

Medicaid Expansion and Parental Health Insurance

Francisco A. Bullano*

[Click here for most recent version](#)

September 25, 2023

Abstract

This paper examines how the Medicaid expansion in the late 1980s and early 1990s impacted parents' health insurance coverage when their children became eligible. Using age eligibility restriction as an identification assumption, I find that while the expansion significantly increased the number of parents with children covered by Medicaid, it also substantially reduced parents' private insurance coverage. For mothers, the private insurance decline is, to a large extent, crowded out by public insurance. However, for fathers, it largely reflects a decrease in health insurance coverage. Overall, I find that Medicaid expansion explains almost 45% of the decline in private insurance in this period and accounts for nearly 30% of the increase in the uninsured. These findings emphasize the importance of considering health insurance decisions at the household level rather than just the individual level when designing policies.

1 Introduction

In the United States, the Omnibus Budget Reduction Act (OBRA) of October 1986 marked the beginning of a series of legislative efforts to expand public health insurance for low-income children. This Act allowed states to loosen traditional Medicaid eligibility and establish new eligibility

*University of Minnesota, bulla083@umn.edu. I am especially grateful to my advisors Mariacristina De Nardi, Jeremy Lise and Joseph Mullins for their continuous encouragement and support, as well as for very thoughtful discussions. I am also grateful to Andrew Goodman-Bacon, Martin Garcia Vazquez, Xavier Reinero, Maria Emilia Bullano, Margherita Borella and Eugenio Giolito for very useful discussions, and to Johanna Torres Chain for her very useful comments and infinite support. All errors are my own.

guidelines for targeted family members. Further legislative changes during the late 80s expanded Medicaid eligibility for low-income children, rendering older and less impoverished children eligible, irrespective of their parent's eligibility status.

Coinciding with this period, the dynamics in the health insurance market for parents were vertiginous. From 1987 to 1993, the share of parents aged 25-64 with private health insurance declined by 5.5 percentage points (pp), from 81.7 % to 76.2 %. This decline was partially offset by an increase in public coverage of 2.6 pp, from 10.9 % to 13.5 %. As a result, the percentage of parents without health insurance coverage escalated 3.3 pp, from 10.1% in 1987 to 13.4% in 1993.

This paper examines how the Medicaid expansion in the late 1980s and early 1990s impacted parents' health insurance coverage when their children became eligible. I rely on an Event Study Difference in Difference strategy to estimate the impact of Medicaid expansion on parents' health insurance decisions. I compare within-state relative outcomes between the control and treatment parents' groups before and after the policy change. To construct those groups, I exploit children's birth year restrictions for Medicaid eligibility. Medicaid reforms during this period¹ primarily expanded coverage to children born after September 30, 1983, providing a natural framework to identify potentially treated families. To assign treatment dates, I rely on simulated eligibility, a measure of Medicaid eligibility driven by policy. Under parallel trend assumption between groups, my research design allows identifying the effect of Medicaid expansion on Parental health insurance outcomes. I find the expansion significantly increased the number of parents with children covered by Medicaid and substantially reduced parents' private insurance coverage.

My results suggest that Medicaid expansion for children accounts for a significant share of the observed trends in the health insurance market for parents. Medicaid expansion accounts for a 2.5 pp decrease in parental private insurance coverage. This reduction accounts for nearly half of the observed decline. Additionally, Medicaid expansion contributes to a 1.6 percentage point increase in public health insurance coverage, representing almost 60% of the total observed increase in this category. Consequently, the expansion explains a 1 pp rise in parents without health insurance,

¹This includes OBRA 1986, OBRA 1987, MCCA 1988, OBRA 1989, and OBRA 1990. Further details in Appendix B

constituting nearly a third of the observed decline in insurance coverage in this period.

Gender-based analysis shows heterogeneous effects: While mothers register a significant crowding out of private insurance, fathers are less likely to have health insurance. My main hypothesis behind this fact is that pregnant women also became a targeted population of Medicaid expansion. This implies that combining both policies - encompassing coverage for children and mothers - stimulates potent incentives for reducing private coverage in favor of the surge of public insurance. However, since fathers are typically ineligible for Medicaid under this expansion, this drop translates to an increase in uninsured individuals.

This paper contributes to several strands of the literature. First, it enriches the discourse on Medicaid expansion and the crowding out of private health insurance. After OBRA 1986 and the subsequent Medicaid reforms, there has been an enormous effort to quantify how those affect coverage for children. [Cutler and Gruber \(1996\)](#) find that Medicaid expansion increases children's coverage but crowds out children's private insurance. Since then, many researchers have examined the same question, reaching mixed results about crowd-out estimates. [Gruber and Simon \(2008\)](#) provides a comprehensive survey about them and additional evidence of this mechanism. This paper presents a novel perspective: First, it departs from using simulated eligibility as an instrument for eligibility to evaluate this effect. Instead, I rely on simulated eligibility to assign treatment dates by state similarly to [East et al. \(2023\)](#) and exploit Medicaid expansion characteristics to set up an event study framework to untangle Medicaid eligibility expansion effects. Secondly, it investigates the effect of child eligibility on parental outcomes and, hence, a spillover effect rather than a direct one.

The second related strand of literature focuses on the determinants of the uninsurance rate for the working-age population from the late 1980s until the introduction of the Affordable Care Act in 2010 when extensive regulatory transformations were introduced within the health insurance market.

During this period, the increase in the fraction of adults without health insurance was substantial, and researchers have a limited understanding of the main drivers of the observed trend. [Gruber](#)

(2008) provides a survey about how the literature has tried to tackle this question and points out that the behavior of this trend is puzzling. Hai (2015) present a novel perspective and analyze the underlying trend under the lens of a structural model with endogenous health insurance choice. The author concludes that the rise in healthcare costs and skill-biased technological change account for a sizeable share of the observed trends. Yet, this study narrowly focuses on the decline of private insurance and abstracts from family-level interrelationships, missing any incentives generated by Medicaid expansion on children.

Similarly, Zhao (2017) uses a structural model to analyze the impact of social insurance policies- such as Medicaid- on savings, health insurance, and labor-supply decisions in a stationary environment. He finds that such policies have large effects on the demand for private health insurance. His results emerge from steady state comparison, which lacks accounting transition dynamics and doesn't provide supportive empirical evidence.

My results align with these conclusions and provide empirical evidence of this mechanism. By exploiting Medicaid children's age eligibility restriction during the late 80s and early 90s, I assess the effects of children's Medicaid expansion on parental health insurance outcomes in a reduced-form fashion. My results provide empirical evidence of a significant reduction in private insurance, with a corresponding increase in the uninsured when public insurance is not offered as an option.

Finally, to the best of my knowledge, Koch (2015) also documents this spillover effect of public health insurance coverage for children. The author also analyzes the effect of Medicaid coverage for children on parents' outcomes and finds that Medicaid coverage for children decreases parents' private insurance. However, our papers differ in different ways. First, our identification strategy is different. While he relies on a regression discontinuity design based on income discontinuity of Medicaid eligibility, I exploit children's year of birth eligibility rules in an Event Study design. Also, since I exploit time variation in the Medicaid rules during the late 80s and early 90s, I quantify the effect of this expansion on the observed trends. Finally, I believe our papers should be seen as complements of each other. Even though our results are not quantitatively comparable, we reach similar qualitative conclusions.

The rest of the paper is structured as follows. Section 2 briefly overviews Medicaid expansions during the late 80s and early 90s. Section 3 outlines my methodology and describes the data. Section 4 presents the baseline results and the robustness exercises. Section 5 presents a discussion of the results and its implications. Finally, Section 6 concludes.

2 Expanding Medicaid for children

Established in 1965, Medicaid was a joint federal-state program aimed at providing health insurance to impoverished adults and their dependent children. In the early years, Medicaid coverage was at the family level, and family eligibility was typically tied to the State Aid to Families with Dependent Children (AFDC) eligibility. As a result, eligibility guidelines were heterogeneous across states. The first notable expansion of Medicaid for children began in October 1986. OBRA 1986 marked the first endeavor to detach Medicaid eligibility from AFDC guidelines by establishing specific income thresholds for targeted individuals within the family and leveling up Medicaid eligibility rules across states.

Under this act, states had the option to cover children up to 5 years old and pregnant women with income up to 100% the Federal Poverty Line (FPL), regardless of the father or mother's own eligibility. The program started by covering children under one year old and then gradually incorporated older children on yearly basis.² Subsequently, the OBRA of 1987 presented states with the option to raise the income eligibility threshold to 185% of the FPL and to expedite the phase-in process started with OBRA 1986.³

Then, the Medicare Catastrophic Coverage Act (MCCA) of 1988 mandated states to cover pregnant women and infants from families with income up to 100% FPL.⁴ The OBRA 1989 required states to cover pregnant women and children up to 6 years old with a family income up to

²Under OBRA 1986, the oldest cohort covered were children born on October 1, 1985.

³Those states that took advantage of this option accelerated the phase-in process, resulting in the oldest cohort covered being children born on October 1, 1983.

⁴The MCCA 1988 was implemented in a two-year gradual process. It requires states to cover the targeted group up to 75% of the FPL by July 1989, and up to 100% of the FPL by July 1990.

133% of the FPL.⁵ Subsequently, OBRA 1990 required states to cover children born after September 30, 1983, in families with income up to 100%. This act aimed to provide coverage for all children by the year 2002.⁶ However, in 1997, the State Children’s Health Insurance Program was launched, giving states the choice to cover children under 19 years in families with income up to 185% of the FPL. A comprehensive detail of each mentioned legislation can be found in [B](#).

Federal acts and state adoptions did not occur simultaneously. Even though the federal government was committed to expanding coverage for children, adoption and eligibility criteria were ultimately determined by states. Specific federal guidelines, such as OBRA 1988, MCCA 1989, and OBRA 1990, provided a lower bound for eligibility criteria, but states had the liberty to expand upon these criteria. [Table 25](#) provides a comprehensive breakdown of changes in income eligibility thresholds for children in each state as a result of all the legislative changes mentioned.

A distinctive feature of this expansion is that starting with OBRA 1986, the oldest targeted cohort of children were those born on October 1st, 1983, or after. Older cohorts typically qualified for Medicaid through AFDC eligibility. This regulatory characteristic provides a natural framework to assess the effects of increasing eligibility for children. The targeted nature of the Medicaid expansion, along with the variation in implementation timelines across states, offers an adequate framework to study Medicaid eligibility expansion for children on parents’ outcomes. The following section provides details of the empirical strategy.

3 Empirical Strategy

To estimate the impact of Medicaid expansion for children on parental health insurance decisions, I follow an Event Study Difference in Difference strategy. The late 80s and early 90s brought about a wave of heterogeneous Medicaid expansion across states, with numerous reforms occurring in tandem and targeting diverse populations. Additionally, states also exhibited a variation in pre-expansion AFCD guidelines, indicating that the impact of the expansion on eligibility criteria for

⁵Effective date April 1990. The oldest cohort affected by this policy were children born on April 1, 1984.

⁶Dependent children up to 19 years old.

Medicaid might have differed across states due to their initial differences in AFDC guidelines. For instance, if a state chose to adopt the flexibilities offered by OBRA 1987, the effects would markedly vary depending on whether the state's pre-AFDC eligibility criteria were close to 100 % or 50 % of the FPL.

To deal with this heterogeneity, I establish an event study focusing on two features of Medicaid expansion. First, I isolate significant changes in eligibility driven by policy change. And second, I isolate a subset of the population the expansion specifically targets. Finally, I compare the relative outcomes of those groups before and after the policy change to identify the effects of this expansion.

To isolate significant changes in eligibility rules, I adopt a similar approach as in [East et al. \(2023\)](#) by utilizing simulated eligibility to assign treatment dates. To construct within-state control and treatment groups, I consider children's birth year and eligibility age restrictions from Medicaid Expansion. The rest of this section explains the methodology used to determine treatment dates, the composition of control and treatment groups, and the data used to perform this analysis.

3.1 Data

To estimate the impact of Medicaid expansion for children on parental health insurance outcomes, I need a dataset that unifies household income and composition measurements for eligibility determination. The Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) provides an excellent resource for this analysis. This survey offers a comprehensive view of all states in the United States through a nationally representative sample. It captures individual-level data, such as age, gender, household relationships, state of residence, income, and health insurance coverage, and its sources for each household member.

As many researchers studying health insurance decisions point out, there is a discrepancy between the household definition used in the Current Population Survey (CPS) and the definitions utilized by health insurance and public health insurance programs. I stick to the literature and conduct my analysis at the Health Insurance Unit (HIU) level. The HIU encodes family relation-

ships relevant to health insurance coverage and eligibility criteria, allowing for a more accurate and consistent assessment of health insurance outcomes.⁷

To construct my eligibility measure, I need Medicaid eligibility rules by the state during my period of analysis. The BLK Medicaid Calculator (Brown et al. (2020)) provides this background but only for selected cohorts of children. I extend their analysis to adapt it to my environment by referring directly to their data sources. Appendix B contains additional information.

3.2 Treatment and Control Groups

The Medicaid expansion for children was a phase-in process, beginning with OBRA 1986, that untangled eligibility for low-income children from AFDC eligibility criteria. Starting in April 1987, this act offered states the option to elevate income eligibility thresholds above AFDC levels to as high as 100% of the Federal Poverty Line (FPL) for pregnant women, infants, and, on a yearly basis, children up to 5 years of age from October 1987. Subsequent legislative changes widened both age restrictions and income eligibility. A shared characteristic across all late 80's expansion efforts is that state coverage for low-income children targeted those born on or after October 1st, 1983. Older children were Medicaid-eligible under AFDC guidelines.

Ideally, the treated groups would be compounded by parents with at least one child born on or after this date. However, as the CPS only offers information about the age of children, I can only recover the year of birth. Consequently, I categorize the treated group as parents with at least one child born in 1984 or later. The control group includes parents with children born before 1984.

There are two potential threats to identification that exist within this design. The first is that the control and treated groups differ in their underlying composition, which may lead to a potential violation of parallel trend assumption between the control and treated group. To address this issue, I conduct several robustness exercises to verify the validity of my research design by exploiting the income dimension of Medicaid eligibility. I test for differences across control and treatment

⁷For more detailed information on the construction of the Health Insurance Unit (HIU), the reader can refer to the IPUMS website at https://cps.ipums.org/cps-action/variables/HIUID#description_section

groups of parents conditional on income. I find significant differences between groups within targeted income groups by Medicaid expansion, while no effect between groups with non-targeted income levels, suggesting that the age composition of children alone didn't drive the observed trends, therefore finding no evidence of a violation of parallel trend assumption across groups. The second threat is that many states started expanding coverage during 1993 to children born before October 1st, 1983, leading to potential contamination for the control group after this year. To deal with this, I restrict my analysis period to 1987 to 1993. This period minimizes the likelihood of policy-induced contamination in the control group.⁸

Finally, and related to the first concern, since treatment and control group are defined based on children's birth year, the control group exhibit a substantial size reduction when their children turn 18 and exit the sample. Restricting my analysis to the 1987-1993 period ensures both groups are similar in size.

3.3 Assigning Treatment Date

To isolate significant changes in eligibility rules, I apply simulated eligibility to assign treatment dates similarly to [East et al. \(2023\)](#). I calculate a measure of Medicaid eligibility based on the state's specific pre and post-expansion guidelines, keeping population characteristics fixed. This allows me to identify significant changes in the state's Medicaid eligibility induced by changes in policy independently of the state's specific demographic characteristics and pre-expansion conditions. Specifically, I construct the share of parents whose child/children are Medicaid eligible over time for a fixed sample of individuals. Additional details can be found in [Appendix B](#).

Figure 9 depicts simulated eligibility by state from 1984 to 1993. Based on this measure, I grouped states using a simple criterion: When did the state evidence a significant increase in simulated eligibility? As depicted, states evidenced increased eligibility in 1987, 1988, 1989, and 1990, with only two states experiencing an increase in simulated eligibility in 1985 and 1986.⁹

⁸Results suggest that expansion takes time to take off. Therefore, the control group is more likely to be contaminated by the policy departing 1994, while I expect negligible effects in 1993.

⁹Those states showed abrupt changes in eligibility due to changes in AFCD guidelines before OBRA 1986

Table 26 shows the resulting assigned expansion date by state. Finally, the top panel of Figure 12 offers a summarized quantification of simulated eligibility dynamics using this grouping approach, revealing the staggered adoption of Medicaid expansion across states. In contrast, the bottom panel showcases its corresponding event study dynamics.

3.4 Event Study and Difference in Difference specification

The event study takes the following form:

$$y_{sgt} = \mu_{sg} + \lambda_{st} + \sum_{k=-2}^{-3} \gamma_k 1(t = s^e + k) + \sum_{k=0}^5 \gamma_k 1(t = s^e + k) + \epsilon_{sgt} \quad (1)$$

where y_{sgt} is the outcome for group $g \in \{0, 1\}$, in state s , at time t . $g = 1$ refers to the treatment group, while $g = 0$ refers to the control group. $\mu_{s,g}$ is a specific state-group fixed effect, and λ_{st} is the state-specific time fixed effect that affects both treated and control groups. The series of dummy variables $1(t = s^e + k)$, key regressors, take the value of one for each event time year, where event time is only defined for each treated state relative to the year in which it first experiences a discrete jump in eligibility for the treated group (s^e). I omit the year preceding each state's large expansion so the estimated coefficients are relative to this baseline period.

I also complement my analysis by showing the estimated coefficient for the following two-way fixed effect difference in different specification.

$$y_{sgt} = \mu_{sg} + \lambda_{st} + \beta D_{sgt} + \epsilon_{sgt} \quad (2)$$

where μ_{sg} and λ_{st} are the same coefficients as in equation 1, but $D_{sgt} = \{0, 1\}$ is a dummy variable indicating whether group g received treatment at time t . The timing assumption and the definition of the groups imply that $D_{s0t} = 0 \quad \forall \quad t$ and $D_{s1t} = 0 \quad \forall \quad t < s^e$ and $D_{s1t} = 1 \quad \forall \quad t \geq s^e$. This specification is a restricted version of Equation 1 with $\{\gamma_k = 0\}_{k=-2}^{-3}$ and $\{\gamma_k = \beta\}_{k=0}^5$.

Finally, the CPS includes information about individual health insurance status from the 1988 survey, referring to 1987, allowing me to construct state-year-group outcomes from 1987 to 1993.

Given this data limitation, I can only estimate the effects of Medicaid on states that expanded in 1988, 1989, and 1990. Consequently, I estimate three pre-period event time coefficients and five post-period treatments. I weight all regression by the specific weights and cluster standard errors at the state level.

4 Results

4.1 Eligibility and Take-Up Estimates

Panel (a) in Figure 1 displays the "first stage" event study estimates based on equation 1. It shows the estimated shift in the share of parents whose children are eligible in the treatment group relative to the control group. Before the expansion, I don't find significant pre-period trend differences. Following the Medicaid expansion, the treatment group experienced a notable increase in eligibility. This eligibility increase aligns with my treatment and control group assignment and indicates a solid first stage.

However, a mere eligibility increase does not ensure impacts on parental outcomes unless it translates into a greater share of parents enrolling their kids in Medicaid. Panel (b) provides this evidence. It shows the event study estimates for the fraction of parents with kids enrolled in Medicaid. As expected, pre-expansion coefficients are not significantly different between groups, while an apparent enrollment increase follows the initial expansion. Within five years post-initial expansion, the share of parents with at least one child covered by Medicaid rises by six percentage points. Relative to the 14 percentage points increase in eligibility indicates a 35% take-up rate. Also, the exercise shows that the increase in enrollment was slower than the registered increase in eligibility, suggesting that the program took time to take off.

4.2 Adult Private and Public Coverage

Having confirmed the event study design's validity, I now employ the same methodology focusing on parents' health insurance status. I concentrate my estimation on three outcomes: the share of parents with i) private health insurance, ii) public health insurance, and iii) any health insurance. Panels (c), (d), and (e) in Figure 1 show the respective event study estimates for each of these outcomes. (Columns 3 to 5 in Table 1 contain the specific estimates) For private health insurance, the pre-period coefficients are near 0 and not statistically significant. However, following the expansion, there was a decline in private insurance in the treatment groups relative to the control groups. These effects are statistically significant at the usual confidence level. As expected from previous results, this effect takes time to build. Initially, I estimate a 1.8 percentage points decrease, while after five years, the effect is a decline of 5.1 percentage points. Table 2 presents the estimated coefficients for equation 2, which indicate that the share of parents in the treatment group experiences a significant decline in private health insurance of 2.6 percentage points.

In panel (d), the event study depicts the estimates on the percentage of parents with public health insurance. The pre-policy period estimates show a negligible trend difference between groups. Following the policy implementation, I evidenced a rise in public health insurance coverage; however, this increase is of a lower magnitude compared to the decline in private insurance coverage. The coefficients estimated for Equation 2 are presented in Table 2, revealing a 1.7 percentage point increase in public health insurance coverage for parents within the treated group.

Lastly, in panel (e), the event study displays the estimates on the percentage of parents with health insurance. During the pre-policy period, the estimates remain negligible and lack significance. After the policy implementation, there is an observed decrease in total insurance coverage, primarily attributable to the reduction in private insurance coverage. While these individual coefficients do not exhibit significant differences from zero, the estimation of Equation 2 reveals a 1.2 percentage point decline (with a p-value of 0.08) in health insurance coverage in the treatment group relative to the control group.

4.3 Effects on Male and Female parents

Adult Medicaid eligibility was primarily linked to AFDC eligibility during this expansion, with a notable exception: Low-income pregnant women. To better understand the previous findings, I estimate Equation 1 separately for male and female parents. Following the previous exposition, panels (a), (b), (c), (d), and (e) in each figure depict the event studies estimates for the mentioned variables of interest, while columns (1) to (5) in the corresponding tables maps to each variable.

Male parents. Figure 2 and Table 3 present the event study estimates for the previous five discussed variables for male parents. First, pre-expansion differences between control and treated groups are close to 0 for eligibility. Post-expansion, a substantial increase in eligibility occurs for the treatment group. Secondly, I find a significant increase in program participation for the treatment group, while the pre-expansion trend difference remains negligible and lacks significance. Finally, as expected, I see no significant pre-expansion difference between groups. At the same time, I register a post-expansion decline in private insurance, no effect in public coverage, and a decrease in total insurance. Some significant negative event time estimates appear in private and total insurance.

Table 4 provides the estimations for Equation 2. Employing the difference-in-difference strategy reveals a substantial 9.5 percentage point increase in eligibility for the treatment group. Additionally, the proportion of male parents with children covered by Medicaid experienced a 3.3 percentage point increase. Private insurance decreased by 1.8 percentage points, while public insurance displayed no significant change. Consequently, the overall insurance coverage declined by 1.6 percentage points. Though those effects are economically meaningful, these estimates do not significantly differ from 0.

Female parents. Figure 3 and Table 5 present the event study estimates for the previous five discussed variables for female parents. First, pre-expansion differences between control and treated groups are close to 0 for eligibility. Post-expansion, a substantial increase in eligibility occurs for the treatment group. Secondly, I find a significant increase in program participation for the treatment group, while the pre-expansion trend difference remains negligible and lacks

significance. Finally, as expected, I see no significant pre-expansion difference between groups. At the same time, I find a post-expansion decline in private insurance, offset by an increase in public insurance, leaving overall insurance for this group unaffected.

Table 6 provides the estimations for Equation 2. Employing the difference-in-difference strategy reveals a substantial 11 percentage point increase in eligibility for the treatment group. Additionally, the proportion of female parents with children covered by Medicaid experienced almost a four percentage point increase. Private insurance decreased by 2.7 percentage points, while public insurance increased by 2.5 percentage points. Consequently, the overall insurance coverage remains unchanged. The estimated effects on private and public insurance attain statistical significance at the usual confidence level.

4.4 Robustness Exercises

To ensure the validity of my findings, I perform the following robustness exercises:

Exercise 1: Testing Parallel Trend Assumption. The main assumption underpinning the interpretation of my estimates as causal effects is the parallel trend assumption across the treatment and control groups. The available data allows me to assess up to three pre-periods for any violations of this assumption, which I fail to reject. However, I further scrutinize this assumption by leveraging the income dimension of Medicaid eligibility. I examine differences between the control and treatment groups conditional on income. Remarkably, I discovered significant differences between groups within income ranges targeted by Medicaid expansion. Yet, I observe no discernible effects between groups with income levels that do not fall within the expansion's target. This indicates that the age composition of children didn't solely drive the observed trend. Particularly, parents within the treatment and control group with incomes high enough to be ineligible for Medicaid show no significant differences in outcomes.

Exercise 2: Exploring Correlation with Traditional Determinants. The literature aiming to explain the decline in health insurance rates has often attributed this trend to skill-biased technological change and rising health insurance costs. Given that Medicaid eligibility primarily focuses

on low-income households, a mechanical correlation emerges between these determinants, Medicaid child enrollment, and declining health insurance coverage among low-income parents. To test this relationship, I segment the sample into high-income¹⁰ and low-income¹¹ households within both the control and treatment groups. Since Medicaid expansion primarily targeted the latter, I redefine the control and treatment groups based on income. The outcomes reveal no significant differences between low and high-income parents with non-eligible children during both the pre and post-expansion periods, indicating that income alone wasn't the driving force behind the trend. However, a different story unfolds when comparing low and high-income parents with age-eligible children. In this scenario, I identify significant post-expansion differences across these groups.

4.4.1 Exercise 1

This exercise has two components:

a) Comparison within the high-income group. I estimated equation 1 and 2 on a restricted sample within the treatment and control group. This sample comprised individuals typically non-eligible under this expansion, with household income ranging from 2 to 4 times the Federal Poverty Line (FPL). The core idea behind this exercise is that despite having children who meet the age requirement for the expansion, these parents earn too much to qualify. Consequently, I wouldn't anticipate the policy to impact them. Figure 4 and Tables 7 and 8 display the event time estimates and the difference-in-difference estimates. As anticipated, no significant differences exist between the control and treated groups, either before or after the expansion, across any of the outcomes of interest.

b) Comparison within the low-income group. After establishing the absence of effects on non-targeted populations, I now conduct the same analysis but restrict the comparison to low-income households. I classify households below twice the Federal Poverty Line (FPL) as low-income.¹² Within this subgroup, I observe a similar pattern to the main exercise. Figure 5 Tables 9

¹⁰Parents with household income between 2 and 4 times the Federal Poverty Line.

¹¹Parents with household income below two times the Federal Poverty Line.

¹²The expansion typically focused on children with household incomes below 133% of the FPL for children under six and below 100% for older children. However, some states extended income eligibility further. Instead of selecting

and 10 display the event time and difference-in-difference estimates. I report a substantial increase in eligibility, which aligns with my experiment design. Post-expansion, I document an increase in the share of parents with children covered by Medicaid in the treatment group relative to the control group. Finally, the difference-in-difference estimates indicate a decrease in private insurance of 4.3 percentage points (with a p-value of 0.064), partially offset by an increase of 2.7 percentage points in public insurance (with a p-value of 0.161). With the decline in private insurance outweighing the other elements, overall insurance is estimated to fall by 2.4 percentage points. (with a p-value of 0.105)

4.4.2 Exercise 2

This exercise has two components:

a) Treatment Group, Low and High Income. In this specification, I estimate Equations 1 and 2, but exploit another source of variation from Medicaid expansion to construct a control and treatment group within my baseline definition. As Medicaid primarily focuses on low-income children, I establish the control group as households with at least one child born after 1984 and a household income between 2 and 4 times the FPL. Conversely, I define the treatment group as households with at least one child born after 1984 and a household income below two times the FPL. Figure 6 and Table 11 showcase the event time estimates, while Table 12 contains the difference-in-difference results. Through these exercises, the robustness of the first stage becomes even more evident. During the pre-expansion period, the coefficients for the eligibility estimates do not exhibit statistical significance. However, post-expansion, the surge in eligibility for low-income groups, when compared to parents with higher incomes, becomes prominent. Simultaneously, the share of parents with children covered by Medicaid also rises significantly. Notably, I observe a significant decrease in private insurance coverage alongside a corresponding increase in public insurance coverage. The difference-in-difference estimates indicate a decline in private insurance of 5.5 percentage points, partially counteracted by a 4 percentage point increase in public insurance. I find an overall drop

state-specific income thresholds, I used two times the FPL as the standard upper-income limit since almost all states did not cover children with income higher than 2 FPL.

in insurance coverage of 1.9 percentage points, although this decline is not statistically significant. (with a p-value of 0.229) When I break down the results by gender, a pattern akin to the benchmark exercise emerges. Tables 15, 16, 17, and 18 contains this disclosure. As seen, both fathers and mothers within the treatment group exhibited a decline in private insurance. While mothers see no change in total insurance due to a partial offset by an increase in public insurance, fathers register a decline in total insurance. (-3.6 percentage point with a p-value of 0.089)

b) Control Group, Low and High Income. Finally, I perform the same exercise but concentrate on the disparity between low and high-income parents without children born in 1984 or later. As part of a falsification test, I hypothesize that this expansion treated low-income families. Tables 13 and 14 present the typical results. As anticipated, I uncover no evidence of trend shifts across these groups in any of our outcomes of interest, even though a significant increase in eligibility emerges towards the end of my analysis. This increase is predictable, as many states chose to expand coverage to older children in 1993, one of the reasons I stopped the analysis that year.

5 Discussion

My empirical strategy relies on children's birth year restrictions in Medicaid eligibility rules to identify the impact of Medicaid on parental outcomes. The baseline specification suggests that increased eligibility boosts the number of parents with children covered by Medicaid and significantly declines private insurance for parents. Although some of these parents gain coverage through public health insurance, this increment fails to counterbalance the overall decline in private insurance, leading to a surge in uninsured parents. (p-value 0.083)

I also exploit the income dimension of Medicaid eligibility to evaluate i) potential threats to the parallel trend assumption between treatment and control group and ii) Medicaid expansion and correlations with traditional determinants.

I examine the differences between control and treatment groups based on income to address the first concern. Remarkably, I discovered significant differences between groups within income

ranges targeted by Medicaid expansion. Yet, I observe no discernible effects between groups with income levels that do not fall within the expansion's target, indicating that children's age composition didn't drive the observed trend.

To address the second point, I compare outcomes within parent groups across the income dimension. If the observed effects are indeed a consequence of Medicaid expansion, I would anticipate no effects within the control group across different income levels, as their children are ineligible irrespective of their income. The findings align precisely with these expectations. I find no effects across the income dimension when analyzing parents with no eligible children. On the other hand, when I focus on the group of parents with eligible children, I find meaningful effects across the income groups. I observe a significant drop in private insurance partially offset by a surge in public insurance. When I break down the analysis by gender, I find very interesting patterns. While mothers evidence an almost complete crowding out of private insurance, fathers are less likely to have health insurance. These patterns appear to be a consequence of the unique characteristics of the Medicaid expansion during this period. Following OBRA 1986, pregnant women also became a focal point of the expansion. These gender-heterogeneous effects imply that the combination of both policies - encompassing coverage for children and mothers - stimulates potent incentives for reducing private coverage in favor of the surge of public insurance, thereby adding a direct crowding-out effect on female parents. However, since fathers are typically ineligible for Medicaid under this expansion, this drop translates to an increase in uninsured individuals.

Having established the causal relationship between Medicaid expansion and parents' health insurance outcomes, I now turn to quantify the effects of Medicaid Expansion on the observed trends. I estimate a restricted version of Equation 1, where I set pre-expansion event studies coefficients to be equal to 0 ($\{\gamma_k = 0\}_{-2}^{-3}$). I construct the counterfactual rates with the estimated coefficients by subtracting the estimated effect. Finally, I aggregate them to construct a national estimate of those rates. I calculate the effect of this expansion as the observed rate minus the counterfactual. Table 23 shows this decomposition. To calculate the confidence interval on these effects, I bootstrap 100 samples from the CPS and run the same exercise for each. Figure 8 reports the point estimate effect

and the P5-P95 confidence interval.

I can solely estimate these effects for states that implemented expansions post-1987. Fortunately, these states account for nearly 90% of the US population, and the observed trends within these groups closely mirror those evidenced at the national level.

The results show that Medicaid expansion is responsible for a 2.5 pp [3.1 - 2.0] decrease in parental private insurance coverage, contributes to a 1.6 pp [1.1 - 2.2] increase in public health insurance coverage, and accounts for a 1 pp [1.3 - 0.5] increase in the share of parents without health insurance. Taking the point estimates as a reference, I find Medicaid expansion accounts for almost 45%, 60%, and 30% of the observed trends in private, public, and overall insurance in this period.

6 Conclusions

Medicaid Expansion attracted substantial research attention during the 90s and early 00s. An extensive body of literature has shown that Medicaid enhances a broad spectrum of recipient outcomes, including health and human capital indicators. Another substantial body of work exposed mixed findings on the direct impacts on health insurance outcomes. However, the exploration of family spillover effects has been relatively limited.

This study highlights significant spillover effects on parental health insurance outcomes. In particular, expanding eligibility for children negatively impacts parental private health insurance. However, the robustness exercises suggest that expanding Medicaid for children was not the unique, influential factor within families. Post-OBRA 1986, pregnant women also became a target group for Medicaid, indicating that the combination of these policies could have fostered powerful incentives in favor of public coverage. Since men were typically ineligible, this drop translated into an increase in uninsured individuals. However, my research design does not allow me to distinguish these effects independently.

Finally, this paper contributes to the literature on understanding the rise in the adult uninsurance rate during this period, presenting empirical evidence of a previously unexplored mechanism that could be driving it. As highlighted by other researchers, despite significant efforts to expand health insurance coverage, the rate of uninsured adults has steadily grown. This study suggests that such efforts can erode the incentive for families to obtain insurance, offering a potential explanation for the observed trends.

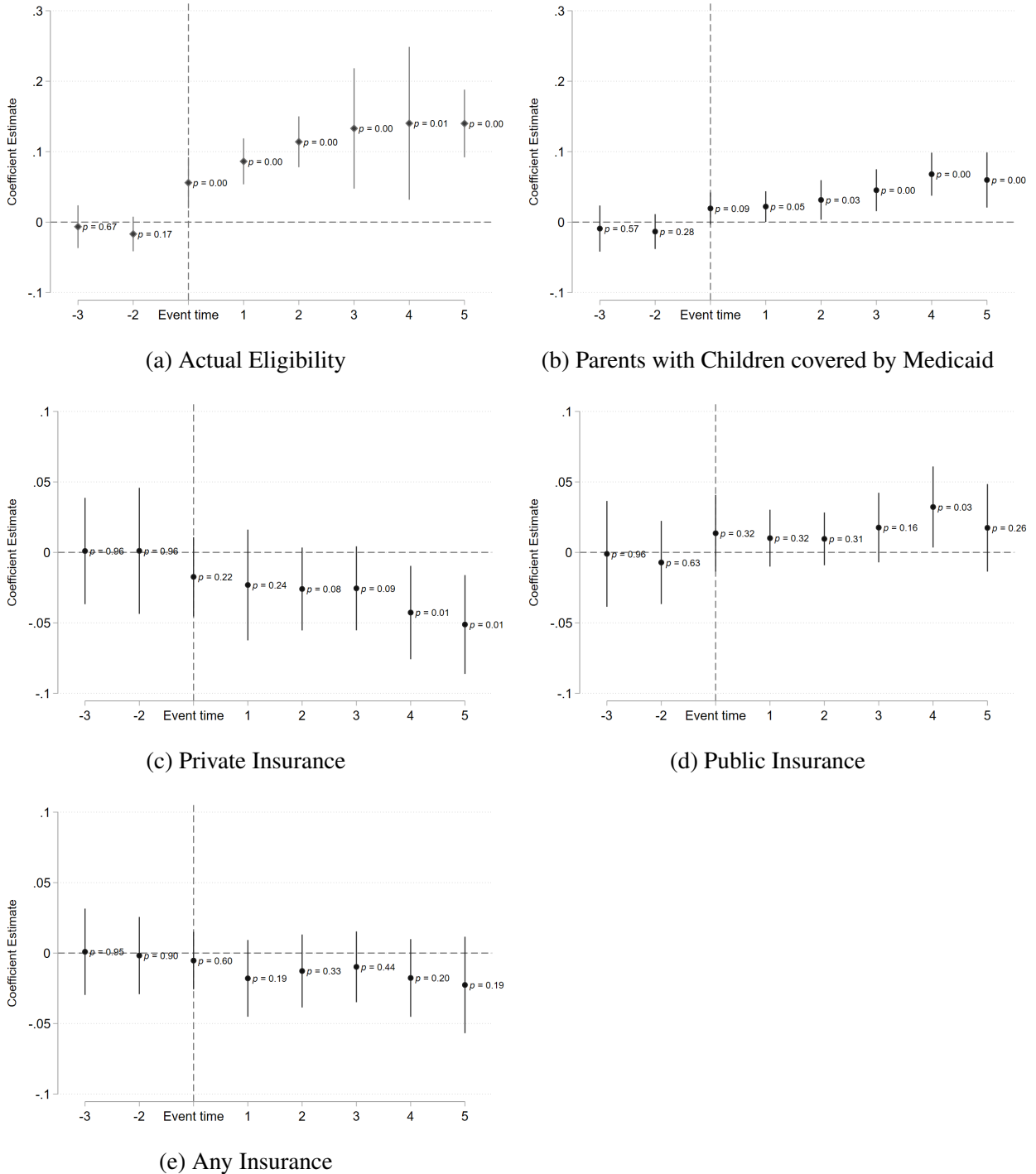
References

- Brown, D. W., A. E. Kowalski, and I. Z. Lurie (2020). Long-term impacts of childhood medicaid expansions on outcomes in adulthood. *The Review of Economic Studies* 87(2), 792–821.
- Cutler, D. M. and J. Gruber (1996). Does public insurance crowd out private insurance? *The Quarterly Journal of Economics* 111(2), 391–430.
- East, C. N., S. Miller, M. Page, and L. R. Wherry (2023). Multigenerational impacts of childhood access to the safety net: Early life exposure to medicaid and the next generation’s health. *American Economic Review* 113(1), 98–135.
- Gruber, J. (2008). Covering the uninsured in the united states. *Journal of Economic Literature* 46(3), 571–606.
- Gruber, J. and K. Simon (2008). Crowd-out 10 years later: Have recent public insurance expansions crowded out private health insurance? *Journal of health economics* 27(2), 201–217.
- Hai, R. (2015). The determinants of rising inequality in health insurance and wages. *Becker Friedman Institute for Research in Economics Working Paper* (2013-07).
- Koch, T. G. (2015). All internal in the family? measuring spillovers from public health insurance. *Journal of Human Resources* 50(4), 959–979.
- Zhao, K. (2017). Social insurance, private health insurance and individual welfare. *Journal of Economic Dynamics and Control* 78, 102–117.

Appendix

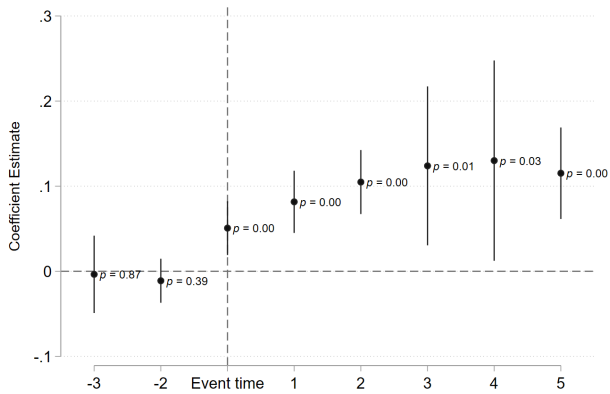
A Figures and Tables

Figure 1: Event Study Estimates

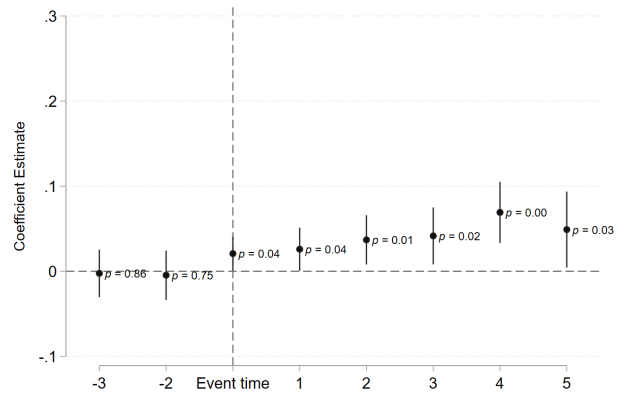


Notes: Event time -1 not shown in the graph. Estimated for parents between 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level. 95% confidence interval and p-values reported.

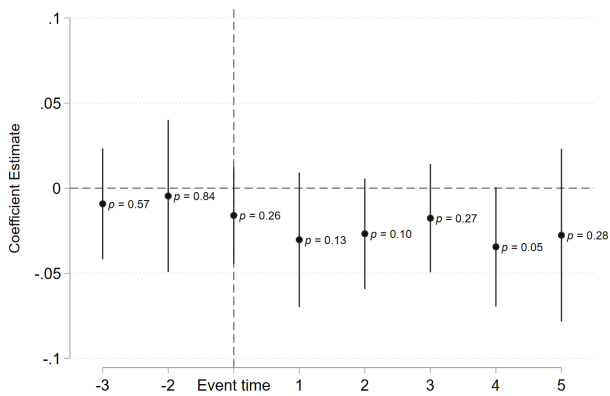
Figure 2: Event Study Estimates: Male Parents



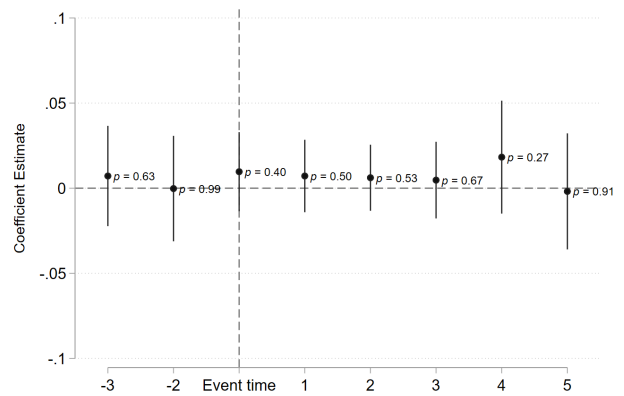
(a) Actual Eligibility



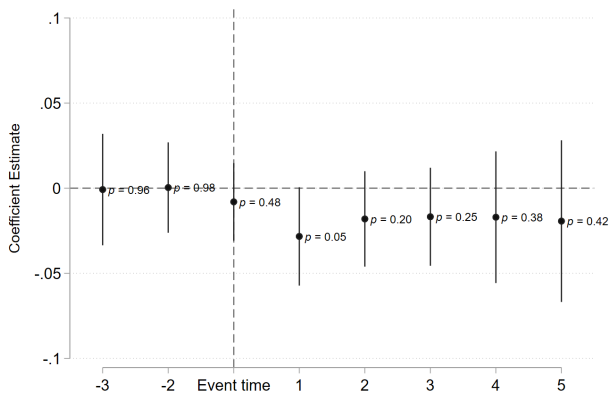
(b) Parents with Children covered by Medicaid



(c) Private Insurance



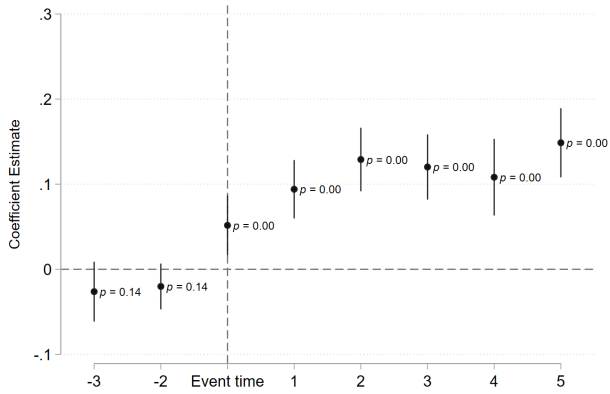
(d) Public Insurance



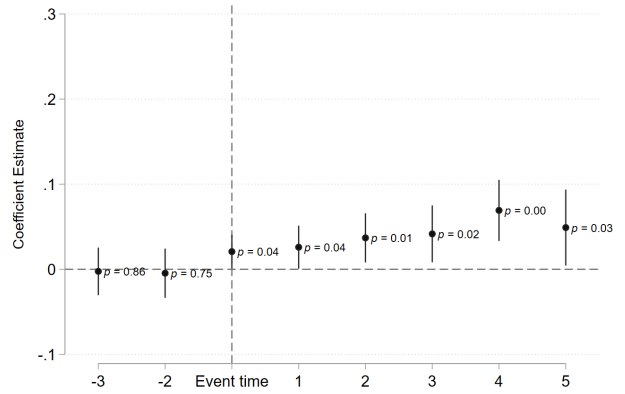
(e) Any Insurance

Notes: Event time -1 not shown in the graph. Estimated for male parents between 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level. 95% confidence interval and p-values reported.

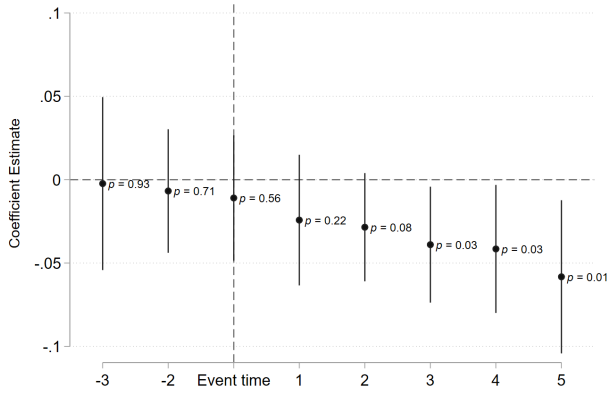
Figure 3: Event Study Estimates: Female parents



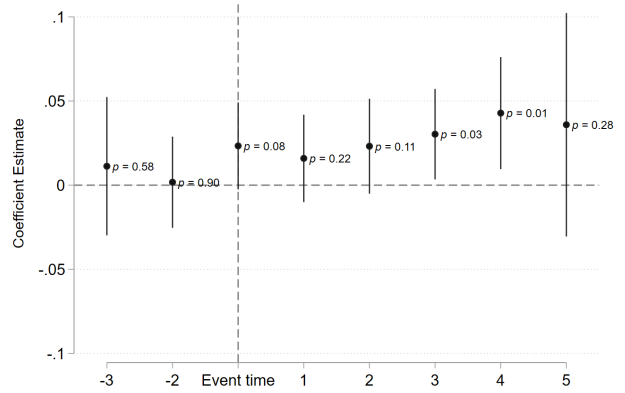
(a) Actual Eligibility



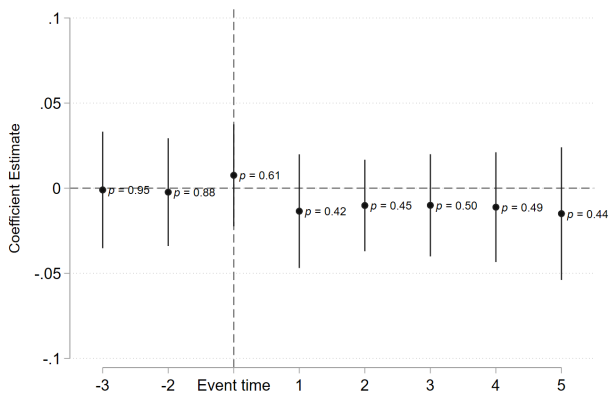
(b) Parents with Children covered by Medicaid



(c) Private Insurance



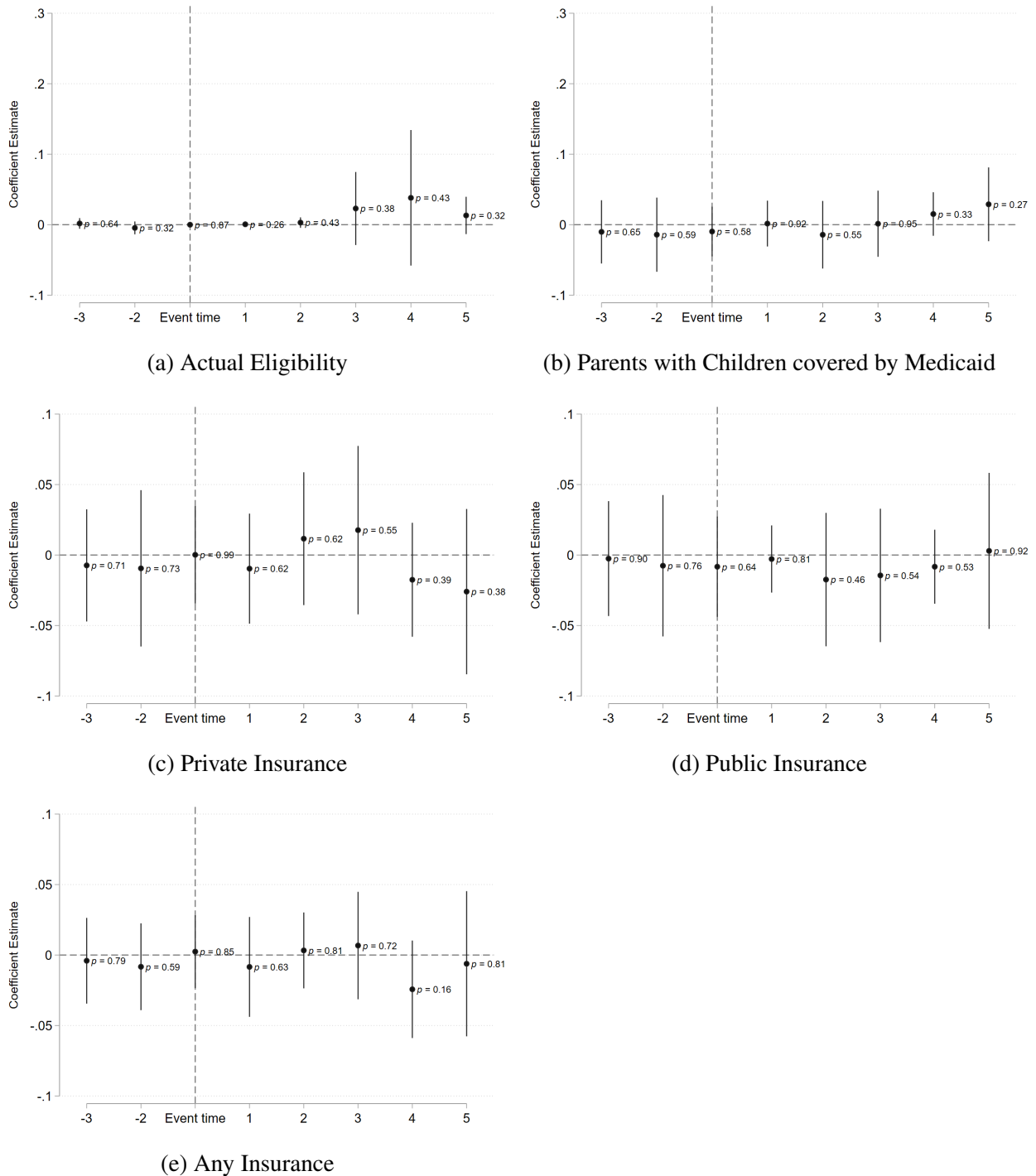
(d) Public Insurance



(e) Any Insurance

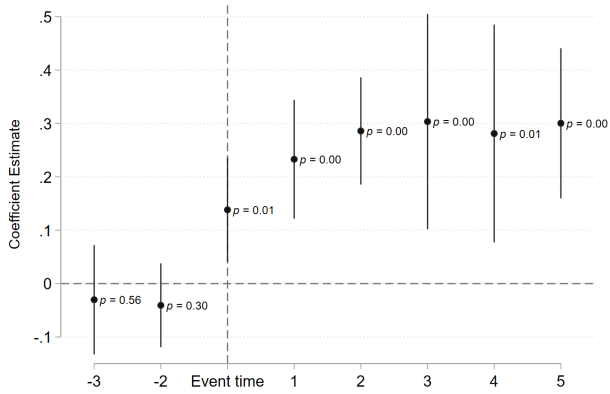
Notes: Event time -1 not shown in the graph. Estimated for female parents between 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level. 95% confidence interval and p-values reported.

Figure 4: Event Study Estimates: Within high-income parents

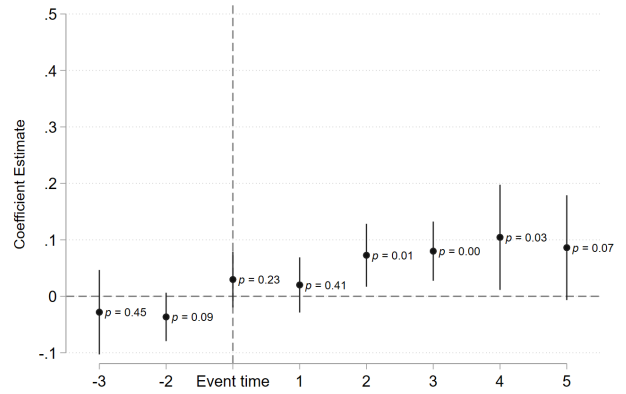


Notes: Event time -1 not shown in the graph. Estimated for parents aged 25-64 years old with family income between 2 and 4 times the Federal Poverty Line between 1987-1993. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level. 95% confidence interval and p-values reported.

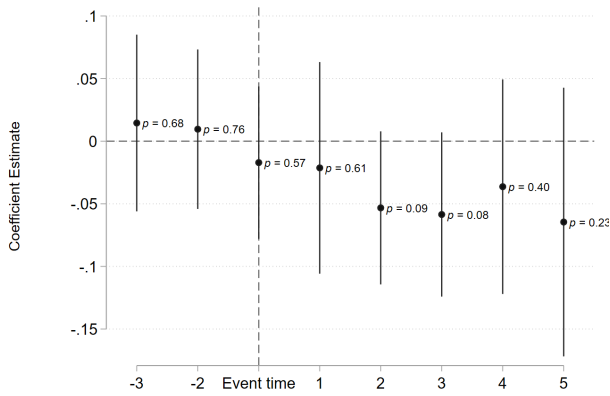
Figure 5: Event Study Estimates: Within low-income parents



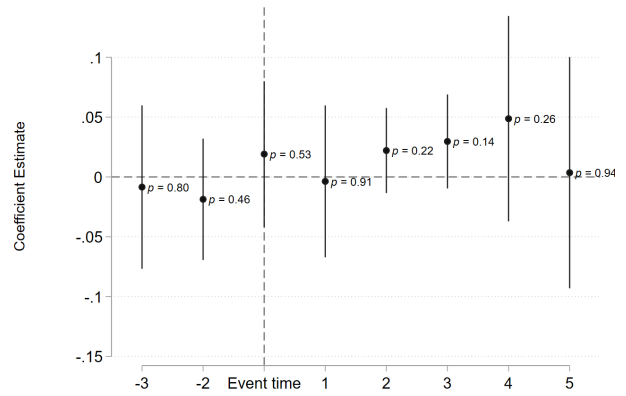
(a) Actual Eligibility



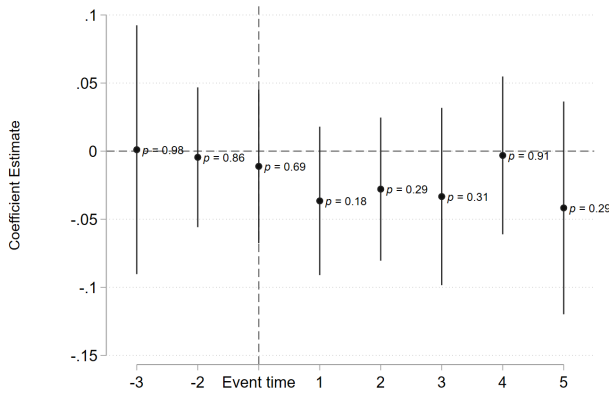
(b) Parents with Children covered by Medicaid



(c) Private Insurance



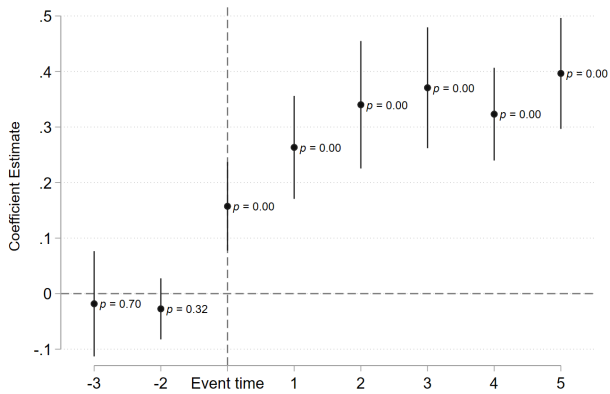
(d) Public Insurance



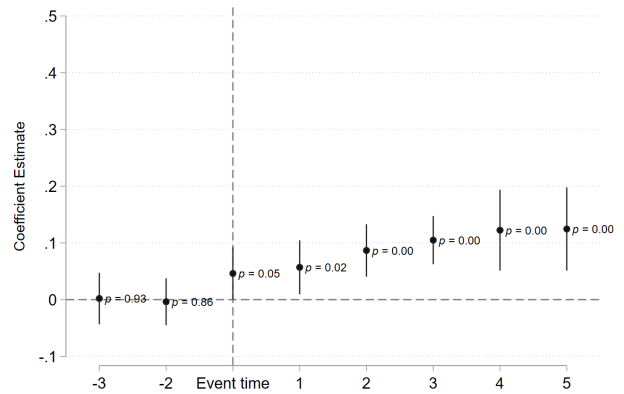
(e) Any Insurance

Notes: Event time -1 not shown in the graph. Estimated for parents aged 25-64 years old with family income below 2 times the Federal Poverty Line between 1987-1993. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level. 95% confidence interval and p-values reported.

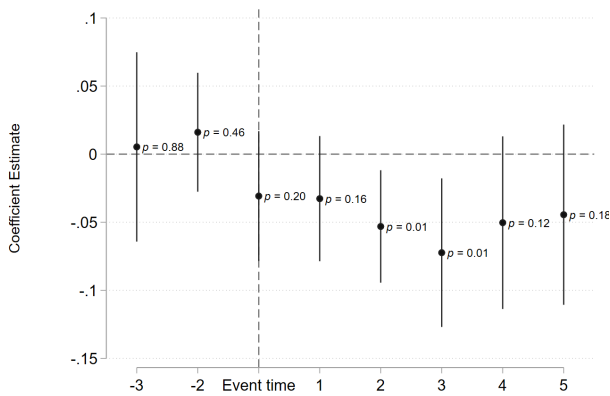
Figure 6: Event Study Estimates: Between income groups with eligible children



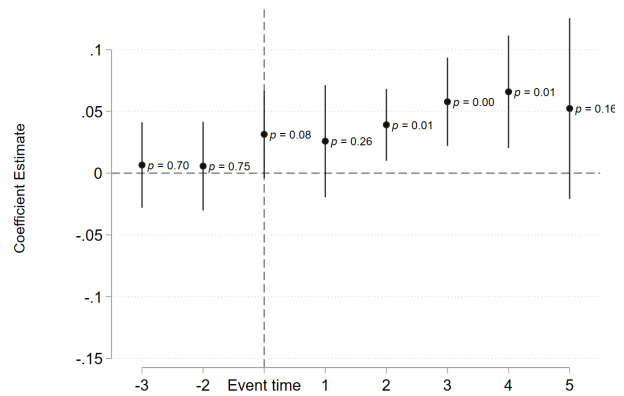
(a) Actual Eligibility



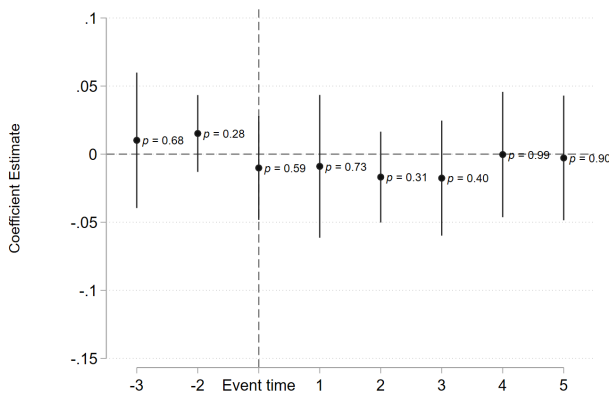
(b) Parents with Children covered by Medicaid



(c) Private Insurance



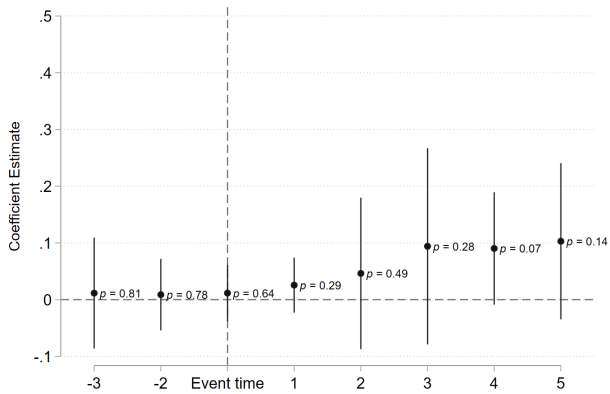
(d) Public Insurance



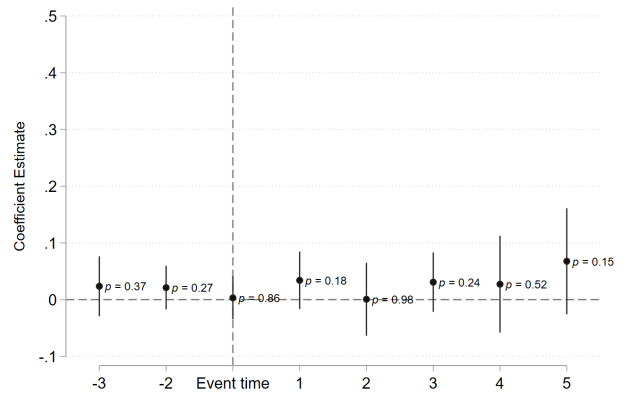
(e) Any Insurance

Notes: Event time -1 not shown in the graph. Estimated for parents aged 25-64 years old with at least a child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level. 95% confidence interval and p-values reported.

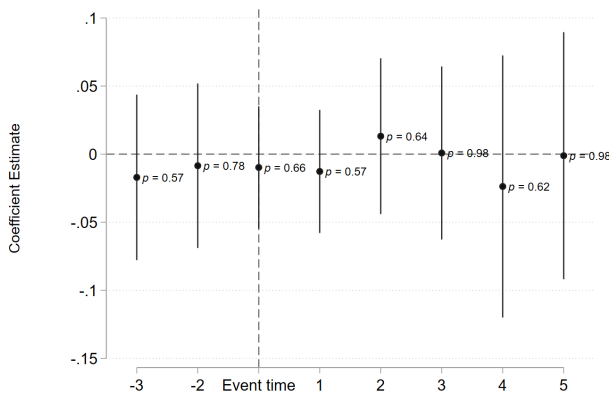
Figure 7: Event Study Estimates: Between income group without eligible children



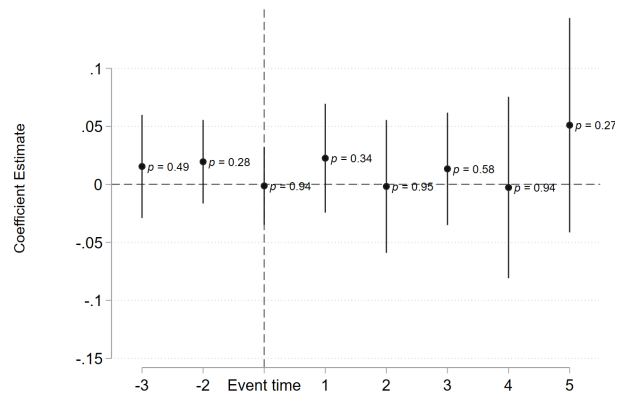
(a) Actual Eligibility



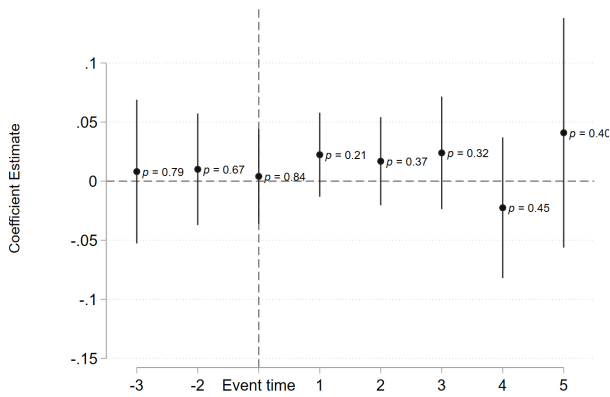
(b) Parents with Children covered by Medicaid



(c) Private Insurance



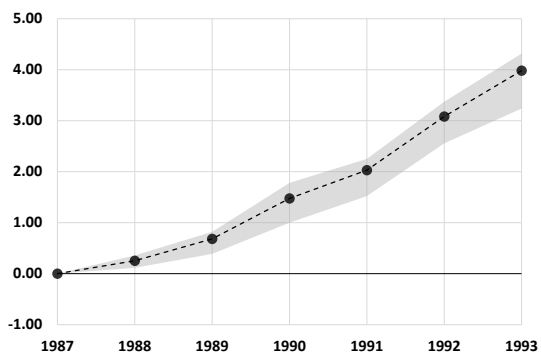
(d) Public Insurance



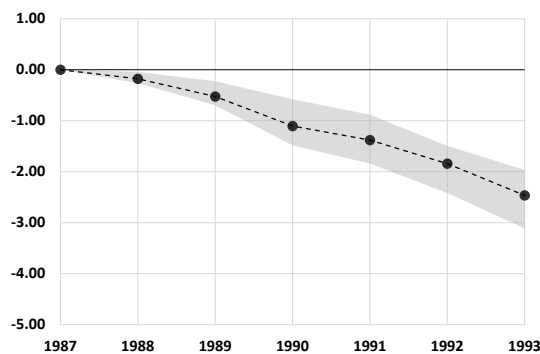
(e) Any Insurance

Notes: Event time -1 not shown in the graph. Estimated for parents aged 25-64 years old with no child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level. 95% confidence interval and p-values reported.

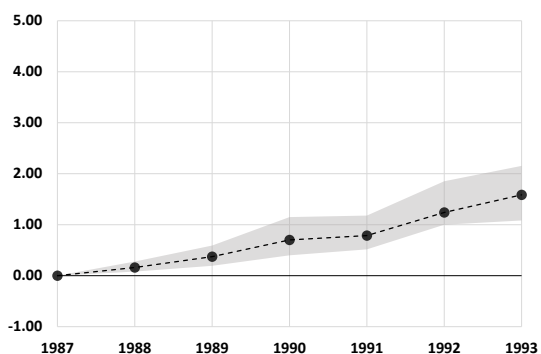
Figure 8: Effect of Medicaid Expansion on the observed trends



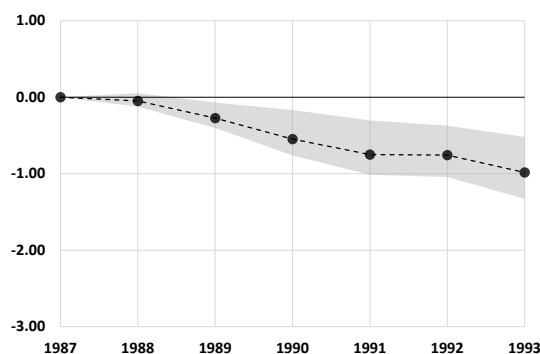
(a) Parents with Children covered by Medicaid



(b) Private Insurance



(c) Public Insurance



(d) Any Insurance

Notes: All estimates are reported in percentage points. Estimated for parents between 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children covered by Medicaid. Panel (b) refers to the share of parents with private health insurance. Panel (c) refers to the share of parents with public health insurance. Panel (d) refers to the share of parents with any health insurance. Light grey area depicts [P5 - P95] bootstrapped confidence interval.

Table 1: Event Study Estimates

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	-0.006 (0.668)	-0.009 (0.574)	0.001 (0.958)	-0.001 (0.955)	0.001 (0.951)
Event Time -2	-0.017 (0.174)	-0.013 (0.281)	0.001 (0.961)	-0.007 (0.626)	-0.002 (0.898)
Event Time 0	0.056 (0.003)	0.019 (0.090)	-0.017 (0.219)	0.014 (0.319)	-0.005 (0.602)
Event Time 1	0.086 (0.000)	0.022 (0.046)	-0.023 (0.241)	0.010 (0.317)	-0.018 (0.191)
Event Time 2	0.114 (0.000)	0.031 (0.029)	-0.026 (0.082)	0.010 (0.307)	-0.013 (0.327)
Event Time 3	0.133 (0.003)	0.045 (0.004)	-0.026 (0.091)	0.018 (0.157)	-0.010 (0.437)
Event Time 4	0.140 (0.013)	0.068 (0.000)	-0.043 (0.013)	0.032 (0.029)	-0.018 (0.203)
Event Time 5	0.140 (0.000)	0.060 (0.004)	-0.051 (0.005)	0.017 (0.264)	-0.023 (0.189)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. p -values in parentheses. Include all states that expanded in 1988,1989, and 1990. Additional details in Appendix B. Estimated for parents aged 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Columns (4) refers to the share of parents with public health insurance. Columns (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 2: Difference-in-Difference Estimates

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
β	0.108 (0.000)	0.039 (0.000)	-0.026 (0.017)	0.017 (0.020)	-0.012 (0.083)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: p -values in parentheses. Include all states that expanded in 1988,1989, and 1990. Additional details in Appendix B. Estimated for parents aged 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Columns (4) refers to the share of parents with public health insurance. Columns (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 3: Event Study Estimates: Male Parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	-0.004 (0.874)	-0.002 (0.861)	-0.009 (0.572)	0.007 (0.626)	-0.001 (0.960)
Event Time -2	-0.011 (0.390)	-0.005 (0.749)	-0.005 (0.836)	-0.000 (0.987)	0.000 (0.978)
Event Time 0	0.051 (0.002)	0.021 (0.040)	-0.016 (0.261)	0.010 (0.405)	-0.008 (0.480)
Event Time 1	0.082 (0.000)	0.026 (0.045)	-0.030 (0.129)	0.007 (0.501)	-0.028 (0.054)
Event Time 2	0.105 (0.000)	0.037 (0.013)	-0.027 (0.103)	0.006 (0.526)	-0.018 (0.200)
Event Time 3	0.124 (0.011)	0.042 (0.016)	-0.018 (0.269)	0.005 (0.673)	-0.017 (0.246)
Event Time 4	0.130 (0.031)	0.069 (0.000)	-0.034 (0.054)	0.018 (0.273)	-0.017 (0.378)
Event Time 5	0.115 (0.000)	0.049 (0.032)	-0.028 (0.277)	-0.002 (0.912)	-0.019 (0.415)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. p -values in parentheses. Include all states that expanded in 1988,1989, and 1990. Additional details in Appendix B. Estimated for male parents aged 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Columns (4) refers to the share of parents with public health insurance. Columns (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 4: Difference-in-Difference Estimates: Male parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
β	0.096 (0.000)	0.032 (0.002)	-0.018 (0.173)	0.003 (0.784)	-0.016 (0.209)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: p -values in parentheses. Include all states that expanded in 1988,1989, and 1990. Additional details in Appendix B. Estimated for male parents aged 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Columns (4) refers to the share of parents with public health insurance. Columns (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 5: Event Study Estimates: Female parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	-0.026 (0.139)	-0.003 (0.885)	-0.002 (0.928)	0.011 (0.584)	-0.001 (0.952)
Event Time -2	-0.020 (0.138)	-0.006 (0.668)	-0.007 (0.713)	0.002 (0.898)	-0.002 (0.883)
Event Time 0	0.052 (0.005)	0.024 (0.091)	-0.011 (0.559)	0.023 (0.076)	0.008 (0.613)
Event Time 1	0.094 (0.000)	0.017 (0.277)	-0.024 (0.219)	0.016 (0.223)	-0.014 (0.419)
Event Time 2	0.129 (0.000)	0.036 (0.029)	-0.029 (0.084)	0.023 (0.105)	-0.010 (0.449)
Event Time 3	0.120 (0.000)	0.049 (0.002)	-0.039 (0.029)	0.030 (0.028)	-0.010 (0.502)
Event Time 4	0.108 (0.000)	0.064 (0.001)	-0.042 (0.035)	0.043 (0.013)	-0.011 (0.489)
Event Time 5	0.149 (0.000)	0.067 (0.038)	-0.058 (0.014)	0.036 (0.281)	-0.015 (0.443)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. p -values in parentheses. Include all states that expanded in 1988,1989, and 1990. Additional details in Appendix B. Estimated for female parents aged 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Columns (4) refers to the share of parents with public health insurance. Columns (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 6: Difference-in-Difference Estimates: Female parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
β	0.112 (0.000)	0.038 (0.002)	-0.026 (0.050)	0.023 (0.031)	-0.006 (0.522)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: p -values in parentheses. Include all states that expanded in 1988,1989, and 1990. Additional details in Appendix B. Estimated for female parents aged 25-64 years old between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Columns (4) refers to the share of parents with public health insurance. Columns (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 7: Event Study Estimates: Within high-income parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	0.002 (0.643)	-0.010 (0.648)	-0.007 (0.710)	-0.003 (0.901)	-0.004 (0.789)
Event Time -2	-0.005 (0.316)	-0.014 (0.588)	-0.009 (0.733)	-0.008 (0.761)	-0.008 (0.589)
Event Time 0	-0.000 (0.871)	-0.010 (0.580)	0.000 (0.993)	-0.008 (0.640)	0.002 (0.851)
Event Time 1	0.001 (0.257)	0.002 (0.924)	-0.010 (0.620)	-0.003 (0.812)	-0.008 (0.633)
Event Time 2	0.003 (0.425)	-0.014 (0.550)	0.012 (0.622)	-0.017 (0.461)	0.003 (0.807)
Event Time 3	0.023 (0.376)	0.001 (0.954)	0.018 (0.554)	-0.014 (0.540)	0.007 (0.723)
Event Time 4	0.038 (0.428)	0.015 (0.328)	-0.018 (0.386)	-0.008 (0.527)	-0.024 (0.163)
Event Time 5	0.013 (0.324)	0.029 (0.271)	-0.026 (0.376)	0.003 (0.915)	-0.006 (0.810)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for parents aged 25-64 years old with family income between 2 and 4 times the Federal Poverty Line between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 8: Difference-in-Difference Estimates: Within high-income parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
β	0.010 (0.367)	0.004 (0.706)	0.006 (0.598)	-0.007 (0.426)	-0.005 (0.601)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for parents aged 25-64 years old with family income between 2 and 4 times the Federal Poverty Line between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 9: Event Study Estimates: Within low-income parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	-0.030 (0.555)	-0.028 (0.451)	0.015 (0.680)	-0.008 (0.803)	0.001 (0.981)
Event Time -2	-0.041 (0.302)	-0.037 (0.093)	0.010 (0.763)	-0.019 (0.461)	-0.004 (0.860)
Event Time 0	0.138 (0.007)	0.030 (0.232)	-0.017 (0.573)	0.019 (0.531)	-0.011 (0.692)
Event Time 1	0.233 (0.000)	0.020 (0.411)	-0.021 (0.613)	-0.004 (0.907)	-0.037 (0.183)
Event Time 2	0.286 (0.000)	0.073 (0.012)	-0.053 (0.086)	0.022 (0.217)	-0.028 (0.290)
Event Time 3	0.303 (0.004)	0.080 (0.004)	-0.059 (0.079)	0.030 (0.135)	-0.033 (0.307)
Event Time 4	0.281 (0.008)	0.104 (0.029)	-0.036 (0.397)	0.049 (0.259)	-0.003 (0.914)
Event Time 5	0.300 (0.000)	0.086 (0.068)	-0.065 (0.231)	0.004 (0.941)	-0.042 (0.288)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for parents aged 25-64 years old with family income below 2 times the Federal Poverty Line between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 10: Difference-in-Difference Estimates: Within low-income parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
β	0.263 (0.000)	0.073 (0.000)	-0.043 (0.064)	0.027 (0.161)	-0.024 (0.105)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for parents aged 25-64 years old with family income below 2 times the Federal Poverty Line between 1987-1993. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 11: Event Study Estimates: Between income group with eligible children

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	-0.018 (0.699)	0.002 (0.926)	0.005 (0.878)	0.007 (0.701)	0.010 (0.682)
Event Time -2	-0.027 (0.320)	-0.004 (0.858)	0.016 (0.461)	0.006 (0.749)	0.015 (0.284)
Event Time 0	0.157 (0.000)	0.046 (0.050)	-0.031 (0.199)	0.031 (0.079)	-0.010 (0.595)
Event Time 1	0.263 (0.000)	0.057 (0.020)	-0.033 (0.159)	0.026 (0.255)	-0.009 (0.732)
Event Time 2	0.340 (0.000)	0.087 (0.000)	-0.053 (0.013)	0.039 (0.010)	-0.017 (0.313)
Event Time 3	0.371 (0.000)	0.105 (0.000)	-0.072 (0.011)	0.058 (0.002)	-0.018 (0.405)
Event Time 4	0.323 (0.000)	0.122 (0.001)	-0.050 (0.117)	0.066 (0.006)	-0.000 (0.990)
Event Time 5	0.397 (0.000)	0.124 (0.001)	-0.044 (0.182)	0.052 (0.156)	-0.003 (0.903)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for parents aged 25-64 years old with at least a child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 12: Difference-in-Difference Estimates: Between income group with eligible children

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
β	0.309 (0.000)	0.083 (0.000)	-0.055 (0.007)	0.040 (0.000)	-0.019 (0.229)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for parents aged 25-64 years old with at least a child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 13: Event Study Estimates: Between income group without eligible children

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	0.011 (0.814)	0.024 (0.373)	-0.017 (0.574)	0.015 (0.487)	0.008 (0.789)
Event Time -2	0.009 (0.780)	0.021 (0.273)	-0.009 (0.777)	0.020 (0.280)	0.010 (0.670)
Event Time 0	0.012 (0.639)	0.003 (0.864)	-0.010 (0.663)	-0.001 (0.938)	0.004 (0.840)
Event Time 1	0.026 (0.292)	0.034 (0.182)	-0.013 (0.573)	0.023 (0.337)	0.022 (0.212)
Event Time 2	0.046 (0.488)	0.001 (0.983)	0.013 (0.644)	-0.002 (0.951)	0.017 (0.366)
Event Time 3	0.094 (0.278)	0.031 (0.241)	0.001 (0.979)	0.013 (0.580)	0.024 (0.316)
Event Time 4	0.090 (0.073)	0.027 (0.523)	-0.024 (0.621)	-0.003 (0.945)	-0.023 (0.449)
Event Time 5	0.103 (0.139)	0.068 (0.151)	-0.001 (0.980)	0.051 (0.271)	0.041 (0.400)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for parents aged 25-64 years old with no child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 14: Difference-in-Difference Estimates: Between income group without eligible children

	(1)	(2)	(3)	(4)	(5)
	Eligibility	Child Medicaid	Priv. Insurance	Pub. Insurance	Total Insurance
β	0.042 (0.390)	0.008 (0.691)	0.001 (0.929)	-0.001 (0.960)	0.009 (0.570)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for parents aged 25-64 years old with no child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Panel (a) refers to the share of parents with children eligible for Medicaid. Panel (b) refers to the share of parents with children covered by Medicaid. Panel (c) refers to the share of parents with private health insurance. Panel (d) refers to the share of parents with public health insurance. Panel (e) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 15: Event Study Estimates: Between income group with eligible children - male parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	-0.020 (0.753)	-0.001 (0.977)	0.023 (0.632)	-0.002 (0.949)	0.019 (0.626)
Event Time -2	-0.021 (0.522)	-0.011 (0.698)	0.026 (0.447)	-0.015 (0.456)	0.005 (0.809)
Event Time 0	0.173 (0.000)	0.056 (0.009)	-0.027 (0.429)	0.022 (0.206)	-0.018 (0.549)
Event Time 1	0.284 (0.000)	0.067 (0.005)	-0.043 (0.256)	0.016 (0.410)	-0.029 (0.413)
Event Time 2	0.369 (0.000)	0.105 (0.001)	-0.072 (0.045)	0.032 (0.159)	-0.039 (0.193)
Event Time 3	0.401 (0.000)	0.114 (0.000)	-0.069 (0.064)	0.029 (0.199)	-0.043 (0.152)
Event Time 4	0.349 (0.000)	0.148 (0.000)	-0.070 (0.084)	0.051 (0.032)	-0.022 (0.574)
Event Time 5	0.411 (0.000)	0.148 (0.001)	-0.040 (0.314)	0.024 (0.493)	-0.013 (0.702)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for male parents aged 25-64 years old with at least a child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 16: Difference-in-Difference Estimates: Between income group with eligible children- male parents

	(1)	(2)	(3)	(4)	(5)
	Eligibility	Child Medicaid	Priv. Insurance	Pub. Insurance	Total Insurance
β	0.331 (0.000)	0.099 (0.000)	-0.068 (0.008)	0.033 (0.021)	-0.036 (0.089)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for male parents aged 25-64 years old with at least a child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 17: Event Study Estimates: Between income groups with eligible children - female parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	-0.008 (0.864)	0.013 (0.566)	-0.017 (0.673)	0.023 (0.241)	0.004 (0.899)
Event Time -2	-0.030 (0.309)	0.004 (0.862)	0.007 (0.782)	0.025 (0.272)	0.024 (0.161)
Event Time 0	0.148 (0.001)	0.042 (0.147)	-0.033 (0.141)	0.042 (0.066)	-0.002 (0.911)
Event Time 1	0.249 (0.000)	0.050 (0.096)	-0.025 (0.369)	0.034 (0.279)	0.005 (0.844)
Event Time 2	0.319 (0.000)	0.074 (0.004)	-0.039 (0.047)	0.044 (0.018)	-0.000 (0.984)
Event Time 3	0.346 (0.000)	0.094 (0.004)	-0.071 (0.018)	0.072 (0.012)	-0.003 (0.882)
Event Time 4	0.302 (0.000)	0.102 (0.021)	-0.032 (0.338)	0.072 (0.025)	0.013 (0.478)
Event Time 5	0.379 (0.000)	0.103 (0.009)	-0.039 (0.299)	0.062 (0.141)	0.001 (0.966)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for female parents aged 25-64 years old with at least a child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 18: Difference-in-Difference Estimates: Between income groups with eligible children - female parents

	(1)	(2)	(3)	(4)	(5)
	Eligibility	Child Medicaid	Priv. Insurance	Pub. Insurance	Total Insurance
β	0.290 (0.000)	0.068 (0.001)	-0.042 (0.045)	0.040 (0.008)	-0.007 (0.636)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for female parents aged 25-64 years old with at least a child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 19: Event Study Estimates: Between income group without eligible children - male parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	0.010 (0.864)	-0.001 (0.988)	0.060 (0.254)	-0.018 (0.298)	0.047 (0.270)
Event Time -2	-0.006 (0.854)	-0.003 (0.886)	0.026 (0.523)	0.004 (0.851)	0.022 (0.542)
Event Time 0	0.021 (0.519)	-0.005 (0.829)	0.029 (0.249)	-0.006 (0.770)	0.033 (0.185)
Event Time 1	0.024 (0.406)	0.023 (0.418)	0.024 (0.490)	0.018 (0.551)	0.048 (0.044)
Event Time 2	0.065 (0.327)	-0.002 (0.949)	0.043 (0.276)	0.002 (0.940)	0.043 (0.121)
Event Time 3	0.090 (0.324)	0.031 (0.273)	0.009 (0.793)	0.018 (0.493)	0.039 (0.217)
Event Time 4	0.100 (0.068)	0.031 (0.469)	-0.026 (0.658)	-0.008 (0.880)	-0.021 (0.671)
Event Time 5	0.131 (0.010)	0.111 (0.026)	-0.008 (0.887)	0.091 (0.154)	0.065 (0.337)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for male parents aged 25-64 years old with no child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 20: Difference-in-Difference Estimates: Between income group without eligible children - male parents

	(1)	(2)	(3)	(4)	(5)
	Eligibility	Child Medicaid	Priv. Insurance	Pub. Insurance	Total Insurance
β	0.053 (0.288)	0.016 (0.351)	0.002 (0.881)	0.010 (0.561)	0.021 (0.306)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for male parents aged 25-64 years old with no child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 21: Event Study Estimates: Between income group without eligible children - female parents

	(1) Eligibility	(2) Child Medicaid	(3) Priv. Insurance	(4) Pub. Insurance	(5) Total Insurance
Event Time -3	0.012 (0.792)	0.038 (0.194)	-0.060 (0.016)	0.033 (0.237)	-0.015 (0.591)
Event Time -2	0.015 (0.640)	0.034 (0.079)	-0.028 (0.340)	0.027 (0.152)	0.001 (0.962)
Event Time 0	0.007 (0.755)	0.008 (0.695)	-0.031 (0.255)	0.001 (0.942)	-0.012 (0.632)
Event Time 1	0.025 (0.296)	0.040 (0.223)	-0.033 (0.171)	0.025 (0.369)	0.008 (0.681)
Event Time 2	0.037 (0.599)	0.002 (0.960)	-0.003 (0.910)	-0.006 (0.851)	0.001 (0.974)
Event Time 3	0.097 (0.263)	0.034 (0.248)	-0.005 (0.879)	0.012 (0.686)	0.014 (0.530)
Event Time 4	0.084 (0.099)	0.027 (0.544)	-0.027 (0.565)	0.002 (0.957)	-0.026 (0.401)
Event Time 5	0.088 (0.274)	0.047 (0.380)	-0.001 (0.985)	0.032 (0.495)	0.027 (0.538)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Event time -1 omitted. Estimated for female parents aged 25-64 years old with no child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 22: Difference-in-Difference Estimates: Between income group without eligible children - female parents

	(1)	(2)	(3)	(4)	(5)
	Eligibility	Child Medicaid	Priv. Insurance	Pub. Insurance	Total Insurance
β	0.036 (0.465)	0.004 (0.870)	0.000 (0.990)	-0.007 (0.760)	0.003 (0.869)
Observations	588	588	588	588	588
Initial Year	1987	1987	1987	1987	1987
Last Year	1993	1993	1993	1993	1993

Notes: Estimated for female parents aged 25-64 years old with no child born during 1984 or later between 1987-1993. High-income refers to parents with family income between 2 and 4 times the Federal Poverty Line. Low-income refers to parents with family income below 2 times the Federal Poverty Line. Regressions are weighted using CPS sample individual weights. Column (1) refers to the share of parents with children eligible for Medicaid. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with any health insurance. Standard errors are clustered at the state level.

Table 23: Medicaid expansion effects on observed trends: Counterfactual exercise

Observed trends (1)				
Year	Parents with children covered by Medicaid	Parents with private health insurance	Parents with public health insurance	Parents with health insurance
1987	12.3	81.7	10.9	89.9
1988	12.8	80.5	11.2	88.8
1989	13.0	80.4	11.0	88.7
1990	14.7	79.0	12.0	88.4
1991	15.7	77.8	12.7	87.8
1992	16.8	76.9	12.7	87.0
1993	18.6	76.1	13.6	86.6
1993 - 1987	6.3	-5.6	2.7	-3.3

Counterfactual trends (2)				
Year	Parents with children covered by Medicaid	Parents with private health insurance	Parents with public health insurance	Parents with health insurance
1987	12.3	81.7	10.9	89.9
1988	12.5	80.7	11.0	88.9
1989	12.4	80.9	10.6	89.0
1990	13.2	80.1	11.3	88.9
1991	13.7	79.2	11.9	88.5
1992	13.7	78.7	11.5	87.7
1993	14.6	78.6	12.0	87.6
1993 - 1987	2.4	-3.1	1.1	-2.3

Medicaid (1) - (2)				
Year	Parents with children covered by Medicaid	Parents with private health insurance	Parents with public health insurance	Parents with health insurance
1987	0.0	0.0	0.0	0.0
1988	0.3	-0.2	0.2	0.0
1989	0.7	-0.5	0.4	-0.3
1990	1.5	-1.1	0.7	-0.5
1991	2.0	-1.4	0.8	-0.7
1992	3.1	-1.8	1.2	-0.8
1993	4.0	-2.5	1.6	-1.0
1993 - 1987	4.0	-2.5	1.6	-1.0

Notes: All estimates are reported in percentage points. Upper table: Rates calculated for parents aged 25-64 using the CPS between 1987-1993. Aggregate rates were constructed using CPS sample individual weights. Eight states are not included: Arkansas, Maryland, Massachusetts, Mississippi, Nevada, North Carolina, Rhode Island, and West Virginia. Middle table: Refer to the main text for details. Lower table: Difference between Upper table and Middle table. Column (2) refers to the share of parents with children covered by Medicaid. Column (3) refers to the share of parents with private health insurance. Column (4) refers to the share of parents with public health insurance. Column (5) refers to the share of parents with health insurance.

B Medicaid Expansions and Eligibility

Traditionally, Medicaid functioned as a health insurance program designed to serve the aged and disabled, the medically needy, and low-income families with dependent children. However, policy shifts during the late 1980s and early 1990s significantly altered the eligibility rules for this last group. In particular, these changes primarily focused to extend coverage to children from low-income families and pregnant women.

In this section, I describe the pathways of Medicaid/SCHIP eligibility during my study period. The main source of information is the BLK Medicaid Calculator ([Brown et al. \(2020\)](#)) documentation. I adapted and extended their database in two ways: i) Instead of by cohorts, I incorporate eligibility rules according to children's age, and ii) I incorporated additional data to determine effective dates. Since eligibility criteria existed prior to Medicaid's expansion, I started my analysis in 1984 when computing eligibility measures. This allows me to assess eligibility dynamics at least three years before OBRA 1986.

B.1 Medicaid Expansion in the Late '80s and Early '90s

The Omnibus Budget Reconciliation Act (OBRA) 1986 was the first legislation to change Medicaid eligibility during my analysis significantly. Before this act, Medicaid eligibility was attached to the State Aid to Families with Dependent Children (AFDC) eligibility. Starting in April 1987, OBRA 1986 allowed states to increase income eligibility thresholds above AFDC levels to a maximum of 100% of the Federal Poverty Line (FPL) for pregnant women, infants, and children up to 5 years old on a phased basis beginning in October 1987.

Subsequent legislative changes, such as OBRA 1987, the Medicare Catastrophic Care Amendments (MCCA) of 1988, OBRA 1989, and OBRA 1990, progressively liberalized public coverage. OBRA 1987 extended the state's optional authority to elevate income thresholds for pregnant women and infants to 185% of the FPL and accelerated OBRA 86's phase-in by October 1988. It also allowed states to increase income thresholds for children as old as eight up to 100% of the FPL, implemented in a phased manner¹³.

The MCCA of 1988 mandated a minimum coverage of pregnant women and infants at 100 percent of the FPL. This expansion was supposed to be implemented in a 2-year phase-in, 75 percent in July 1989 and 100 percent by July 1990. However, OBRA 1989 accelerated this process and expanded the minimum federal guarantee coverage. By April 1990, all states were required to cover, at a minimum, pregnant women and children up to 6 years old at 133% of the FPL. Lastly, OBRA 1990 required states to extend coverage to children up to age 19 born after September 30, 1983, with income below 100% FPL, effective from July 1991. Table 24 summarizes these changes.

Despite these reforms, except for the required eligibility coverage by the federal government, each state retains the authority to design and implement its Medicaid programs and set requirements. For instance, although OBRA 86 allowed states to cover children up to age 5, only some opted. In contrast, under OBRA 87, some states chose to speed up coverage for older children, while others only expanded in April 90, when OBRA 1989 mandates came into effect. Moreover, since AFDC eligibility thresholds varied widely across states, the impact of Medicaid expansion varied across states and over time. Table 25 details this information by state, showing income eligibility thresholds pre-expansion (AFDC) and post-expansion (Medicaid-specific thresholds).

B.2 Simulated Eligibility

Simulated eligibility was initially introduced in the literature investigating the effects of Medicaid expansion by [Cutler and Gruber \(1996\)](#). They examine the impact of Medicaid expansion on relevant outcome variables

¹³Children must be born on or after October 1, 1983

by exploiting variations in the magnitude of the expansion across states and time. However, since changes in states' demographic and economic conditions could cause changes in the percentage eligible for Medicaid even without a change in policy, they introduce a simulated instrument where population characteristic is kept fixed, and they isolate changes driven by changes in policy. Using the same approach, I constructed a similar measure of simulated eligibility. Using the information on Medicaid eligibility income thresholds and Children's age restrictions across states and time, I construct the share of parents whose child/children become eligible over time for a fixed sample of individuals. I fix the 1988 ASEC-CPS population of parents and kids to evaluate specific states' rules across time. In particular, to evaluate specific state eligibility, I use the whole population and not only the population living in that state at that year. The procedure is as follows:

1. For a given state s
 - (a) For a given child¹⁴ of current age x , at time t
 - Given Household total income and structure, compute adjusted income and determine the Federal Poverty line cut-off.
 - Look for the maximum income threshold of children at age x for qualifying for Medicaid at time t .
 - Check whether adjusted income is equal to or below that threshold.
 - Impute eligibility of the Child if adjusted income is equal to or below that threshold.
 - Impute eligibility of Parent if at least one child is eligible.
 - (b) Repeat this step for all t
2. Repeat for all states s

This procedure allows isolating the change in eligibility driven by changes in law/policy and identifying the major changes in eligibility by state and time. It allows for creating a measure of the share of parents potentially affected by these policies and tracking how different groups were affected. Also, it allows me to build an aggregate measure of eligibility through time.

Figure 9 shows eligibility levels by state and year. The dotted lines depicted the 1987-1990 and refers to the late 80- early 90s expansion. As depicted, all states greatly expanded their eligibility levels. They differ in time adoption and gradualism in implementation. In general, the transition dynamics of each state are heterogeneous. However, Figure 10 provides a cleaner view of what happened in the US as a whole. This figure shows the aggregate simulated eligibility resulting from the weighted average of state's-simulated eligibility. To construct this measure, I use 1988 CPS weights. The top panel refers to the share of adults parents eligible. In 1984, the mean simulated eligibility was 7%, and by 1993, changes in policy implied that 15% of the parent population was potentially eligible. This implied an increase in eligibility by more than two folds. The bottom panel refers directly to children. The observed trends also depict a two folds increase in simulated eligibility for this group.

B.3 Event Study

Simulated eligibility provides an adequate framework to isolate relevant changes in legislation and how they map to changes in eligibility criteria. In particular, by observing each state's time series, one can pin down a treatment date for each state and build an event study around that period. To identify such a date, I am based on the jumpy or discontinuous behavior of simulated eligibility rather than using the initial enrollment date

¹⁴Individual between 0-18 years old

as in Table 25. This is because the subsequent introduction of legislation implied different state dynamics of eligibility, which is the mechanism I want to investigate. Table 26 shows the date that is consistent with the event study plots in Figure 11. This figure depicts the simulated eligibility level with respect to the previous year's expansion level. The vast majority of the states showed a very flat pre-trend in simulated eligibility before the expansion. This was due to relatively stable AFCD income thresholds. Finally, Figure 12 summarizes this information by collapsing states' eligibility levels by year of expansion. The top panel depicts the trend in eligibility relative to the year before the expansion for each group and presents the information by calendar year, showcasing the staggered adoption of the policy. The bottom panel shows the same information, but it plots it by relative time to the expansion year.

Table 24: Medicaid Expansion 1986-1990

Reform	Effective date	Details
Omnibus Budget Reconciliation Act (1986)	Apr 1987 Oct 1987	Separate Medicaid eligibility from AFDC eligibility (Optional) Pregnant Women and Infants up to 100% of FPL (Optional) Children under 5 up to 100% of FPL (phase-in on yearly basis)
Omnibus Budget Reconciliation Act (1987)	Oct 1988	(Optional) Pregnant Women and Infants up to 185% of FPL (Optional) Accelerate coverage for children under 5 up to 100% FPL (Optional) Extend Coverage for Children up to age 8 up to 100% of the FPL (phase-in on yearly basis)
Medicare Catastrophic Coverage Act (1988)	Jul 1989 Jul 1990	Infants in families up to 75% of FPL Infants in families up to 100% of FPL
Omnibus Budget Reconciliation Act (1989)	Apr 1990	Children under age 6 in families up to 133% of FPL
Omnibus Budget Reconciliation Act (1990)	Jul 1991	Children under age 19 born after September 30, 1983 in families up to 100% of FPL (phase-in on yearly basis)

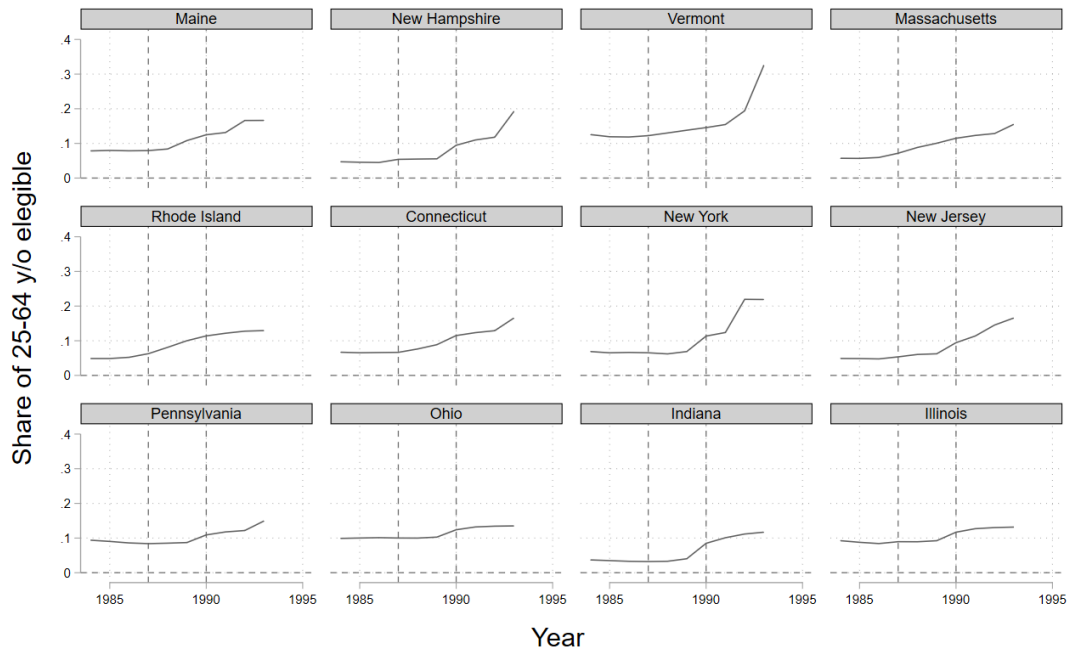
Source: Congressional Research Service (1988-1993). See [Brown et al. \(2020\)](#) for further details.

Table 26: Event Study Expansion Dates

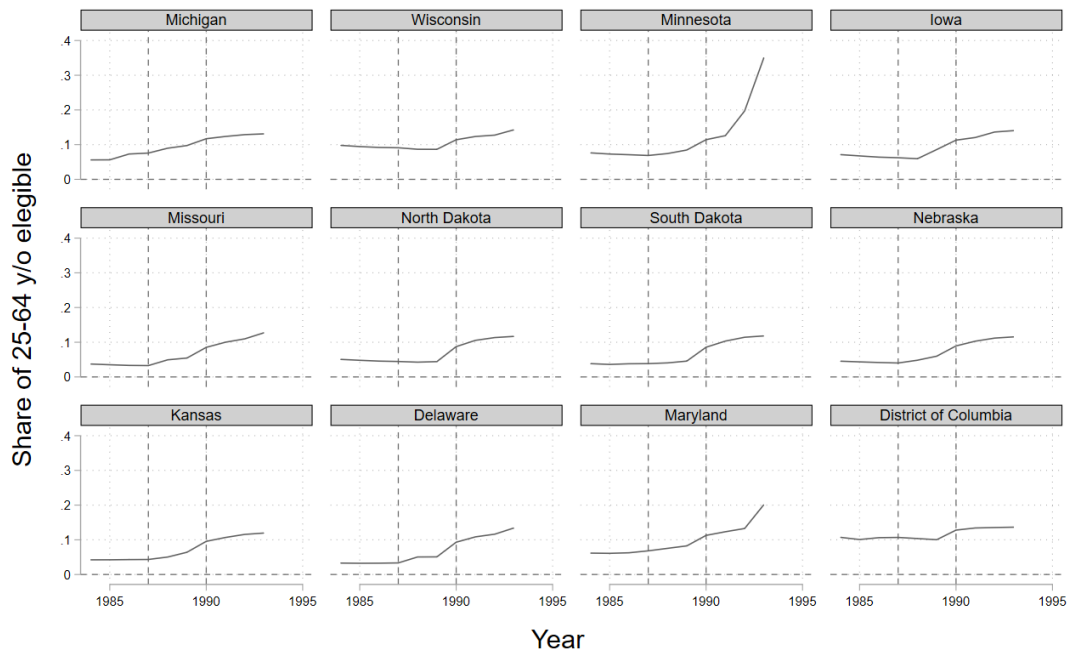
State	Expansion	State	Expansion
Alabama	AL 1989	Missouri	MO 1988
Alaska	AK 1989	Montana	MT 1990
Arizona	AZ 1986	Nebraska	NE 1988
Arkansas	AR 1987	Nevada	NV 1987
California	CA 1989	New Hampshire	NH 1989
Colorado	CO 1990	New Jersey	NJ 1989
Connecticut	CT 1988	New Mexico	NM 1988
Delaware	DE 1988	New York	NY 1990
District of Columbia	DC 1990	North Carolina	NC 1987
Florida	FL 1988	North Dakota	ND 1990
Georgia	GA 1989	Ohio	OH 1990
Hawaii	HI 1988	Oklahoma	OK 1990
Idaho	ID 1990	Oregon	OR 1988
Illinois	IL 1990	Pennsylvania	PA 1990
Indiana	IN 1989	Rhode Island	RI 1987
Iowa	IA 1988	South Carolina	SC 1988
Kansas	KS 1988	South Dakota	SD 1989
Kentucky	KY 1988	Tennessee	TN 1988
Louisiana	LA 1989	Texas	TX 1990
Maine	ME 1989	Utah	UT 1990
Maryland	MD 1987	Vermont	VT 1988
Massachusetts	MA 1987	Virginia	VA 1989
Michigan	MI 1988	Washington	WA 1988
Minnesota	MN 1990	West Virginia	WV 1985
Mississippi	MS 1987	Wisconsin	WI 1990
		Wyoming	WY 1990

Notes: Assigned expansion year for each state based on simulated eligibility. See Appendix B for further details.

Figure 9: Simulated Eligibility by state: 1984-1993

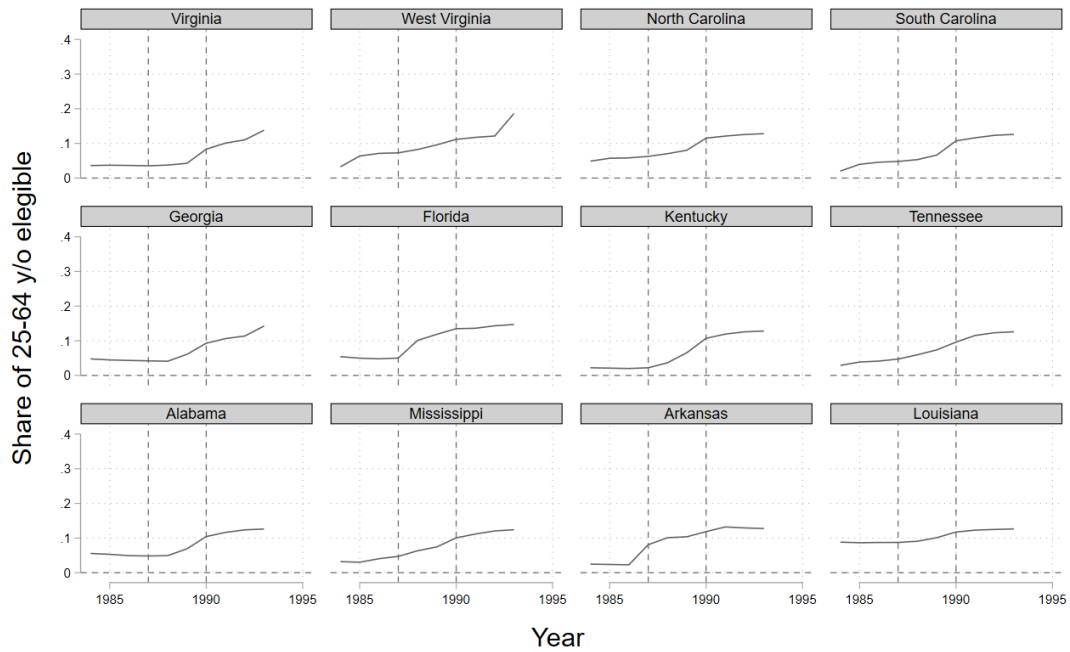


Graphs by statecensus

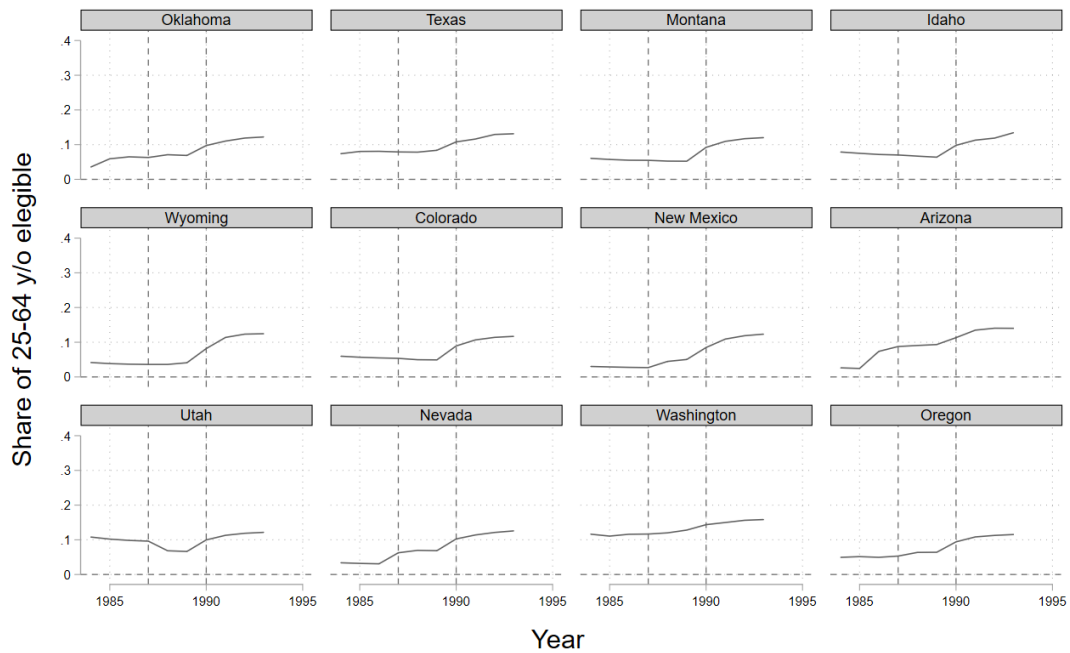


Graphs by statecensus

Figure 9 (Cont.): Simulated Eligibility by state: 1984-1993



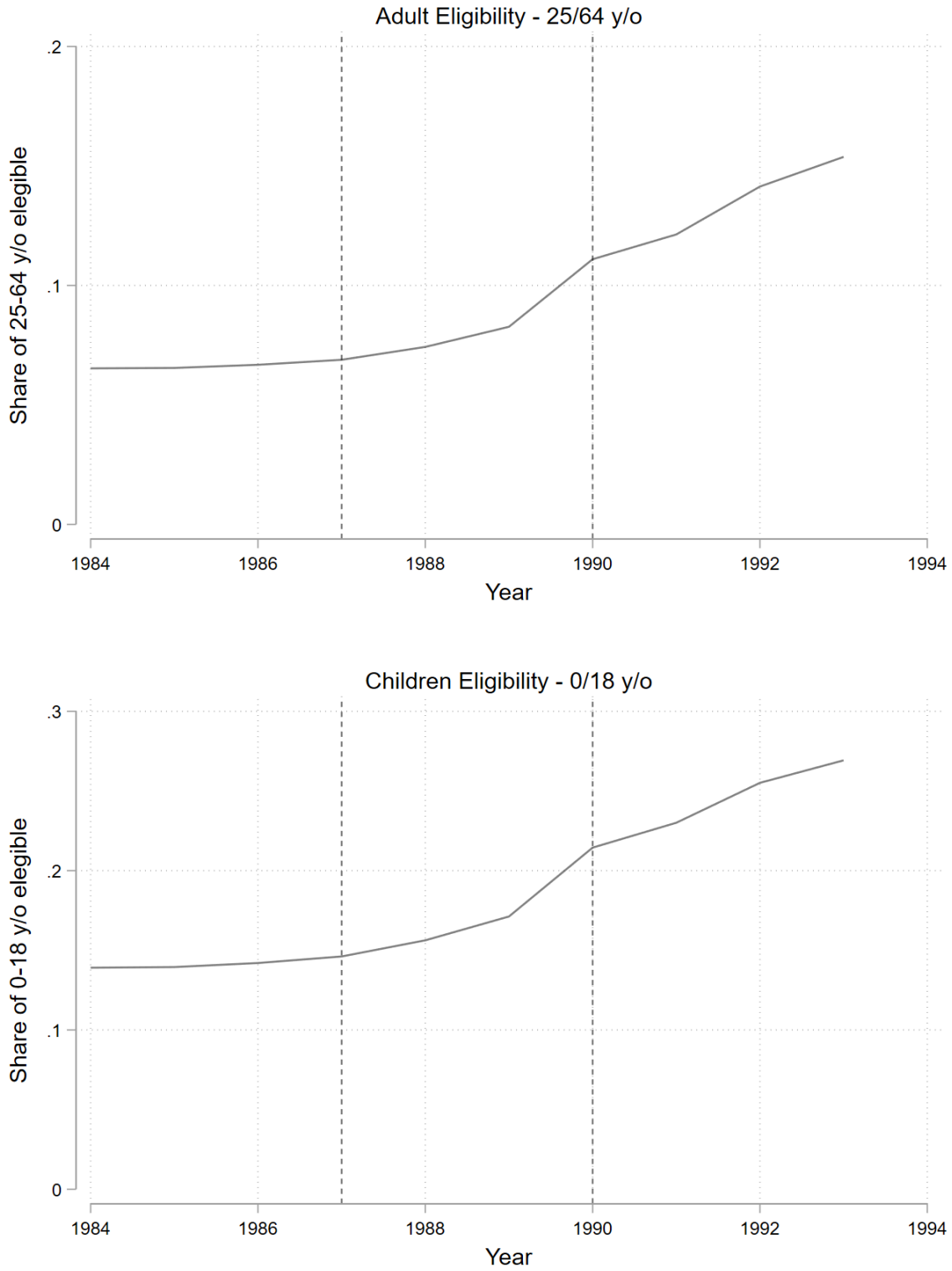
Graphs by statecensus



Graphs by statecensus

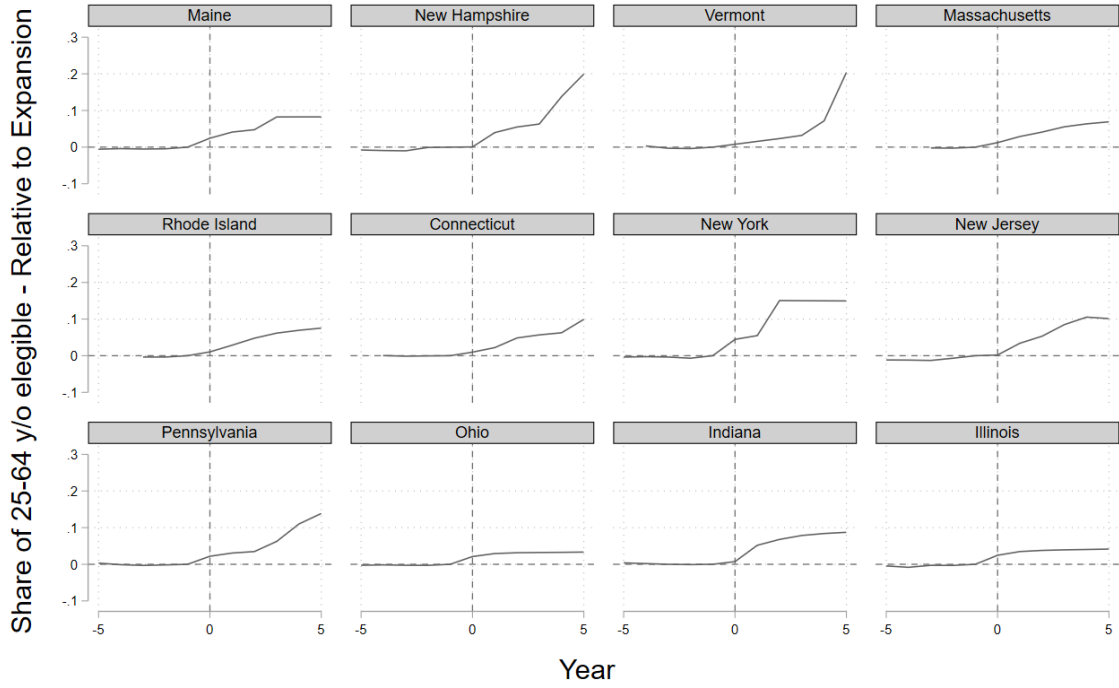
Notes: Author's calculation from the Current Population Survey and Medicaid Eligibility rules. The dotted lines show the 1987-1990 period. California, Hawaii, and Alaska are not shown. See Appendix B for further details.

Figure 10: Aggregate Simulated Eligibility: 1984-1993

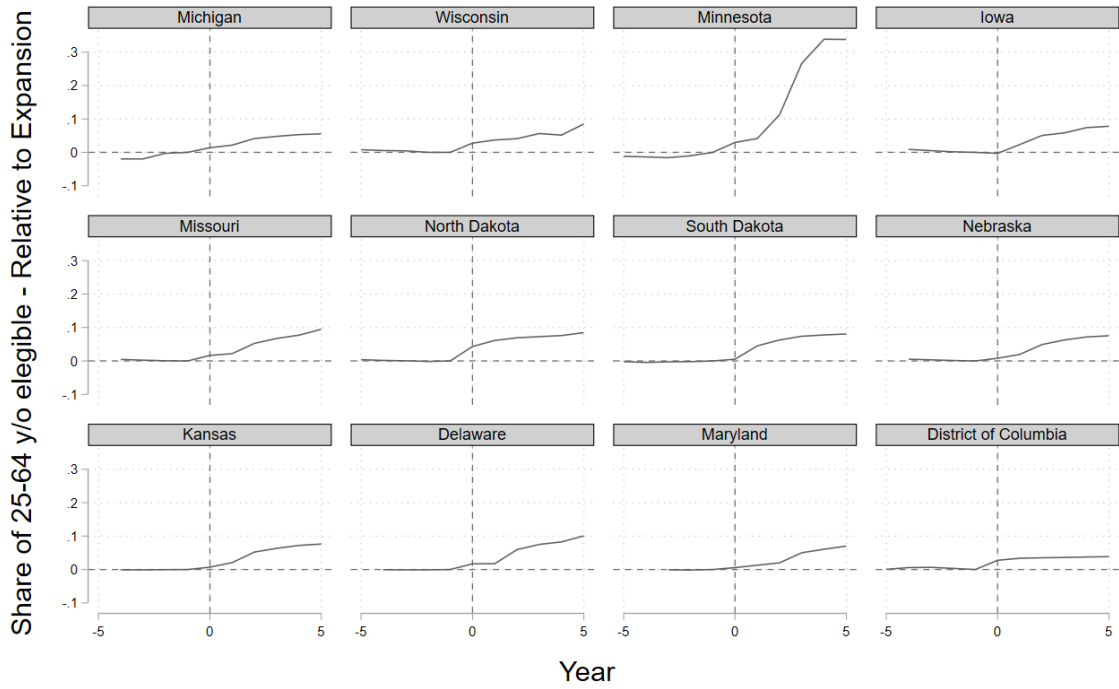


Notes: Top Panel: Solid line depicts the share of parents with at least one child eligible for Medicaid, using a simulated sample of parents (ASEC-CPS 1988). Bottom panel: Solid line depicts the share of dependent children eligible for Medicaid using a simulated sample of children (ASEC-CPS 1988). Both panels show the weighted average of state-specific simulated eligibility levels. See Appendix B for further details.

Figure 11: Event study by State

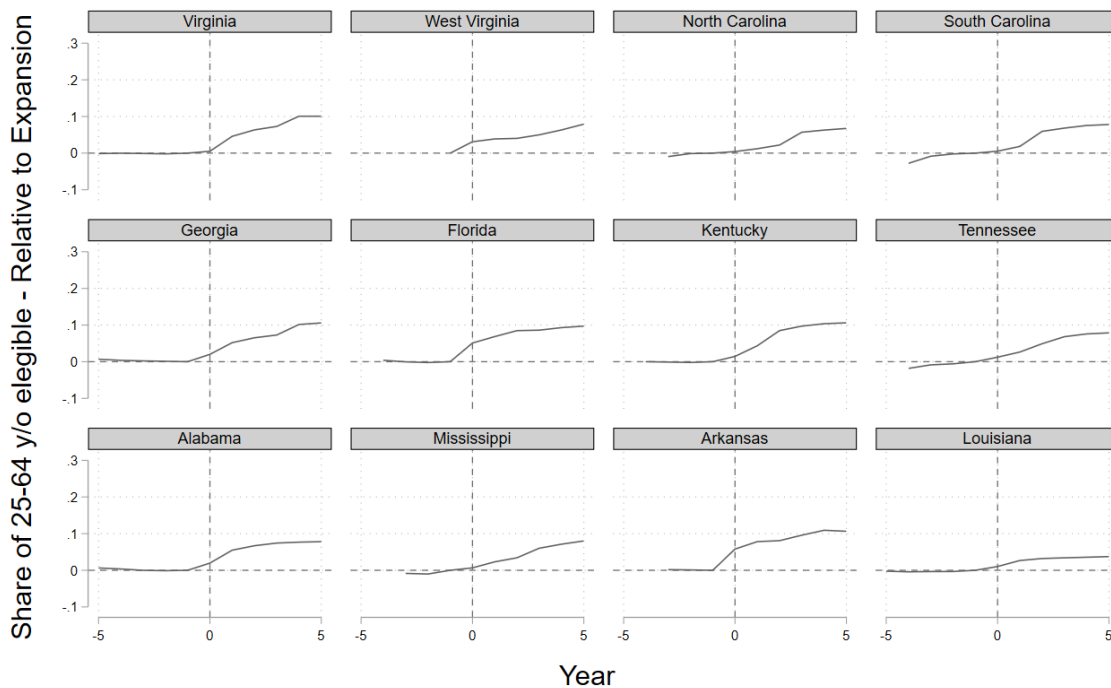


Graphs by statecensus

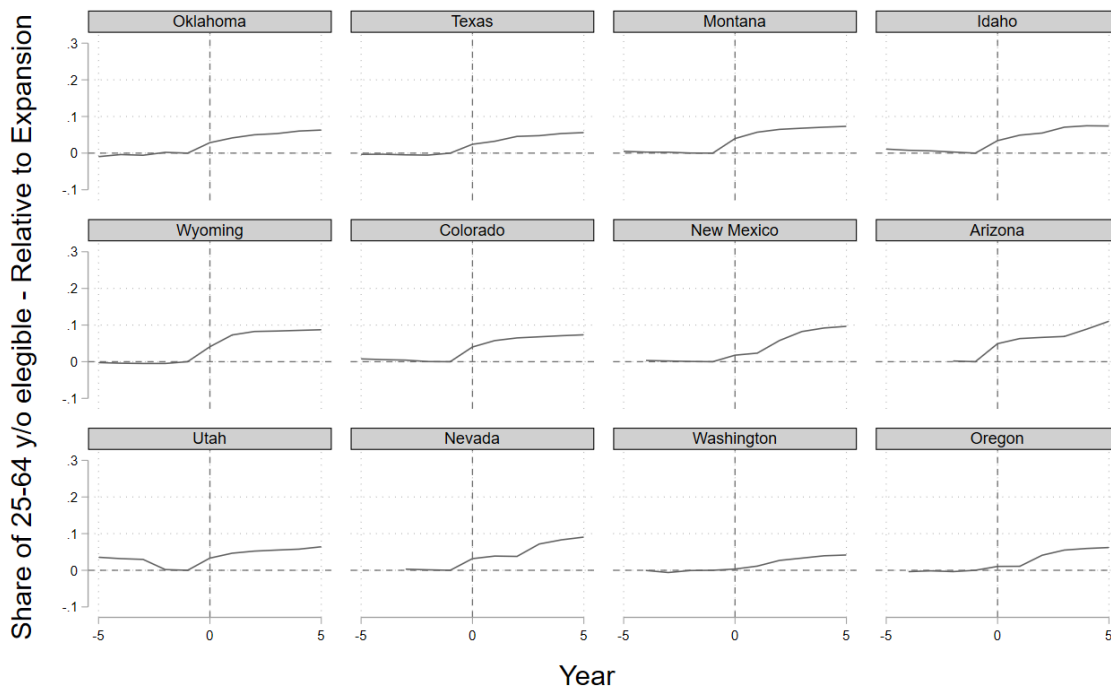


Graphs by statecensus

Figure 11 (Cont.): Event study by State



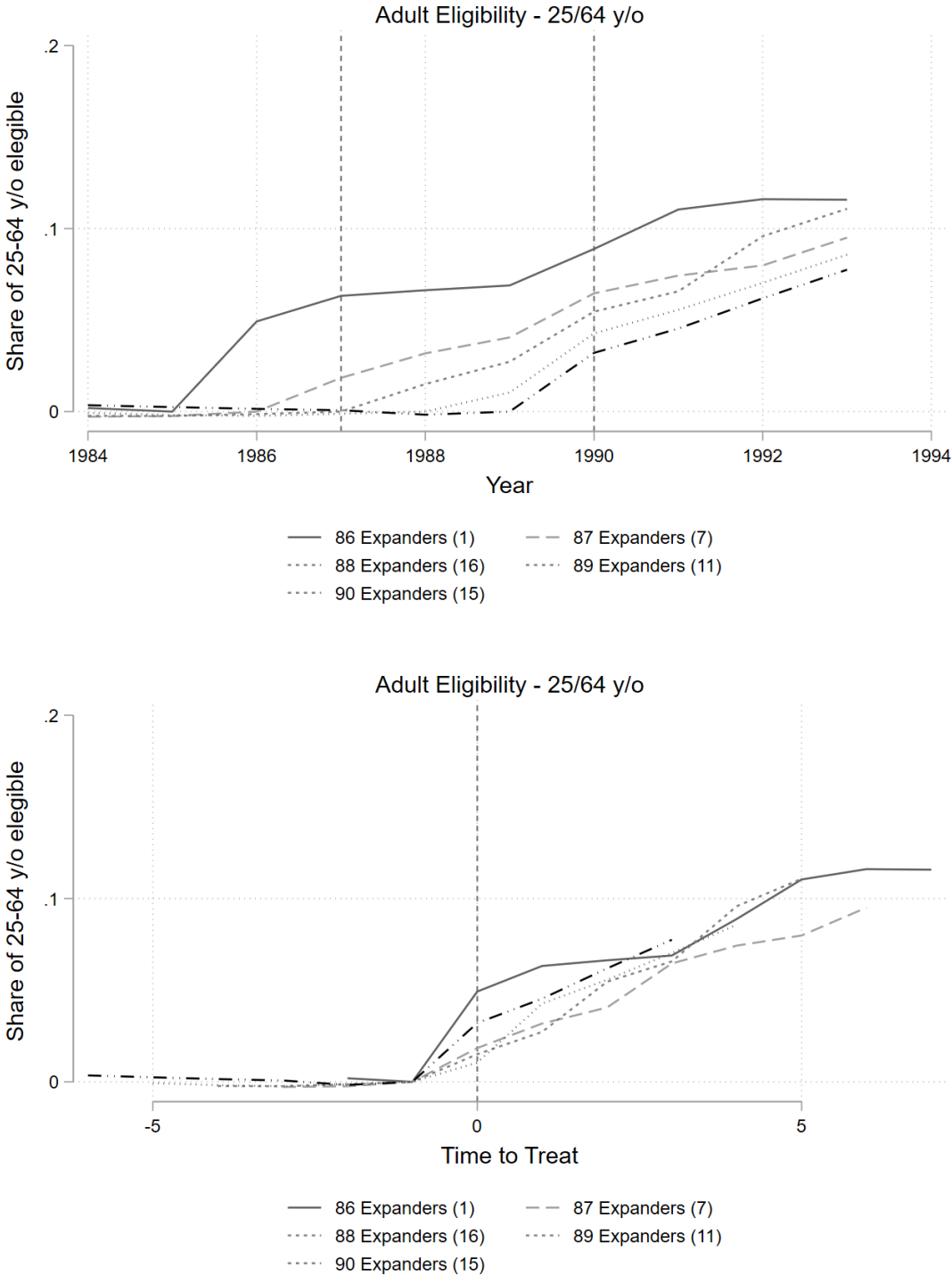
Graphs by statecensus



Graphs by statecensus

Notes: Author's calculation from the Current Population Survey and Medicaid Eligibility rules. The dotted lines show expansion year. California, Hawaii, and Alaska are not shown. See Appendix B for further details.

Figure 12: Medicaid Expansion Summary



Notes: Author’s calculations from the Current Population Survey and Medicaid eligibility rules. The top panel shows trends in eligibility by year. The bottom panel shows trend in eligibility by time relative to the expansion year. The groups are defined based on the expansion year. The number of states in each group is listed in parentheses. See Appendix B for further details.