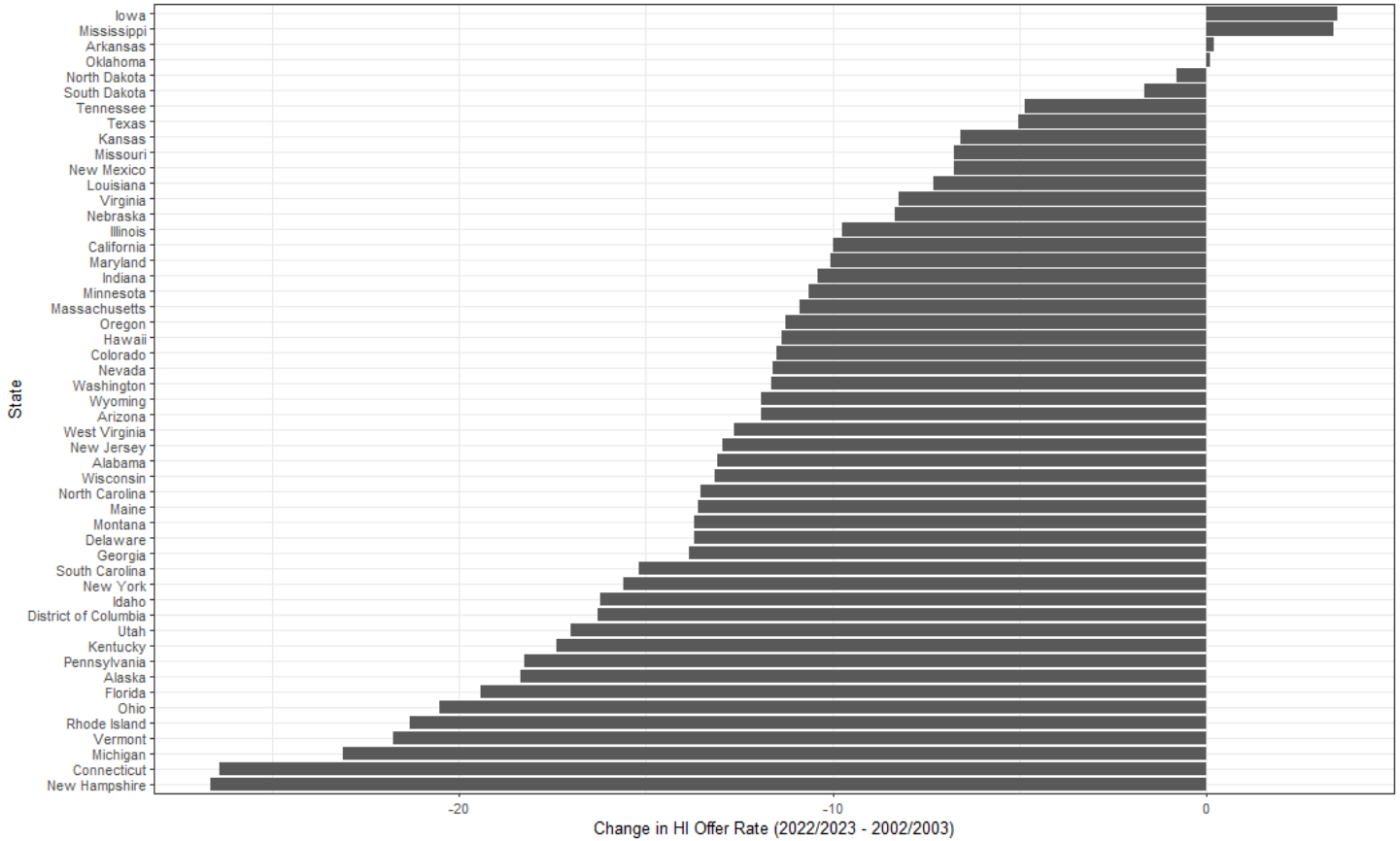
- We use 2002-2023 state-year estimates from the Medical Expenditure Panel Survey – Insurance/Employer Component (MEPS-IC)
- Largest, most comprehensive survey of ESI (40,000+ establishments per year)
- Sampling designed for making state level estimates
- Stratified by firm size (<50 vs. 50+), low-wage distribution (<50% vs. 50+% low-wage employees), industry grouping
- Focus on state-year estimates for firms with 50 or fewer employees

# Small firm offer rate by state, 2022/2023

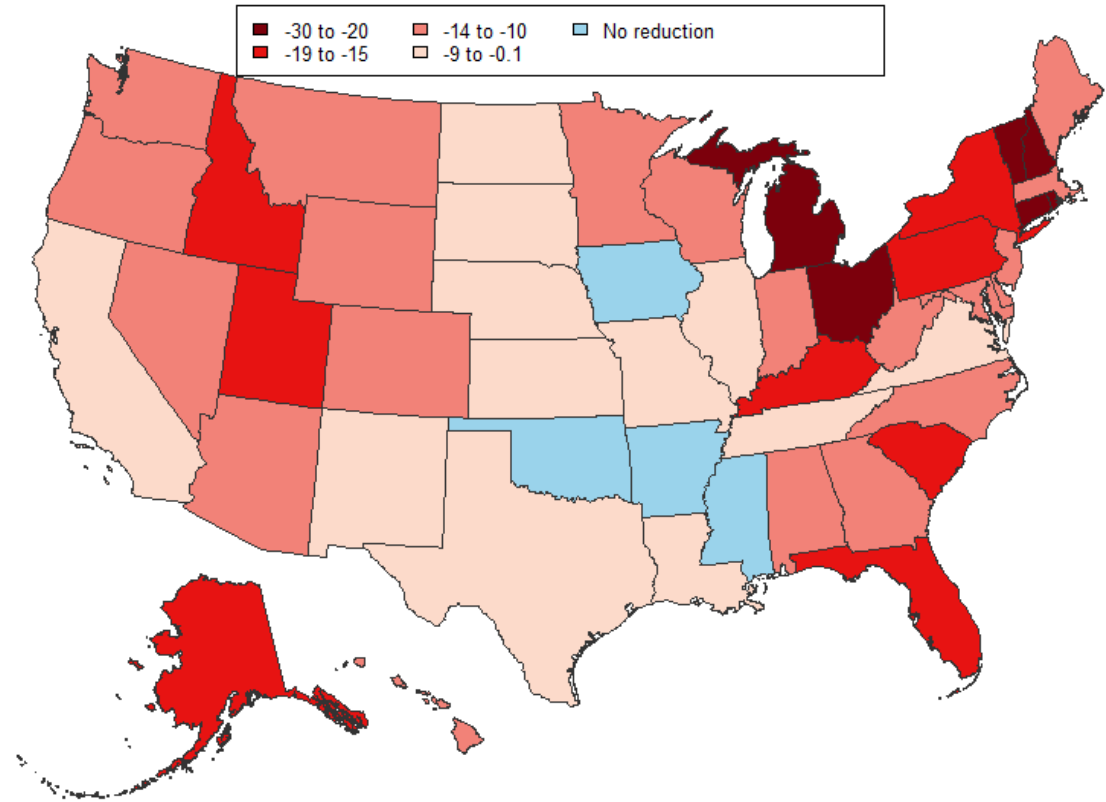




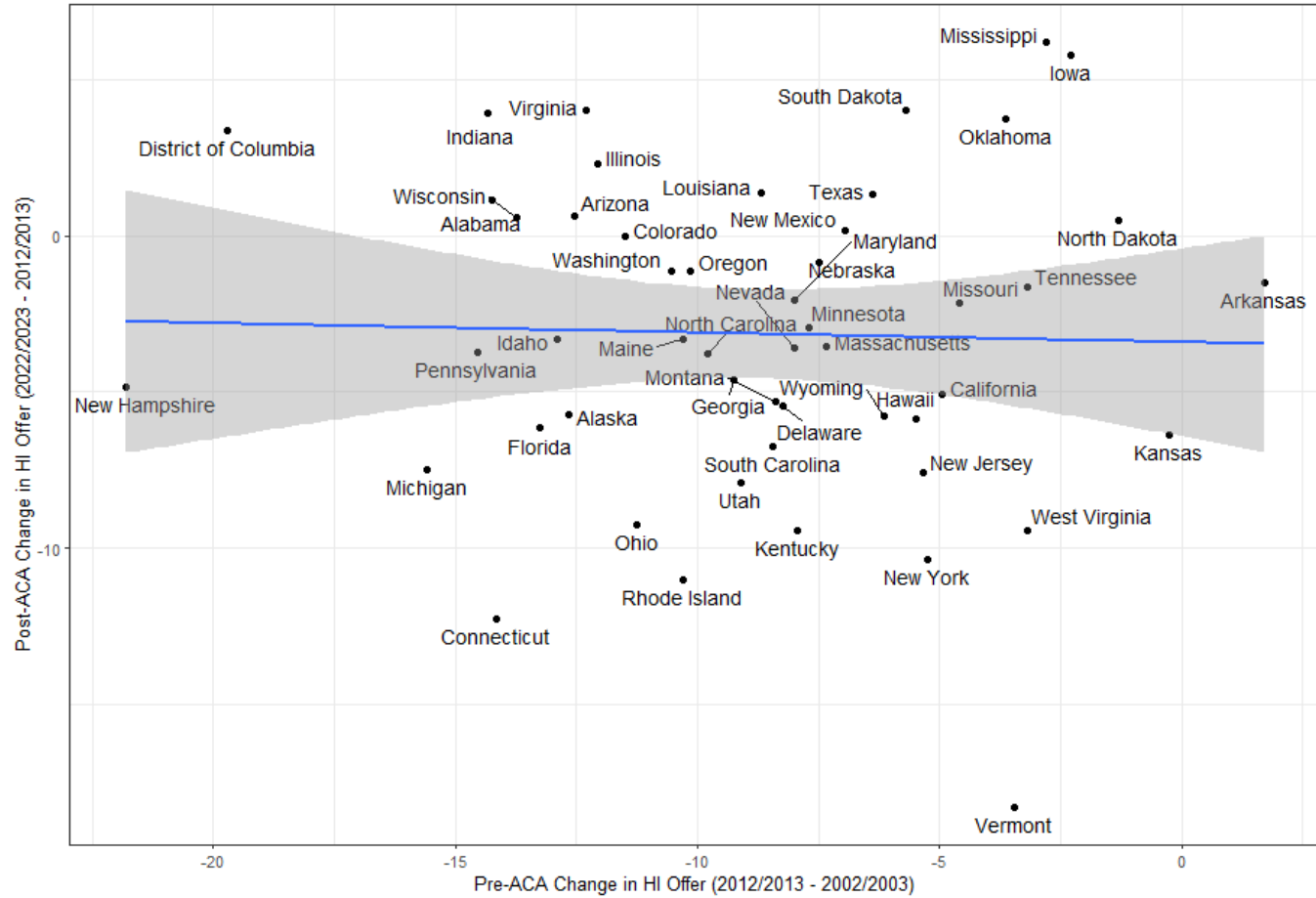
# Nearly every state has seen some decline from 2002 to 2023, with substantial variation



Percentage  
point change in  
the small firm  
offer rate by  
state from  
2002/2003 to  
2022/2023



# Changes in small firm offer rate pre- vs. post-ACA regulations



# *The Long-Term Decline in Small Firms Offering Health Insurance:*

## *Drivers*

# Empirical strategy: policy drivers

- Outcome: state-year small firm offer rate from MEPS-IC from 2002-2020
- Linked to state-year and national policy changes from 2002-2020
- For each policy, separately estimate difference-in-differences for state  $s$ , in year  $t$

$$OfferRate_{s,t} = \beta_0 + \beta_1 Policy_{s,t} + \beta_2 X_{s,t} + \alpha_s + \delta_t + \varepsilon_{s,t}$$

- Controls for state-year unemployment rate, Medicaid eligibility threshold for childless adult relative to Federal Poverty Level, and median income
- Regressions are weighted by the number of establishments in a state-year cell
- Estimated using Callaway and Sant'Anna estimator with state clustered standard errors with wild bootstrapping
- Always-treated states are excluded
- Also use the Callaway and Sant'Anna estimates for event study analyses

# Empirical strategy: investigated policies

- State minimum wage increases (source: University of Kentucky National Welfare Data)
  - 30 states and DC have minimum wages above the federal
  - Modeled as first implementation of increase and as continuous
- Stop loss regulation (source: National Association of Benefits and Insurance Professionals)
  - Firms can avoid state health insurance regulation by self-insuring their plans
  - Stop loss policy is typically purchased with plan to protect against financial risk to firm
  - States regulate stop loss policies for small group, requiring they take on some amount of risk (i.e., no “level-funding”)
- Pre-ACA community rating regulations (source: KFF pre-ACA archives)
  - Limits premium variation based on health status/experience rating

# Empirical strategy: investigated policies (continued)

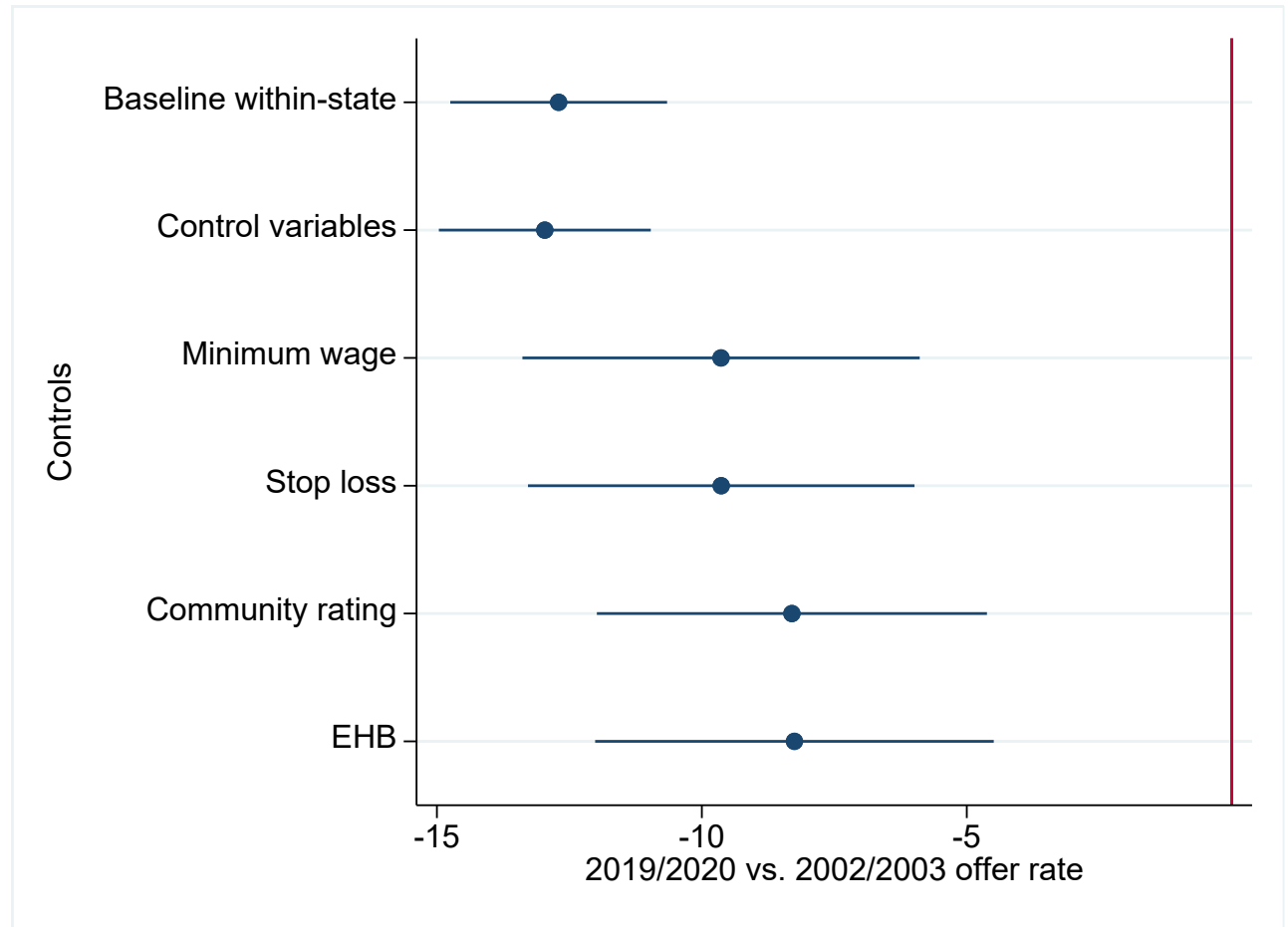
- Pre-ACA benefit mandates (source: BCBS reports)
  - States require small group plans to cover select services (e.g., rehabilitation services)
  - Focus on “costly mandates” following Robinson (2023), with expected impact >1% on premiums
- Post-ACA essential health benefits requirements and community rating (source: CCIO and KFF pre-ACA archives)
  - In 2014, ACA standardized required benefits, but left some discretion to states on specific services included in EHB
  - Also, implemented community rating regulations, but some states already had those policies in place

# Difference-in-differences analysis of small firm offer rates vs. individual state policies

VARIABLES	(1) Minimum wage increase	(2) Minimum wage increase	(3) Stop loss regulation	(4) Pre-ACA community rating regulations	(5) Pre-ACA “costly” mandates	(6) Post-ACA EHB includes dental, vision, and habilitation	(7) Post-ACA community rating regulation
Policy ATT	-3.41** (1.63)		-1.72** (0.82)	-1.97* (1.14)	0.63 (0.77)	-0.43 (1.86)	1.07 (0.86)
Minimum wage (\$)		-0.96** (0.45)					
State-year observations	534	910	667	492	307	608	752



# Difference in 2019/2020 offer rate vs. 2002/2003, conditional on policy controls



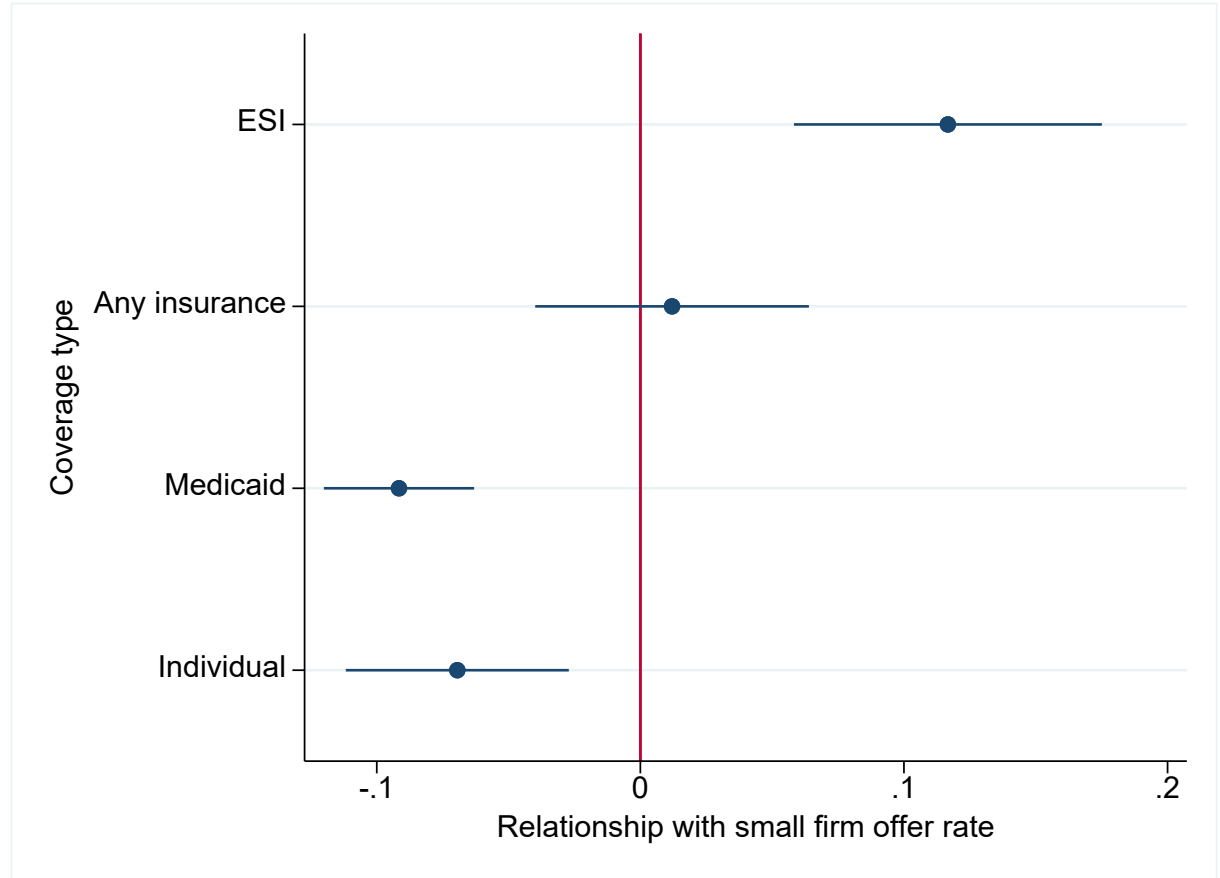
# *The Long-Term Decline in Small Firms Offering Health Insurance:*

*Coverage dynamics*

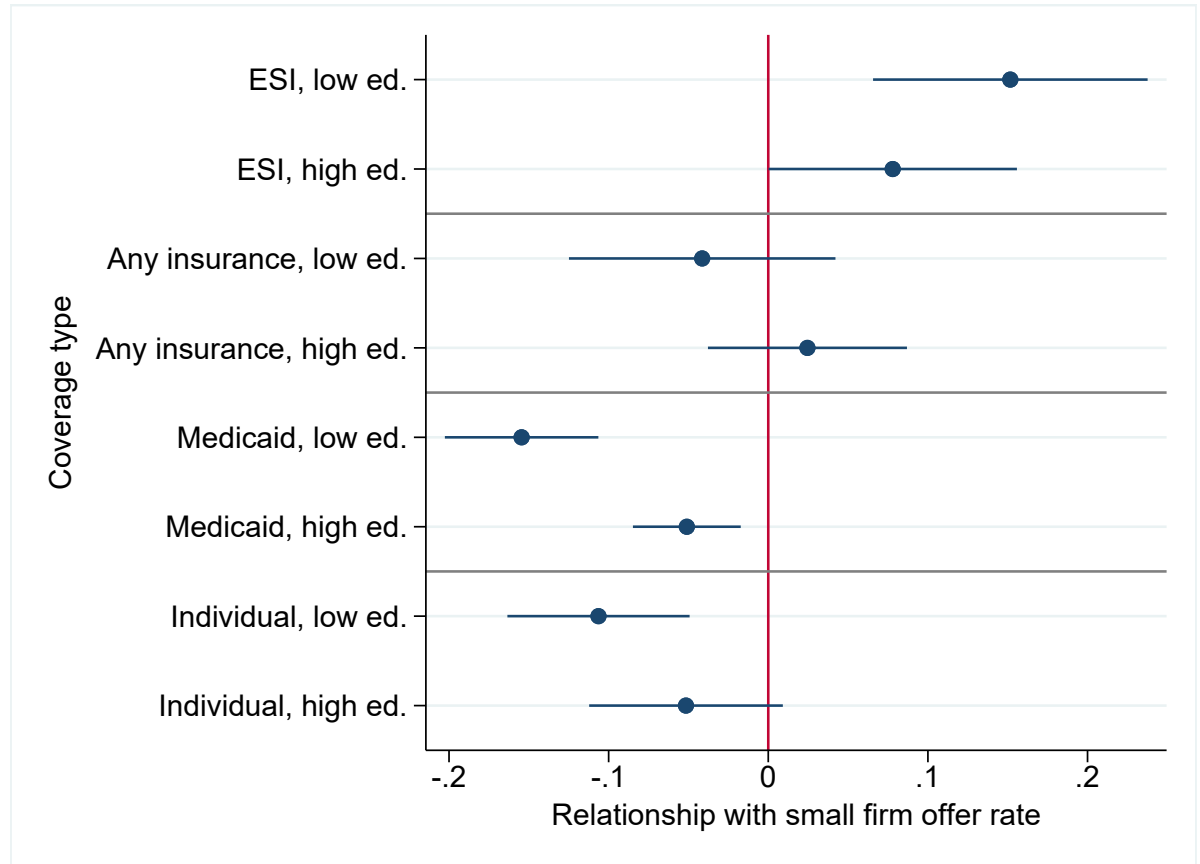
# Empirical strategy: coverage dynamics

- Outcome: binary person-year level coverage source (any coverage, employer-sponsored insurance, Medicaid, or individual)
  - Data: 2002-2018 Current Population Survey Annual Social and Economic Supplement (CPS-ASEC)
  - Sample: limited to respondents who work at small firms, between ages 18-64
- Linked to state-year small firm offer rate from MEPS-IC
- For each coverage outcome, for respondent  $i$ , in state  $s$ , in year  $t$ 
$$Coverage_{i,s,t} = \beta_0 + \beta_1 SmallFirmOfferRate_{s,t} + \beta_2 X_{i,s,t} + \alpha_s + \delta_t + \varepsilon_{i,s,t}$$
- $SmallFirmOfferRate_{s,t}$  is specified as a proportion
- Controls for state-year unemployment rate, age, firm size
- Regressions are weighted using CPS-ASEC population weights
- Stratified regression models for education levels and state Medicaid eligibility

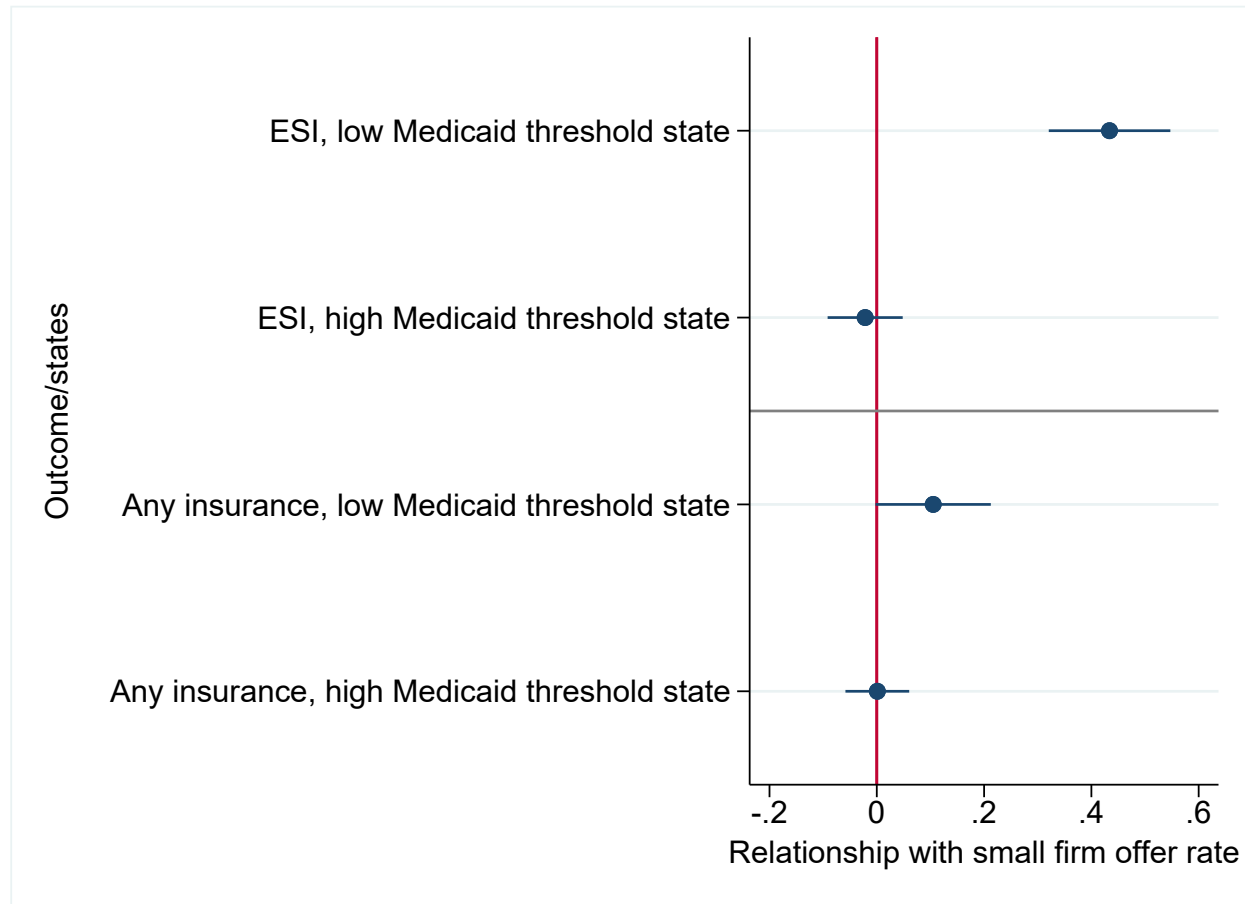
# Relationship between within-state changes in small firm offer rate and coverage, 2002-2018



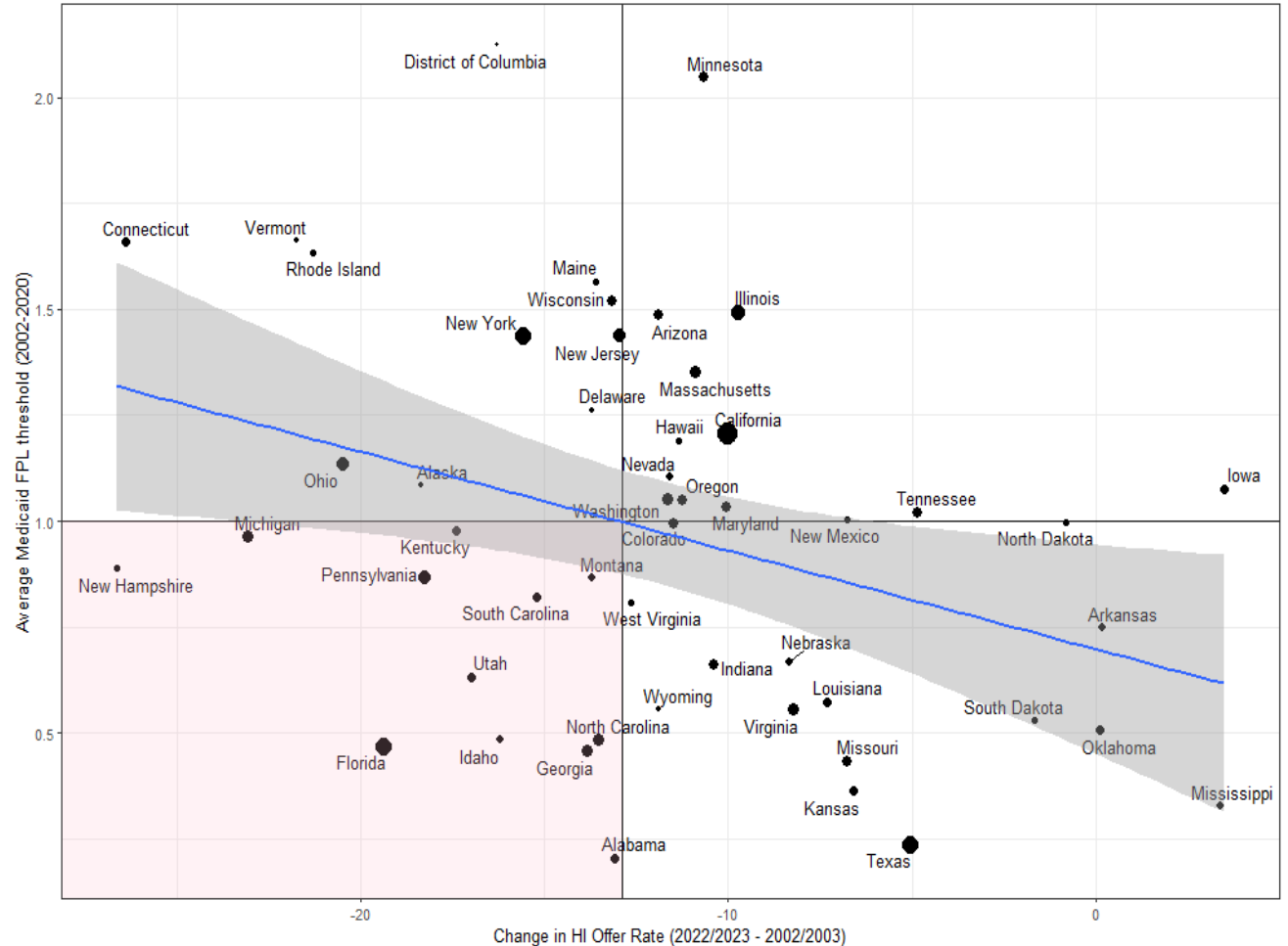
# Relationship between within-state changes in small firm offer rate and coverage, 2002-2018, by education status



Relationship between small firm offer rate and coverage in states that have never had Medicaid thresholds  $\geq 100$  FPL vs. those that have



# Medicaid threshold in 2019-2020 vs. change in small firm offer rate over study period



# *The Long-Term Decline in Small Firms Offering Health Insurance:*

## *Costs*



# Empirical strategy: costs

- Outcome: state-year level Medicaid expenditures per state population (total, state, and federal)
  - Data: 2002-2020 National Association of State Budget Officers (NASBO) expenditure reports
- Linked to state-year small firm offer rate from MEPS-IC
- For each outcome in state  $s$ , in year  $t$

$$MedicaidSpendingPC_{s,t} = \beta_0 + \beta_1 SmallFirmOfferRate_{s,t} + \beta_2 X_{s,t} + \alpha_s + \delta_t + \varepsilon_{i,s,t}$$

- $SmallFirmOfferRate_{s,t}$  is specified as a percentage
- Controls for state-year unemployment rate, Medicaid eligibility threshold for childless adult relative to Federal Poverty Level, and median income
- Include interactions for ACA Medicaid expansion

# State Medicaid expenditures per capita vs. small firm offer rate

VARIABLES	(1) Total	(2) Total	(3) State	(4) State	(5) Federal	(6) Federal
Small firm offer rate (%)	-4.32** (1.75)	0.23 (2.34)	-0.01 (0.98)	0.38 (0.96)	-4.47*** (1.63)	-0.67 (1.64)
Small firm offer rate X Medicaid threshold $\geq$ 138 FPL		-13.51*** (2.56)		-0.90 (0.69)		-8.69*** (1.21)
Observations	995	995	995	995	995	995
Mean Y	1416	1416	396.5	396.5	896.2	896.2

# *The Long-Term Decline in Small Firms Offering Health Insurance:*

*Conclusions, Implications, and Next Steps*

# Conclusions and implications

- Though decreasing in nearly all states, there is substantial variation state-to-state in the decline of employer-sponsored insurance from small firms
- Pre-ACA-related decline mostly uncorrelated (or inversely correlated) with post-ACA decline
- Policy choices have likely contributed to the long-term decline of the small group market
- However, when supplemented with robust Medicaid and individual marketplace, declines may not lead to coverage losses
- The total tax/cost implications are not yet clear, as it requires further understanding of the impact to marketplace subsidies and employer tax exemptions
- The welfare implications also depend on patient preferences and cost-sharing arrangements across market segments

# Appendix



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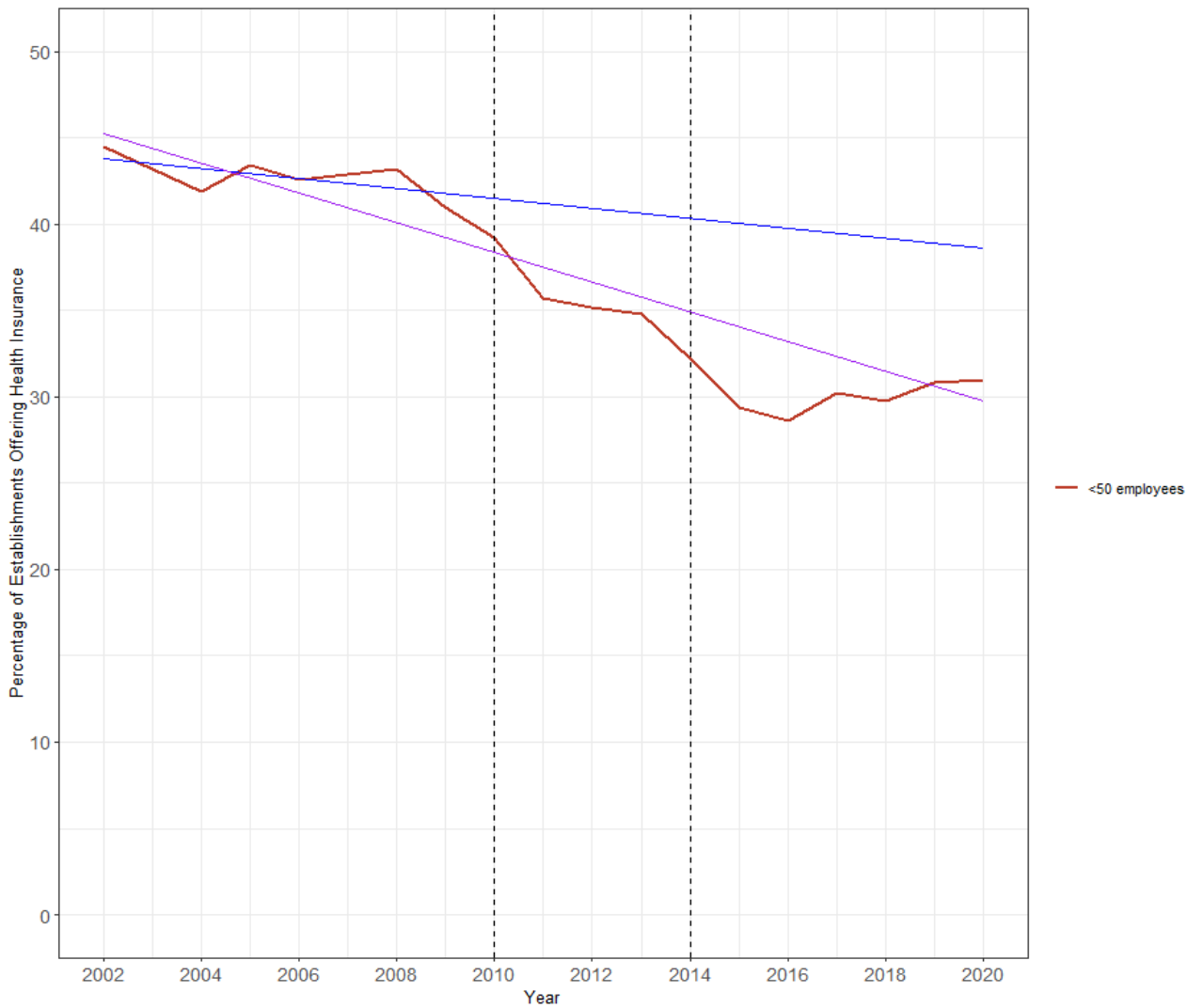
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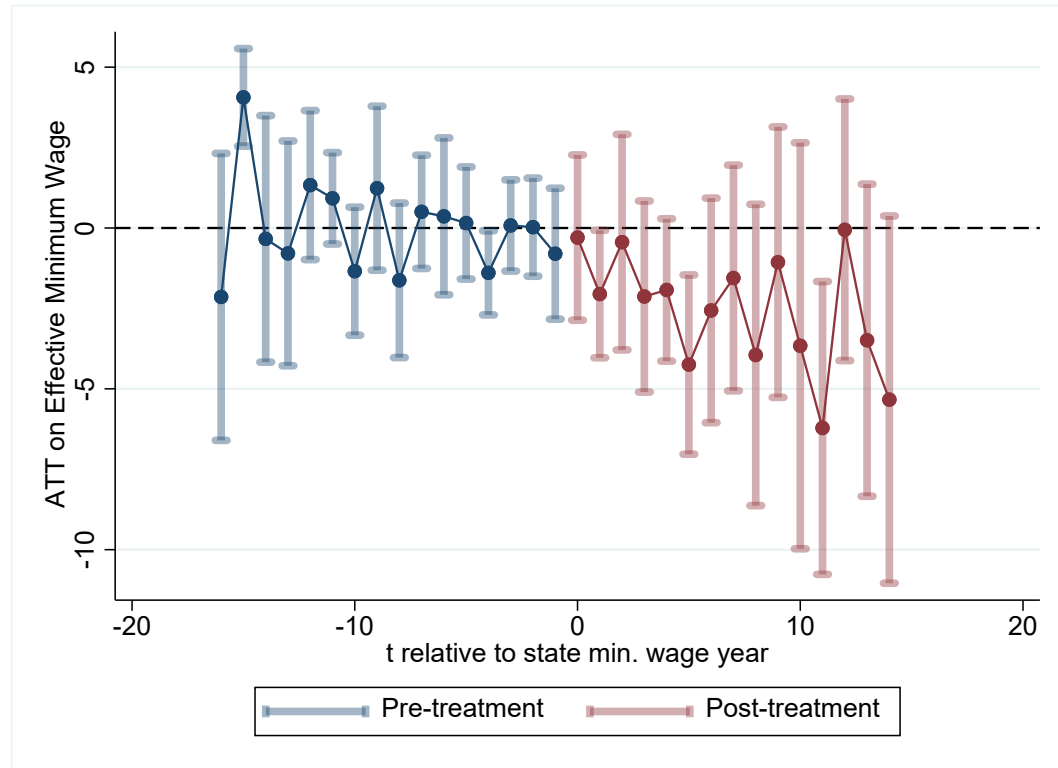
# National ACA-relat



# National ACA-related changes

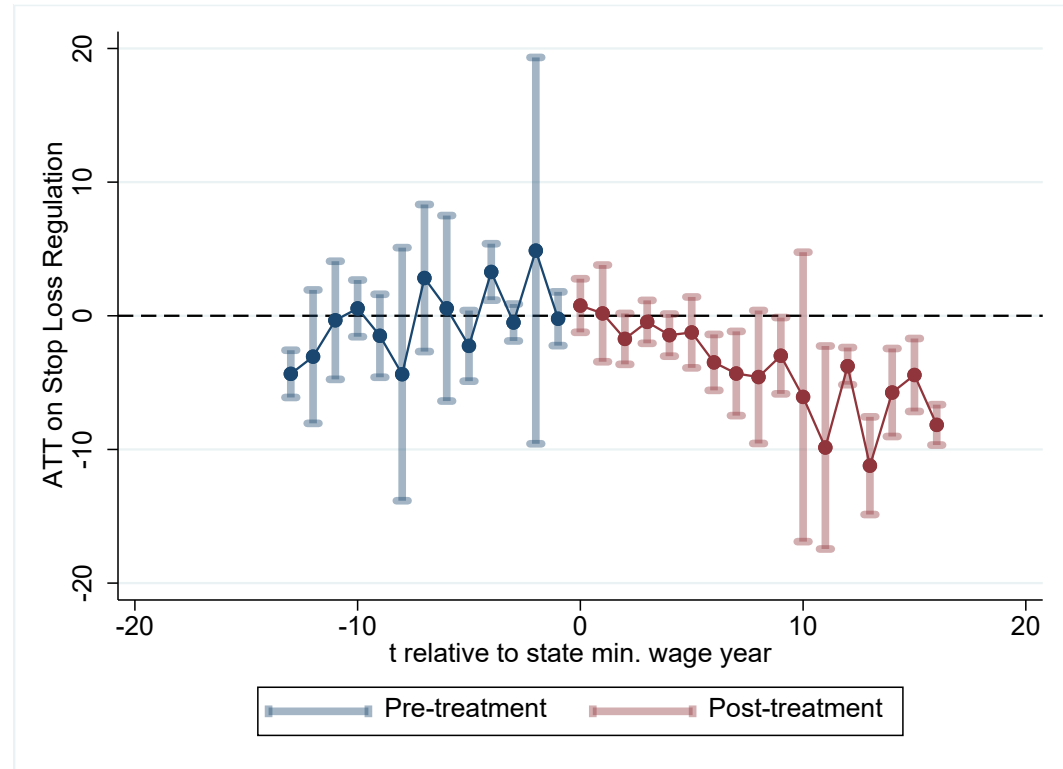
VARIABLES	(1) Small firm offer rate	(2) Small firm offer rate	(3) Small firm offer rate	(4) Small firm offer rate
Small firm X post-2010	-6.61*** (0.53)	-6.43*** (0.49)	-2.92*** (0.68)	-6.45*** (0.49)
Small firm X post-2014	-6.13*** (0.55)	-5.25*** (0.63)	-3.40*** (0.75)	-5.25*** (0.63)
Observations	2,126	2,126	2,126	2,126
R-squared	0.98	0.98	0.94	0.93
Comparison	Above vs. below 50 in same state	Above vs. below 50 in same state	Below 25 vs. 25-99 in same state	Below 25 vs. 25-99 in same state
Time control	Year FEs	Size specific linear trend	Year FEs	Size specific linear time trend

# Event study – minimum wage increases



[Difference-in-differences](#)

# Event study – stop loss regulation



# Event study – community rating regulation

