

ESTIMATING THE EFFECTS OF PAID FAMILY LEAVE
ON BREASTFEEDING BEHAVIOR IN THE UNITED STATES

by

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ABSTRACT

Breastfeeding provides substantial health benefits for both mothers and infants, yet participation rates in the United States remain unequal across racial and socioeconomic groups. Black mothers are significantly less likely to initiate breastfeeding than white mothers. This thesis examines whether state-level Paid Family Leave (PFL) policies improve breastfeeding outcomes, with a focus on Black mothers. Using data from the CDC Pregnancy Risk Assessment Monitoring System (PRAMS) from 2000 to 2022 and labor force data from IPUMS CPS, I analyze four states that implemented PFL policies: New Jersey, New York, Rhode Island, and Washington. I estimate the policy treatment effects using difference-in-differences, triple difference, event studies, and synthetic control methods. Findings indicate that PFL is associated with a 2 percentage point increase in breastfeeding initiation relative to baseline rates. Effects are larger for Black mothers, who see increases of 7 percentage points on average. These results are robust across multiple estimation strategies. Although impacts on breastfeeding duration are limited, the findings suggest that PFL policies meaningfully promote breastfeeding initiation and may serve as a tool to reduce disparities in maternal and infant health.

CHAPTER ONE

INTRODUCTION

Breastfeeding is widely recognized as one of the most effective investments in early childhood health. The American Academy of Pediatrics recommends that infants be exclusively breastfed for the first six months of life. There is evidence that breastfeeding lowers the risk for infections, obesity, and chronic disease (AAP, 2020). The CDC echoes this recommendation but notes that only 1 in 4 infants is exclusively breastfed as recommended (CDC, 2024). Despite the benefits, breastfeeding rates in the United States remain uneven across racial and socioeconomic groups, particularly for Black mothers. The CDC notes that Black mothers only initiate breastfeeding at a rate of 75% compared to the national average of 84% (CDC, 2024).

A growing body of research suggests that employment-related constraints, particularly the lack of paid leave following childbirth, play a central role in shaping breastfeeding outcomes. The U.S. remains one of the few high-income countries without a national paid family leave program, leaving state-level initiatives to fill the gap. Beginning with California in 2004, several states have implemented Paid Family Leave (PFL) policies that provide partial income replacement for new parents. Through these policies, I aim to study how access to paid leave may influence breastfeeding participation and duration.

This thesis investigates the effect of PFL on breastfeeding outcomes in the United States using data from the CDC Pregnancy Risk Assessment Monitoring System (PRAMS) with supplemental data on labor force statistics from IPUMS CPS. This constructed dataset covers the years 2000-2022. I focus on four states that adopted PFL during this time frame: New Jersey, Rhode Island, New York, and Washington. Using these four states, I estimate the effect of PFL

through a variety of causal inference strategies, including difference-in-differences, triple difference, event studies, and synthetic control methods. Particular attention is given to identifying the disproportionate effect of PFL implementation on Black mothers.

This thesis finds that PFL policies are associated with a modest but meaningful increase in breastfeeding initiation, with larger effects among Black mothers. On average, PFL is linked to a 2 percentage point increase in breastfeeding participation, while Black mothers experience an average increase of 7 percentage points. These effects are robust across estimation strategies, though impacts on breastfeeding duration are more limited. By quantifying how paid leave policies shape maternal breastfeeding outcomes, this research contributes to ongoing policy debates and highlights the role of targeted social policy in reducing racial health disparities.

The remainder of this paper proceeds as follows: Section 2 provides background information and Section 3 describes prior research. Section 4 describes the data and variable construction. Section 5 presents empirical strategies, and Section 6 reviews the results of those strategies. Section 7 concludes with a discussion of implications for policy and future research.

CHAPTER TWO

BACKGROUND

In 1993, the federal government of the United States implemented the Family and Medical Leave Act (FMLA). This legislation allows eligible employees to take up to 12 weeks of job-protected, unpaid leave within a 12-month time period. Qualifying reasons for FMLA leave include the birth or adoption of a child, placement of a child through foster care, caring for a family member or the employee's own serious health condition, or addressing a qualifying emergency related to a family member in active-duty military service. FMLA remains the primary federal mandate that provides emergency leave for workers, and it forms the legal foundation for unpaid maternity leave in the United States (Federal Register, 1993).

Although the United States does not offer a federal paid maternity leave program, several states have implemented mandatory state disability insurance programs. These programs, typically funded through payroll deductions, allow workers to receive partial wage replacement while managing a serious illness, providing care for a family member, or bonding with a new child. Rhode Island was the first state to pass such legislation in 1942, followed by California, New Jersey, New York, Puerto Rico, and Hawaii.

Building on these disability insurance frameworks, some states have introduced Paid Family Leave (PFL) programs to extend benefits specifically for caregiving and parental bonding. California enacted the first PFL law in 2002, with benefits available beginning in 2004. Like disability insurance, PFL programs are funded through payroll deductions and typically provide between seven and sixteen weeks of paid leave. Subsequent PFL legislation was passed in New Jersey (2008), Rhode Island (2013), New York (2016) and Washington (2017). In some

states, such as New Jersey, PFL benefits may be combined with disability leave, offering parents up to 18 weeks of leave following childbirth. (California Employment Development Department, 2025). Table 1 outlines the current PFL benefits in the states included in this study.

Table 1: PFL Benefits by State

State	Title	Year Legislation Passed	Year Benefits Start	2025 Max. Duration of Benefits	2025 Max. Benefit Amount
New Jersey	Family Leave Insurance	2008	2009	12 weeks	85% of average weekly wage, up to \$1,081/week
New York	Paid Family Leave	2016	2018	12 weeks	67% of average weekly wage, up to \$1,177.32/week
Rhode Island	Temporary Caregiver Insurance Program	2013	2014	7 weeks	4.62% of the wages paid to employees in the highest quarter of the Base Period, up to \$1,070.00/week
Washington	Paid Family and Medical Leave	2017	2020	16 weeks	90% of the average weekly wage, up to \$1,542/week

CHAPTER THREE

LITERATURE REVIEW

The United States remains the only member of the Organisation for Economic Co-operation and Development (OECD) without a federal paid maternity leave policy. Despite this, several states, the first being California in 2002, have implemented their own payroll-funded family leave programs. Much of the existing research on paid family leave (PFL) focuses on California or Western Europe, where data availability is highest. As a result, there is limited evidence on the effects of PFL in the other U.S. states.

A large body of work has examined both the short- and long-term labor market impacts of family leave policies. Short-term outcomes include the likelihood that a mother returns to work after childbirth and whether taking extended leave reduces the probability of re-employment. Long-term outcomes typically assess lifetime earnings and the extent to which family leave contributes to the gender wage gap.

Using data from the early implementation of FMLA, Baum (2003) found no significant impact of unpaid leave eligibility on women's later wages or employment. Goodpaster (2010) reported that employed mothers in states without paid family leave are more likely to exit the labor force after unpaid leave. However, there remains no clear consensus in the U.S. literature on the labor market impacts of paid or unpaid family leave.

While the U.S.-based studies offer inconclusive results, international research points to other benefits of leave policies. A meta-analysis of European parental leave policies by Ruhm and Waldfogel (2011) suggests that the most substantial benefits may lie not in labor market outcomes, but in early childhood development. The authors found that the greatest gains from

parental leave occur during the first four months of a child's life, a critical period for parent-child bonding. Encouraging parental leave during this window may support improvements in both infant health and developmental milestones. In Canada, where paid family leave has been available in most provinces since 1971, labor and health outcomes have also been studied. Using data from Canada's maternity leave expansion, Baker and Milligan (2008) found that extending leave from six months to one year led to an average uptake increase of three months and extended breastfeeding by one month on average. However, the authors reported no statistically significant change in breastfeeding participation rates.

At the state level, California has received the most attention due to its status as the first to implement PFL. California's program offers up to 12 weeks of partially paid leave. Research on take-up rates has shown that men are significantly less likely than women to utilize paid leave, even when eligible. Bana et al. (2018) found that female bonding claims averaged 12 weeks, while male claims averaged fewer than six. Bartel et al. (2017) reported that fathers with access to PFL were 46% more likely to take any leave, and Baum and Ruhm (2013) found that men increased leave use by one week after PFL was enacted. These findings consistently show that women are more likely to use PFL benefits. Bailey et al. (2024) further support this, finding that women with access to PFL immediately after temporary disability insurance were 16 percentage points more likely to take leave than those without extended access. Bullinger (2019) examined maternal and child health outcomes under California's PFL policy, finding that it improved parent-reported infant health and likely enhanced maternal mental health, although those effects were not statistically significant.

A gap in the literature remains, as most U.S. studies focus either on the federal FMLA or on California. This study aims to expand the existing literature by examining breastfeeding outcomes in four states—New Jersey, New York, Rhode Island, and Washington—that implemented PFL policies between 2009 and 2020. While prior research often assumes near-universal uptake of leave when it is available, this study asks whether access to paid leave encourages longer breastfeeding duration or higher participation rates.

In summary, although a growing body of research examines paid family leave, especially in California and Europe, relatively little is known about its effects on breastfeeding outcomes. Most studies emphasize labor force participation or earnings, with limited focus on maternal and infant health. This paper seeks to fill that gap by evaluating the relationship between PFL and breastfeeding participation and duration in several U.S. states, offering insights that may inform the future design of family leave policies.

CHAPTER FOUR

DATA

The primary data source for this study is the Pregnancy Risk Assessment Monitoring System (PRAMS), administered by the U.S. Centers for Disease Control and Prevention (CDC). I use data from Phases 4 through 8, covering the years 2000 to 2022. While state participation varies across survey phases, I restrict the analysis to 17 states with consistent participation throughout the period: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Jersey, New Mexico, New York, Oregon, Rhode Island, Utah, Washington, and West Virginia. Although these states are included in each phase, some have intermittent missing years, which are noted in the analysis.

The analytic sample is further limited to mothers residing in these states whose infants were alive at the time of the survey. I exclude observations where the infant had passed away, removing 1,243 cases in Phase 4, 1,736 in Phase 5, 900 in Phase 6, 836 in Phase 7, and 928 in Phase 8. To assess breastfeeding behavior, I focus on mothers who had either completed breastfeeding or were still breastfeeding at the time of the survey. For mothers still breastfeeding, I impute breastfeeding duration by calculating the difference between the month of the survey and the infant's birth month.

Income data is inconsistently reported across phases. Phase 4 lacks income information entirely, while Phases 5 through 8 categorize income using different binning structures. To address this, I harmonize income into ten consistent categories across all phases. Although two economic recessions occurred during the study period, I do not find evidence that these events substantially influenced breastfeeding outcomes.

PRAMS questions used in this study are drawn from both the Core Questionnaire and the Birth Certificate section. From the Core Questionnaire, I include:

- Q19b (whether the mother spoke to a healthcare worker about breastfeeding)
- Q36a/c (infant birth month and year)
- Q41 (whether the infant was alive at the time of the survey)
- Q43–Q44 (whether the infant was ever breastfed and whether they are still being breastfed)
- Q45a/b (weeks or months of breastfeeding)
- Q54 (household income before birth)
- Q56a/c (survey month and year)

From the Birth Certificate section, I use categorical variables capturing maternal marital status, education, age, race, plurality of birth, number of previous live births, Hispanic ethnicity, state, and a unique ID number. Several variables, including income, ethnicity, and marital status, were recoded or grouped to ensure consistent categorization across phases. These harmonized categories are used in heterogeneity analyses.

For the synthetic control analysis, I construct balanced state-level panels centered on each treated state's PFL implementation year. The treated/control structure is as follows:

- New Jersey (treated 2009): 2004-2014, with controls from Hawaii, Illinois, Maryland, Maine, Nebraska, Utah, and West Virginia
- New York (treated 2018): 2014-2019, with controls from Illinois, Maryland, Maine, New Mexico, and Utah

- Washington (treated 2020): 2018-2022, with controls from Colorado, Maine, Michigan, Nebraska, New Mexico, and Utah
- Rhode Island (treated 2014): excluded due to missing data in 2015, which undermines the validity of a balanced panel.

The primary outcomes of interest are:

1. Breastfeeding participation: a binary indicator of whether the infant was ever breastfed
2. Breastfeeding duration: measured in weeks or months, depending on available data; duration is imputed for ongoing breastfeeding using date differences.

These outcomes are chosen due to the time-sensitive nature of breastfeeding and the hypothesis that access to job-protected leave may increase both initiation and duration. However, the dataset presents some limitations, including missing duration values even when breastfeeding initiation is reported. This may reflect survey fatigue or recall issues.

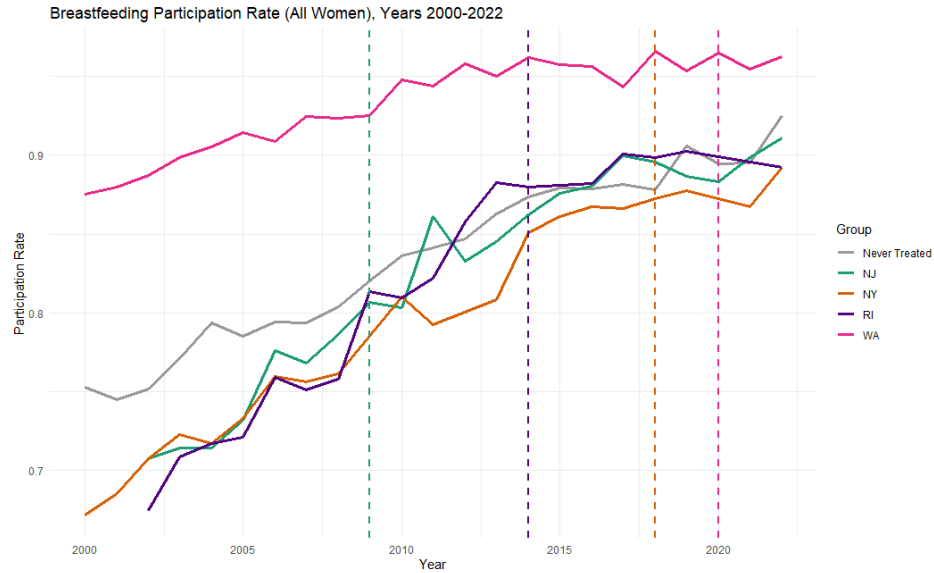
A further complication is the absence of employment status in PRAMS. Since eligibility for PFL typically depends on pre-birth employment, this limitation introduces potential bias. To partially address this, I supplement the analysis with state-level labor force participation rates (LFPR) to verify comparability between treated and control states. I use LFPR averages for women aged 25 to 35, the group most likely to give birth. These values, presented in Table 2, support the assumption that women in treated states are similarly likely to qualify for PFL benefits. This supplemental data is drawn from the IPUMS Current Population Survey (CPS).

Table 2: Summary Statistics for Women in Treated and Never Treated States, Years 2000-2022

	New Jersey	New York	Washington	Rhode Island	Never Treated
Overall LFPR	75.0	73.7	74.6	78.9	75.8
Black LFPR	77.4	73.2	70.2	76.7	75.8
Proportion Black	13.5	18.0	3.6	7.5	8.8
Breastfeeding Participation	81.1	78.5	93.0	80.4	82.6
Average Duration of Breastfeeding (Months)	1.65	1.60	1.56	1.55	1.66
Black Breastfeeding Participation	72.0	74.7	90.6	80.6	69.0
Black Average Duration of Breastfeeding (Months)	1.63	1.67	1.74	1.66	1.49

Note. Labor Force Participation (LFPR) data is from IPUMS CPS for women aged 25-35. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia. Breastfeeding data is from 2000-2022 CDC PRAMS.

Figure 1. Breastfeeding Participation Rate in Years 2000-2022



Note. Breastfeeding data is from 2000-2022 CDC PRAMS. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.

CHAPTER FIVE

EMPIRICAL STRATEGY

To evaluate the impact of Paid Family Leave (PFL) policies on breastfeeding outcomes, I employ a combination of econometric approaches that build upon each other to reinforce the robustness of the findings. I begin with a difference-in-differences (DiD) approach, estimated via a two-way fixed effects (TWFE) model, to identify the average PFL treatment effect by controlling for unobserved heterogeneity across states and over time.

To examine heterogeneity in policy effects, particularly by race, I extend the DiD framework using a triple difference (DDD) specification. This model allows for an interaction between treated states, treated time period, and subgroup status, enabling me to assess whether PFL has a differential impact on Black mothers relative to non-Black mothers.

Recognizing the limitations of standard DiD models in settings with staggered policy adoption, I incorporate two event study designs. I first estimate a TWFE event study and then extend it with the two-stage estimator proposed by Gardner (2021). These dynamic models allow for flexible estimation of treatment effects over time and provide a visual check of the parallel trends assumption, a key identification requirement in difference-in-differences analysis.

Finally, I implement a synthetic control method to construct state-specific counterfactuals for each treated state. This method offers a visual and intuitive robustness check of the estimated effects and strengthens the causal interpretation by comparing observed outcomes to a weighted combination of untreated states that closely match pre-treatment trends.

Together, these methods constitute a triangulated empirical strategy to identify the causal effects of paid family leave policies on breastfeeding behavior, accounting for treatment heterogeneity, policy timing, and unobserved confounders.

Difference-in-Differences Strategy

To identify the effect of PFL on breastfeeding outcomes, the ideal research design would randomly assign mothers, who are otherwise similar in income, demographic characteristics, and timing of birth, to either paid or unpaid postpartum leave. Such a randomized experiment would allow for clean comparisons in breastfeeding participation and duration between treatment and control groups. However, random assignment of paid leave is not feasible in practice, as PFL policies are adopted at the state level.

To address this, I use a difference-in-differences (DiD) strategy that compares changes in breastfeeding outcomes before and after PFL implementation in treated states to contemporaneous changes in control states that never implemented PFL. I include state and year fixed effects to account for time-invariant differences across states and for common time shocks across all states. This specification is thus estimated as a Two-Way Fixed Effects (TWFE) model.

The treatment effect is identified by comparing breastfeeding participation and duration for mothers before and after PFL implementation in their state, relative to mothers in states that never implemented PFL during the study period. Mothers in never-treated states serve as a control group that helps isolate policy-induced changes from broader trends. I estimate the following TWFE model:

$$\text{Equation 1) } Y_{i,s,t} = \beta_0 + \beta_1 PFL_{s,t} + \beta_2 X_{i,t} + \text{State } FE_s + \text{Year } FE_t + e_{i,s,t}$$

The dependent variable in Equation 1 is either breastfeeding participation, a binary indicator for whether the infant was ever breastfed, or breastfeeding duration, measured in months. For clarity, I refer to both as breastfeeding outcomes throughout the paper. These outcomes are measured for mother i , in state s , in year t .

The vector $X_{i,s,t}$ includes individual-level covariates such as maternal age, race, income level, marital status, education level, parity (previous live birth), and whether the mother reported speaking with a healthcare worker about breastfeeding. State fixed effects control for time-invariant differences across states, while year fixed effects account for national trends and common shocks over time. The treatment variable, $PFL_{s,t}$, is an indicator equal to one if a Paid Family Leave policy is active in state s during year t , and zero otherwise.

The parameter of interest, β_I , represents the estimated effect of PFL on a mother's decision to breastfeed or on the duration of breastfeeding, relative to mothers in states without access to PFL. In all specifications, standard errors are clustered at the state level to account for within-state correlation over time. PFL is implemented at the state level, and observations within a state may share unobserved characteristics that could bias standard errors if clustering is not applied.

To assess the robustness of the DiD estimates, I implement two additional specifications. First, I re-estimate the models using two-way clustering at the state-year level, allowing for arbitrary correlation within each state-year combination. Second, I include state-specific linear time trends to account for the possibility that states differ not only in outcome levels but also in the trajectories of breastfeeding outcomes over time. Together, these robustness checks enhance the credibility of the results and help ensure that the estimated treatment effects are not driven by

correlated shocks or unobserved trends. The results of these robustness specifications are presented in Table 4.

A key assumption of the TWFE identification strategy is the parallel trends assumption. This requires that, in the absence of treatment, trends in breastfeeding outcomes would have been similar across treated states (New Jersey, New York, Washington, and Rhode Island) and comparison states that never implemented PFL. In other words, no other external shocks or confounding factors should differentially affect breastfeeding participation or duration between treated and control groups in the pre-treatment period. If this assumption is violated, the TWFE estimator may produce biased and inconsistent estimates of the treatment effect.

To assess the plausibility of this assumption, I examine pre-treatment trends in breastfeeding participation. Figure 1 presents average participation rates for mothers in treated states and those in comparison states during the pre-policy period. The figure illustrates that these groups follow similar trajectories before PFL implementation, providing support for the validity of the parallel trends assumption in this setting.

Triple Difference Strategy

To explore the heterogeneous effects of Paid Family Leave policies on breastfeeding behavior, I implement a triple difference (DDD) strategy. This approach compares changes in breastfeeding outcomes for a specific subgroup, relative to other groups, before and after the implementation of PFL, while also accounting for overall trends in treated and untreated states.

One subgroup of particular interest is Black mothers, who have lower breastfeeding participation rates compared to other racial groups (CDC, 2024). Understanding whether PFL policies help reduce these disparities is central to evaluating the equity impacts of family leave

policy. The DDD approach allows me to estimate whether the effect of PFL on breastfeeding outcomes is significantly different for Black mothers relative to non-Black mothers. The triple difference specification is shown in Equation 2.

$$\text{Equation 2) } Y_{i,s,t} = \beta_0 + \beta_1 PFL_{s,t} + \beta_2 Black_i + \beta_3 (PFL_{s,t} * Black_i) + X_{i,s,t} + State\ FE_s + Year\ FE_t + e_{i,s,t}$$

This specification differs from Equation 1 in that I interact *PFL* and *Black*. The coefficient on this interaction, β_3 , captures the average additional effect of PFL on breastfeeding outcomes for Black mothers relative to non-Black mothers. I also estimate corresponding specifications for each racial group independently; for example, replacing *Black* and *PFL*Black* with *Hispanic* and *PFL*Hispanic*. This is also done with age of the mother, education level, marital status, income level, birth order, and whether breastfeeding was discussed with a healthcare worker during pregnancy.

Event Study Strategy

To complement the baseline TWFE and DDD models, I incorporate an event study design to examine the dynamic effects of PFL policies on breastfeeding outcomes over time. This approach enables me to assess how the treatment effect evolved in the years leading up to and following the implementation of PFL. Importantly, the event study framework also provides a visual and statistical check on the parallel trends assumption by comparing pre-treatment trajectories between treated and control groups. In addition, it allows for the detection of anticipatory effects, such as changes in behavior before policy implementation, possibly due to mothers timing births to align with anticipated access to paid leave.

To further ensure the robustness of my findings, I estimate a model following the two-stage difference-in-differences estimator proposed by Gardner (2021). The first stage is shown in Equation 3. The second-stage estimation is shown in Equation 4. In this framework, t represents the year of observation, and g is the year in which treatment (PFL implementation) begins. The difference, $\tau - g$, defines the relative time to treatment and is denoted by k . This formulation allows me to account for staggered adoption of PFL across states.

For instance, New Jersey implemented PFL in 2009; thus, in an observation for 2008, $k = -1$. In the event-time specification, I exclude the $k = -1$ period, which is the year immediately before the start of PFL benefits, from the summation to avoid collinearity, establishing it as the reference period for dynamic treatment effects.

The Gardner estimator is specifically designed to reduce the bias introduced by traditional TWFE models in settings with staggered treatment timing and heterogeneous treatment effects. This approach provides more accurate estimates of policy effects over time by isolating comparisons between treated and not-yet-treated units at each relative period.

Equation 3) $Y_{i,t} = \alpha_i + \gamma_t + \varepsilon_{i,t}$

Equation 4) $Y_{i,s,t} = \beta_0 + \sum_{k \neq -1}^{\tau} \beta_k * (\tau - g = k) + \beta_2 X_{i,t} + State\ FE_s + Year\ FE_t + e_{i,s,t}$

Synthetic Control Strategy

While TWFE and event study models rely on the parallel trends assumption between treated and untreated groups, the synthetic control method provides a data-driven approach to constructing a more precise counterfactual. Instead of assuming untreated states would have followed similar trends, this method creates a synthetic version of the treated state by forming a weighted average of control states that best replicate the treated state's pre-treatment outcomes.

Thus, this approach minimizes the reliance on the parallel trends assumption.

Using the Synth package in R, I construct a synthetic control for each treated state based on a balanced panel of donor states and pre-policy predictor variables. The Synth procedure selects weights to minimize differences between the treated state and its synthetic counterpart in both baseline predictors (such as demographics) and pre-treatment trends in breastfeeding outcomes. By closely matching these characteristics before policy implementation, any post-treatment divergence can be more confidently attributed to the PFL policy effect.

CHAPTER SIX

RESULTS

Difference-in-Differences Results

The Two-Way Fixed Effects model is used to estimate the causal impact of Paid Family Leave on breastfeeding outcomes. These results are reported in Table 3. The estimates suggest that PFL implementation is associated with a 2.6 percentage point increase (approximately 3% relative to the pre-treatment mean) in the probability that a mother initiates breastfeeding. This estimate is significant at the 10% level. In contrast, the estimated coefficients for breastfeeding duration are not statistically significant, indicating that PFL does not have a detectable impact on how long mothers breastfeed. Similarly, when analyzing breastfeeding duration conditional on participation, no statistically significant effect is observed. Results from a specification that includes a state-specific linear time trend show a slightly smaller but still positive estimated coefficient: a 1.7 percentage point increase in breastfeeding participation for mothers in treated states. These estimates, though slightly attenuated, are consistent in direction with the baseline specification. The additional specification results are available in Table 4.

Triple Difference Results

Estimates from the triple difference models, which examine heterogeneous treatment effects across subgroups, are provided in full in Appendix Table A2. The focal estimates for Black women are reported in Table 3. These results indicate that PFL implementation is associated with an additional 7.2 percentage point increase in the likelihood that Black mothers initiate breastfeeding, relative to comparable women in control states and relative to non-Black

women in treated states. This estimate is statistically significant at the 1% level, highlighting a potentially meaningful and targeted effect of PFL for this historically underserved group. To contextualize the magnitude of this estimate, the pre-treatment breastfeeding participation rate for Black mothers in the study is approximately 70%. This reflects an increase of 10% relative to the pre-treatment mean, suggesting that PFL policies may help reduce racial disparities in breastfeeding initiation.

As reported in Appendix Table A2, the corresponding triple difference estimates are not significantly different from 0 for other minority subgroup estimates. Significant estimates are found for less educated mothers, those with later-born children, and those with relatively lower income levels. These heterogeneous effects reinforce that the disadvantaged populations may benefit more from these PFL state policies. I cannot fully disentangle the effect on Black mothers from the effects on lower education or lower income groups, and I leave this to future research.

Table 3: Effect of PFL on Breastfeeding Participation and Duration

	Participation in Breastfeeding	Breastfeeding Duration	Breastfeeding Duration Conditional on Participation
Panel A: Difference-in-Differences			
PFL	.026* (.014)	.032 (.022)	.023 (.024)
Mean	.825	1.07	1.57
Panel B: Triple Difference			
PFL	.015 (.015)	.030 (.023)	.024 (.023)
PFL*Black	.072*** (.072)	.020 (.035)	.016 (.036)
Non-Black Mean	.842	1.11	1.58
Black Mean	.702	0.91	1.51
N	332,660	153,922	113,575

Note. The mean is averaged across all states in the pre-treatment period. Breastfeeding duration conditional on participation indicates that NA values are maintained in the data, while breastfeeding duration assigns 0 to months if the mother did not breastfeed. State and year fixed effects are used in all models. Breastfeeding data is from 2000-2022 CDC PRAMS. Significance is indicated *** significant at 1% level, ** significant at 5% level, * significant at 10% level.

Table 4: Robustness of Effect of PFL on Breastfeeding Participation

	Participation in Breastfeeding	Participation in Breastfeeding	Participation in Breastfeeding
Panel A: Difference-in-Differences			
PFL	.026* (.014)	.026* (.014)	.017*** (.004)
Panel B: Triple Difference			
PFL	.015 (.015)	.015 (.015)	.004 (.005)
PFL*Black	.072*** (.072)	.071*** (.021)	.075*** (.023)
State Clustered Errors	Yes	No	Yes
State * Year Clustered Errors	No	Yes	No
State-Specific Linear Time Trends	No	No	Yes

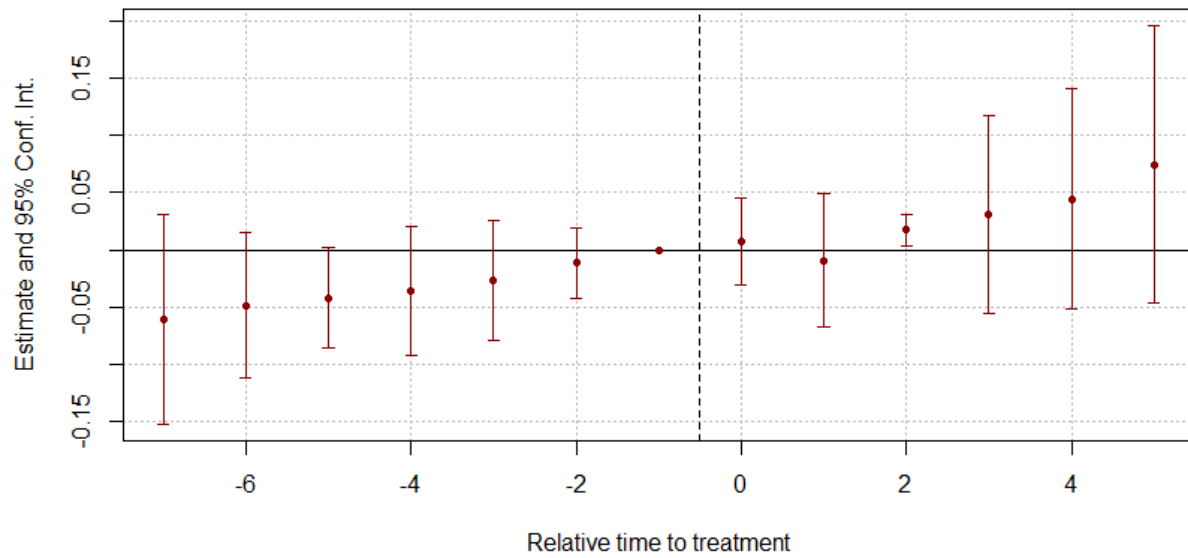
Note. Data comes from subsets of the 2000-2022 CDC PRAMS. Coefficients are given, and standard errors are in parentheses. The mean of pre-treatment breastfeeding participation in Panel A is .825. The pre-treatment breastfeeding participation mean in Panel B is .842 for non-Black mothers and .702 for Black mothers. N is 332,660. State and year fixed effects are used in all models. Significance is indicated *** significant at 1% level, ** significant at 5% level, * significant at 10% level.

Event Study Results

The results of the event study are presented by model type to highlight the robustness of the estimated policy effects. The first specification uses the TWFE estimator to examine changes in breastfeeding participation relative to the timing of PFL implementation. The second model applies the Gardner (2021) staggered treatment estimator, which addresses potential biases in the TWFE framework that arise in settings with staggered adoption or treatment. These models are shown in Figures 2 and 3, respectively. Each figure includes a reference line at event time $t = -1$. This is the period before PFL implementation. Confidence intervals are shown in the figures to indicate the estimates' statistical precision. In each case, the estimated effects of PFL

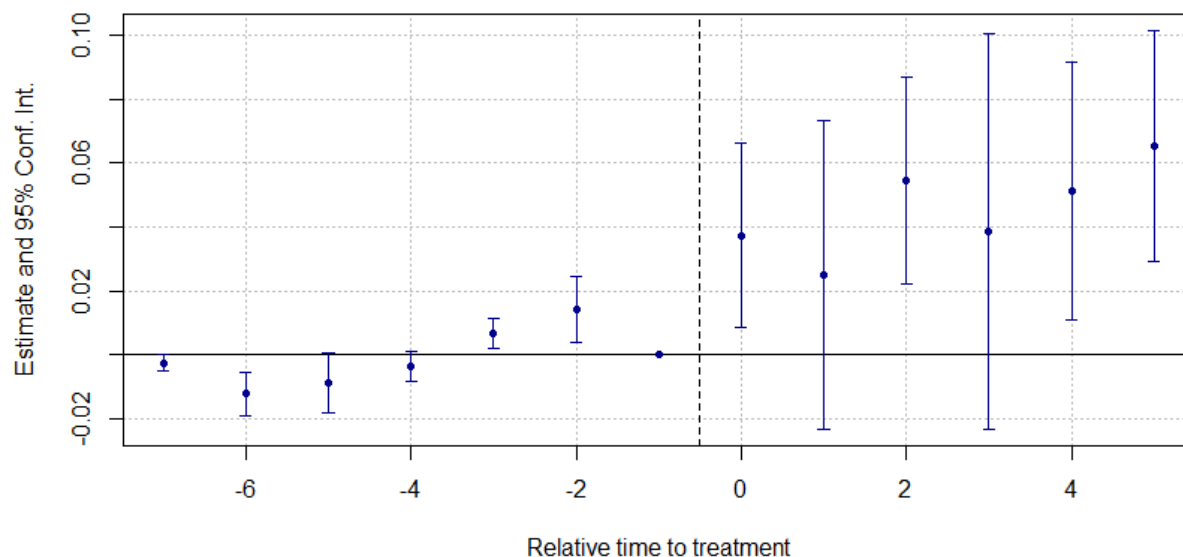
implementation on breastfeeding participation are positive and grow stronger over time, providing evidence of consistent and robust policy effects.

Figure 2. Effect of PFL on Breastfeeding Participation (TWFE)



Note. This figure presents estimates from a Two-Way Fixed Effects (TWFE) event study estimating the effect of Paid Family Leave (PFL) on breastfeeding participation. The x-axis shows years relative to the implementation of PFL, with year 0 marking the first year of treatment. Treated states include New Jersey, New York, Washington, and Rhode Island. Due to limited post-treatment data, Washington (treated in 2020) is excluded from $t=4$ and $t=5+$; New York (treated in 2018) is excluded from $t=5+$. The $t=-7$ estimate pools observations from seven or more years before treatment; $t=5+$ pools five or more years after. Data from the 2000-2022 CDC PRAMS.

Figure 3. Effect of PFL on Breastfeeding Participation (Gardner Model)



Note. This figure presents estimates from the Gardner (2021) two-stage difference-in-differences event study, which accounts for staggered adoption of Paid Family Leave across states. The x-axis displays years relative to PFL implementation, with year 0 marking the first year of treatment. The model controls for year and state fixed effects in the first stage and estimates dynamic treatment effects in the second stage. Treated states include New Jersey, New York, Washington, and Rhode Island. Due to limited post-treatment data, Washington (treated in 2020) is excluded from $t=4$ and $t=5+$. New York (treated in 2018) is excluded from $t=5+$. The $t=-7$ category includes observations from seven or more years before treatment; $t=5+$ aggregates five or more years after. Estimates are based on data from the 2000-2022 CDC PRAMS.

Synthetic Control Results

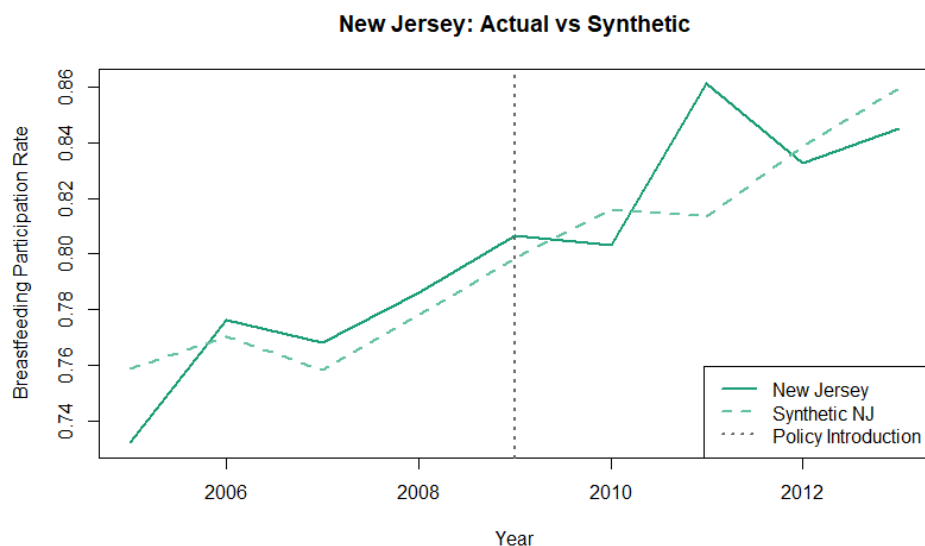
To further explore the impact of PFL implementation on breastfeeding participation, I apply synthetic control methods to construct counterfactual trends for New Jersey, Washington, and New York—states that adopted PFL policies during the study period. The synthetic control for each state is generated using a weighted combination of comparison states that did not implement PFL. This approach further validates the baseline DiD specification results as it minimizes the reliance on the parallel trends assumption.

Due to limited post-treatment data, Rhode Island is excluded from this analysis. In general, the performance of each synthetic control varies, and these results highlight the

importance of having sufficient pre- and post-treatment observations to produce consistent estimates. The full list of donor pool states and their associated weights is included in Appendix A.

For New Jersey, the synthetic control closely tracks the observed breastfeeding participation rate during the pre-treatment period, as shown in Figure 4. This tight fit suggests a well-constructed counterfactual. Following the implementation of PFL in 2009, the actual participation rate diverges upward from the synthetic estimate, suggesting a positive treatment effect consistent with earlier DiD and event study results.

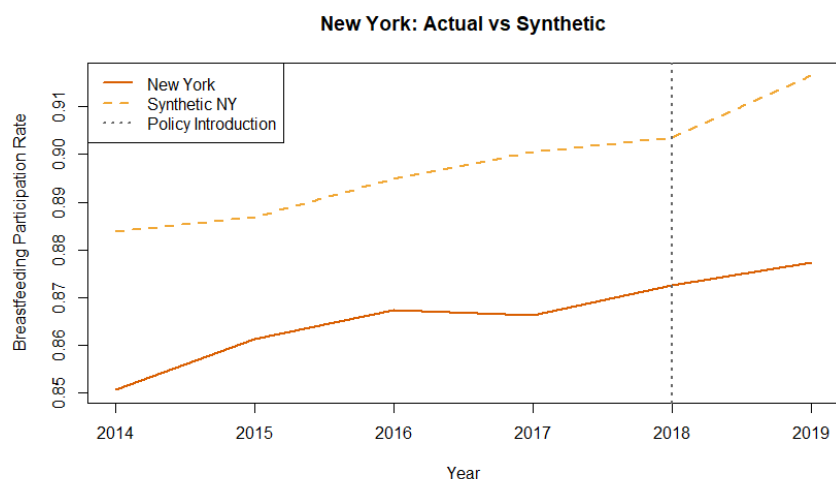
Figure 4. Breastfeeding Participation: New Jersey vs. Synthetic Control



Note. New Jersey implemented Paid Family Leave in 2009, indicated by the vertical line. The solid line shows the observed breastfeeding participation rate, while the dashed line represents the synthetic control. The synthetic control is made from a weighted combination of donor states that did not implement PFL during the study period. A subset of the 2000-2022 CDC PRAMS data is used to construct the synthetic New Jersey.

In New York, shown in Figure 5, the synthetic control overestimates actual breastfeeding participation before PFL implementation in 2018. After policy adoption, the observed participation rate continues to increase but does so more slowly than the synthetic control trend. This pattern suggests that the short-run effects of the policy may be limited, potentially due to gradual benefit rollout, delayed awareness, or low initial uptake.

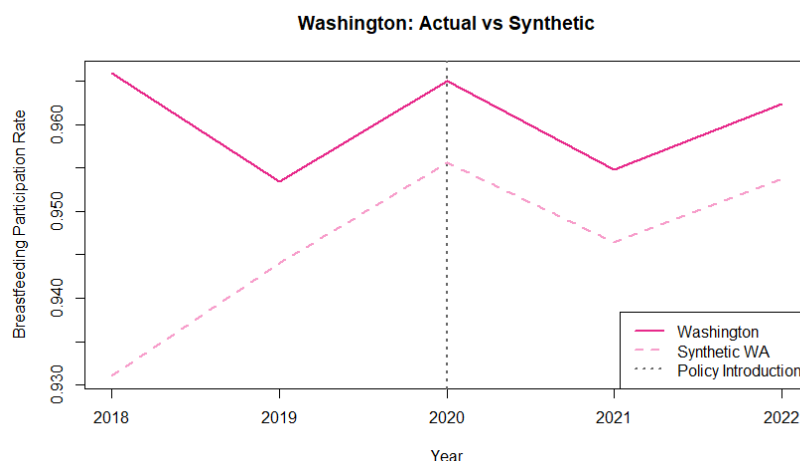
Figure 5. Breastfeeding Participation: New York vs. Synthetic Control



Note. New York implemented Paid Family Leave in 2018, indicated by the vertical line. The solid line shows the observed breastfeeding participation rate, while the dashed line represents the synthetic control. The synthetic control is made from a weighted combination of donor states that did not implement PFL during the study period. A subset of the 2000-2022 CDC PRAMS data is used to construct the synthetic New York.

The synthetic control for Washington shown in Figure 6 does not replicate pre-treatment trends well and consistently underestimates actual participation. Given that the policy was implemented in 2020, and the dataset ends in 2022, the short window of post-treatment observations as well as the timing, relative to the COVID-19 pandemic, also limits the interpretability of the post-policy trends. As such, any observed divergence is unlikely to reflect a reliable treatment effect and may instead be driven by poor pre-treatment fit and limited data.

Figure 6. Breastfeeding Participation: Washington vs. Synthetic Control



Note. Washington implemented Paid Family Leave in 2020, indicated by the vertical line. The solid line shows the observed breastfeeding participation rate, while the dashed line represents the synthetic control. The synthetic control is made from a weighted combination of donor states that did not implement PFL during the study period. A subset of the 2000-2022 CDC PRAMS data is used to construct the synthetic Washington.

Overall, the synthetic control analysis indicates that New Jersey shows the strongest evidence of a positive treatment effect, likely due to a well-fitting synthetic control and a longer post-policy observation window. In contrast, New York and Washington exhibit weaker or inconclusive patterns, largely attributed to shorter post-treatment periods and poorer synthetic matches.

Balanced Panels Regressions

As a final robustness check, I re-estimate the effect of PFL implementation on breastfeeding participation using balanced panels constructed for the synthetic control analysis. These regressions assess the overall treatment effect of PFL, as well as its impact on Black mothers, within the treated states of New Jersey, New York, and Washington. These results will

be reported for the overall effect of PFL implementation on breastfeeding participation, as well as the additional effect on Black mothers. These results are available in Table 5.

In the balanced panel models, I find that PFL implementation is associated with a 2 percentage point increase in breastfeeding participation in New Jersey and a 1.8 percentage point increase in New York. Washington's estimated coefficient is negative, likely reflecting the limitations of the dataset, particularly the short post-treatment window. This is consistent with earlier concerns from the synthetic control analysis, where the synthetic Washington estimates did not closely track the observed participation trend.

In each balanced panel regression, the triple differences estimated coefficient for Black mothers remains positive and statistically significant. As seen in Table 5, I estimate increases of 5.2 percentage points in New Jersey, 10 percentage points in New York, and 7.2 percentage points in Washington in the share of Black mothers' breastfeeding following the introduction of PFL. While these subgroup models are estimated on smaller samples with fewer control states and reduced observations, the results are directionally consistent with the earlier findings. These results compare the effect against non-Black mothers, the composition of which varies by state. For example, the population proportion White non-Hispanics across all years is 36.4% in New Jersey, 69.9% in New York, and 27.7% in Washington. This reinforces the conclusion that PFL is particularly beneficial for Black mothers, a group that has historically faced barriers to breastfeeding. A possible explanation for the negative estimated coefficient for Washington is that the policy took effect in 2020, a year when the pandemic restricted healthcare resources and family support systems in the state.

These robustness checks support the core findings from both the difference-in-differences and event study analyses. Despite limitations in post-policy data, these estimated effects across models lend credibility to the conclusion that PFL improves breastfeeding participation and may offer disproportionate benefits to historically underserved populations.

Table 5: Effect of PFL on Breastfeeding Participation using Balanced Panels

	New Jersey	New York	Washington
Panel A: Difference-in-Differences			
PFL	.021*** (.007)	.018** (.007)	-.008* (.004)
Mean	.787	.894	.903
Panel B: Triple Difference			
PFL	.010 (.008)	.006 (.007)	-.017*** (.006)
Mean	.787	.894	.903
PFL*Black	.052*** (.019)	.100*** (.016)	.072*** (.022)
Non-Black Mean	.803	.829	.920
Black Mean	.661	.901	.791
N	126,331	39,471	40,647

Note. Data comes from subsets of the 2000-2022 CDC PRAMS. Coefficients are given, and standard errors are in parentheses. Pre-treatment means are used. Errors are clustered at the state level. State and year fixed effects are used in both regressions. Significance is indicated *** significant at 1% level, ** significant at 5% level, * significant at 10% level.

CHAPTER SEVEN

CONCLUSION

This thesis examines the effect of PFL policies on breastfeeding outcomes in the United States, with particular attention to impacts on Black mothers, who have been identified by the CDC as having lower breastfeeding participation rates relative to national averages. Using difference-in-differences, triple difference, event study, and synthetic control models, I consistently find that PFL is associated with modest but meaningful increases in breastfeeding participation.

The strongest and most consistent effects emerged in New Jersey, the earliest adopter of PFL in this dataset, where policy effects had more time to materialize and where data coverage was most complete. Across models, the evidence points to a positive effect of PFL on breastfeeding initiation, while results for breastfeeding duration are null.

For Black mothers, the effects are stronger. Triple difference models estimate that PFL increases breastfeeding participation among Black mothers by 7 percentage points more than among non-Black mothers. These findings remain consistent across balanced panel regressions with limited post-treatment data, where estimates range from 5 percentage points to 10 percentage points, depending on the state.

This research contributes to the growing literature on family leave policies and maternal health outcomes. Although PFL alone may not close breastfeeding gaps, it meaningfully improves initiation rates, particularly among Black mothers. As more states adopt paid leave programs, disproportionate benefits for marginalized communities could help advance both public health and health equity.

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APPENDICES

APPENDIX A

APPENDIX A: ADDITIONAL DESCRIPTIVE STATISTICS
AND RESULTS

Table A1: Descriptive Statistics for Treated and Never Treated States, Years 2000-2022

Group	New Jersey	New York	Rhode Island	Washington	Never Treated
Age	29.7	29.5	29.1	28.6	27.9
Less than High School	13.2	13.4	13.5	16.5	15.9
High School/GED	26.3	22.8	24.2	23.4	28.1
Some College	19.9	26.2	18.7	28.6	25.6
College Degree	39.9	36.8	38.2	29.1	29.3
BF Discussed w/ HCW	79.3	82.4	86.7	88.2	85.2
Married	62.9	65.5	59.8	64.2	63.1
White non-Hispanic	36.4	69.9	62.4	27.7	55.8
Black	20.3	10.5	8.4	13.6	12.4
Asian/Pacific Islander	17.7	4.3	4.6	16.2	10.5
White Hispanic	18.7	7.8	8.4	8.4	10.6
American Indian	.16	.33	.94	11.5	3.0
Other/Mixed Race	5.3	6.7	13.3	15.2	6.5

Note. Data is from 2000-2022 CDC PRAMS. Values represent the percentage of the state in the group. Age indicates the average age of mothers in the study. HCW indicates a discussion about breastfeeding was had with a healthcare worker during pregnancy. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.

Table A2: Effect of PFL on Breastfeeding Participation by Group

PFL * Group	Participation in Breastfeeding
35 ≤ Age	0.0004 (0.002) .827
25 ≤ Age < 35	0.002 (0.005) .813
Age < 25	0.014 (0.012) .708
Less than High School	0.040** (0.018) .672
High School/GED	0.013 (0.019)

Table A2 Continued	.698
Some College	0.0016 (0.003) .812
College Degree	-0.024* (0.014) .904
BF Discussed w/ HCW	-0.007 (0.007) .778
Married	-0.015 (0.018) .837
Single	0.015 (0.018) .668
White non-Hispanic	-0.063*** (0.017) .759
Black	0.072*** (0.072) .636
Asian/Pacific Islander	0.015 (0.016) .900
White Hispanic	0.005 (0.019) .849
American Indian	-0.015 (0.031) .782

Table A2 Continued

Other/Mixed Race	0.025 (0.020) .880
First Born Child	-0.021*** (0.007) .803
Second Born Child	0.005 (0.006) .769
Later Born Child	0.021*** (0.005) .741
Income $\leq$ \$14,999	0.0284 (0.019) .695
\$15,000 $\leq$ Income $\leq$ \$24,999	0.0237*** (0.007) .778
\$25,000 $\leq$ Income $\leq$ \$49,999	0.0007 (0.006) .820
\$50,000 $\leq$ Income $\leq$ \$74,999	-0.020*** (0.005) .878
\$75,000 $\leq$ Income	-0.007 (0.010)

No observations

Note. Data comes from subsets of the 2000-2022 CDC PRAMS. Coefficient provided, standard error in parentheses, mean provided below standard error. Means are taken across all pre-treatment years. Each row represents the triple difference coefficient from a different regression. The baseline coefficient for PFL is not shown and captures the average effect of PFL for all mothers who do not fall into that specific subgroup. N is 332,660. Significance is indicated *** significant at 1% level, ** significant at 5% level, * significant at 10% level.

Table A3: NJ Synthetic Control Donor States

unit	FIPS Code	weight	STATE
1	17	0.628	IL
2	24	0.289	MD
3	54	0.0775	WV
4	15	0.003	HI
5	23	0.002	ME
6	31	0.0001	NE
7	49	0.00004	UT

Table A4: WA Synthetic Control Donor States

unit	FIPS Code	weight	STATE
1	8	0.946	CO
2	23	0.053	ME
3	49	0.002	UT
4	26	0.0002	MI
5	35	0.00001	NM
6	31	0.000004	NE

Table A5: NY Synthetic Control Donor States

unit	FIPS Code	weight	STATE
1	24	0.627	MD
2	23	0.037	ME
3	49	0.00003	UT
4	35	0.000001	NM
5	17	0.00000004	IL

Table A6: Effect of PFL on Breastfeeding Participation by Group, New Jersey Balanced Panel

PFL * Group	Participation in Breastfeeding
35 ≤ Age	-0.007 (0.008) .833
25 ≤ Age < 35	0.0008 (0.005) .821
Age < 25	0.006 (0.012) .710
Less than High School	0.004** (0.02) .667
High School/GED	-0.019 (0.017) .705
Some College	0.011* (0.006) .815
College Degree	-0.011 (0.018) .906
BF Discussed w/ HCW	-0.023*** (0.006) .782
Married	0.022 (0.017) .849
Single	-0.022 (0.017) .668

Table A6 Continued

White non-Hispanic	-0.069*** (0.013) .755
Black	0.052*** (0.019) .661
Asian/Pacific Islander	0.040* (0.023) .920
White Hispanic	-0.0007 (0.019) .864
American Indian	-0.109*** (0.008) .716
Other/Mixed Race	0.030** (0.014) .867
First Born Child	-0.002 (0.007) .805
Second Born Child	-0.008** (0.004) .782
Later Born Child	0.011* (0.006) .764
Income $\leq$ \$14,999	0.021 (0.016)

Table A6 Continued	.677
\$15,000 ≤ Income ≤ \$24,999	0.015*** (0.004) .768
\$25,000 ≤ Income ≤ \$49,999	-0.009 (0.005) .819
\$50,000 ≤ Income ≤ \$74,999	-0.020** (0.008) .873
\$75,000 ≤ Income	-0.005 (0.017)
	No observations

Note. Data comes from subsets of the 2000-2022 CDC PRAMS. Coefficient provided, standard error in parentheses, mean provided below standard error. Mean is across all pre-treatment periods. Each row represents the triple difference coefficient from a different regression. The baseline coefficient for PFL is not shown and captures the average effect of PFL for all mothers who do not fall into that specific subgroup. N is 126,631. Significance is indicated *** significant at 1% level, ** significant at 5% level, * significant at 10% level.

Table A7: Effect of PFL on Breastfeeding Participation by Group, Washington Balanced Panel

PFL * Group	Participation in Breastfeeding
35 ≤ Age	-0.005 (0.005) .919
25 ≤ Age < 35	-0.019*** (0.002) .909
Age < 25	0.038*** (0.009) .875
Less than High School	0.106*** (0.022) .775
High School/GED	0.049*** (0.016) .845
Some College	-0.010 (0.006) .920
College Degree	-0.061*** (0.013) .969
BF Discussed w/ HCW	0.015** (0.006) .904
Married	-0.062*** (0.020) .940
Single	0.064*** (0.020) .836

Table A7 Continued

White non-Hispanic	-0.035*** (0.013) .923
Black	0.072*** (0.022) .791
Asian/Pacific Islander	-0.027** (0.011) .947
White Hispanic	-0.014** (0.006) .910
American Indian	0.033*** (0.011) .875
Other/Mixed Race	-0.014* (0.008) .915
First Born Child	-0.027*** (0.005) .935
Second Born Child	-0.002 (0.003) .912
Later Born Child	0.033*** (0.007) .857
Income $\leq$ \$14,999	0.086*** (0.015) .807

Table A7 Continued	
\$15,000 ≤ Income ≤ \$24,999	0.033*** (0.011) .859
\$25,000 ≤ Income ≤ \$49,999	0.003 (0.002) .911
\$50,000 ≤ Income ≤ \$74,999	-0.017*** (0.004) .958
\$75,000 ≤ Income	-0.045*** (0.013) .966

Note. Data comes from subsets of the 2000-2022 CDC PRAMS. Coefficient provided, standard error in parentheses, mean provided below standard error. Mean is across all pre-treatment periods. Each row represents the triple difference coefficient from a different regression. The baseline coefficient for PFL is not shown and captures the average effect of PFL for all mothers who do not fall into that specific subgroup. N is 40,647. Significance is indicated *** significant at 1% level, ** significant at 5% level, * significant at 10% level.

Table A8: Effect of PFL on Breastfeeding Participation by Group, New York Balanced Panel

PFL * Group	Participation in Breastfeeding
35 ≤ Age	0.002 (0.004) .899
25 ≤ Age < 35	-0.002 (0.005) .904
Age < 25	0.002*** (0.011) .866
Less than High School	-0.013 (0.014) .821
High School/GED	-0.039*** (0.013) .834
Some College	0.022*** (0.006) .902
College Degree	0.021* (0.012) .954
BF Discussed w/ HCW	0.009 (0.008) .894
Married	0.040*** (0.013) .930
Single	-0.040*** (0.013)

Table A8 Continued	.832
White non-Hispanic	-0.051*** (0.012) .894
Black	0.100*** (0.016) .829
Asian/Pacific Islander	0.061*** (0.010) .942
White Hispanic	-0.034* (0.021) .917
American Indian	-0.144*** (0.014) .863
Other/Mixed Race	0.013 (0.021) .925
First Born Child	-0.017*** (0.005) .922
Second Born Child	-0.011*** (0.004) .891
Later Born Child	0.036*** (0.003) .860
Income $\leq$ \$14,999	-0.063*** (0.015) .815

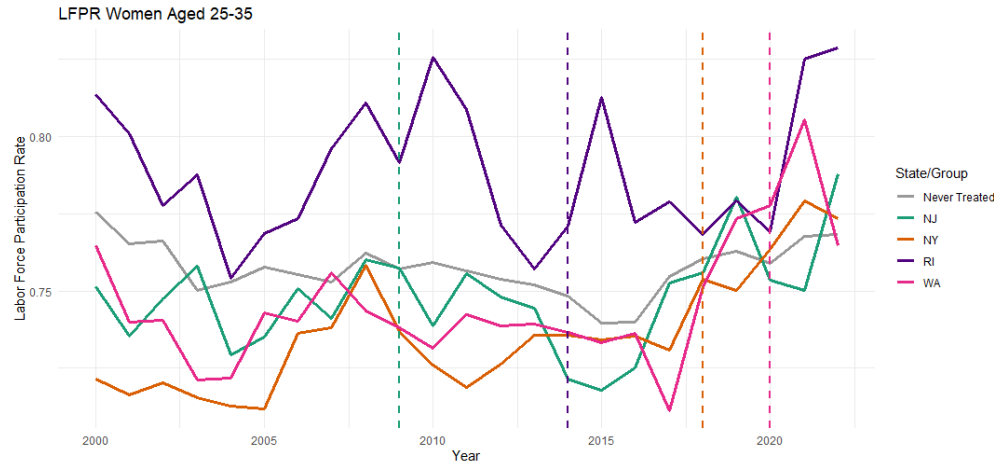
Table A8 Continued	
\$15,000 ≤ Income ≤ \$24,999	-0.041*** (0.008) .873
\$25,000 ≤ Income ≤ \$49,999	0.035*** (0.005) .916
\$50,000 ≤ Income ≤ \$74,999	0.022*** (0.006) .933
\$75,000 ≤ Income	0.018** (0.009) .945

Note. Data comes from subsets of the 2000-2022 CDC PRAMS. Coefficient provided, standard error in parentheses, mean provided below standard error. Mean is across all pre-treatment periods. Each row represents the triple difference coefficient from a different regression. The baseline coefficient for PFL is not shown and captures the average effect of PFL for all mothers who do not fall into that specific subgroup. N is 39,471. Significance is indicated *** significant at 1% level, ** significant at 5% level, * significant at 10% level.

APPENDIX B

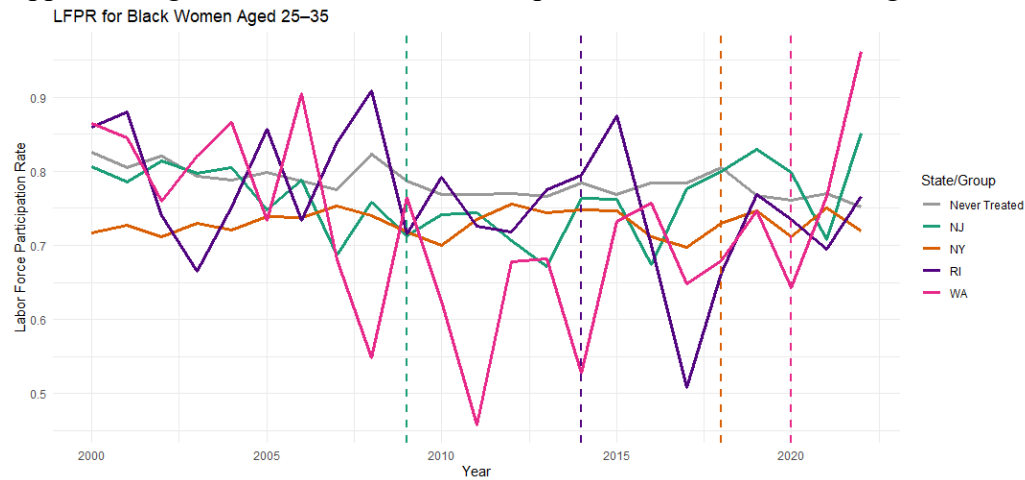
APPENDIX B: ADDITIONAL FIGURES

Appendix Figure B1. Labor Force Participation for Women, Aged 25-35



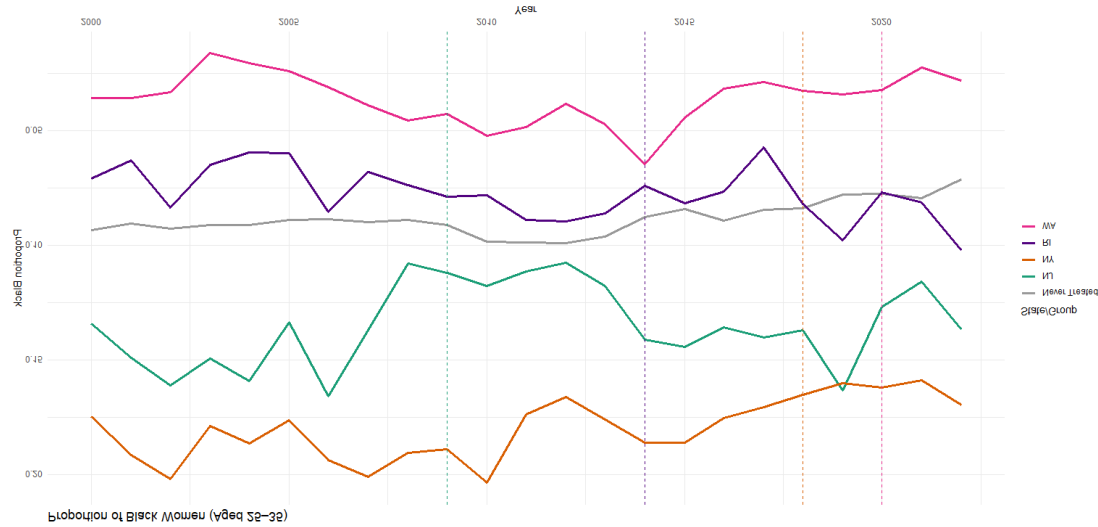
Note. Labor Force Participation (LFPR) data is from IPUMS CPS for women aged 25-35. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.

Appendix Figure B2. Labor Force Participation for Black Women, Aged 25-35



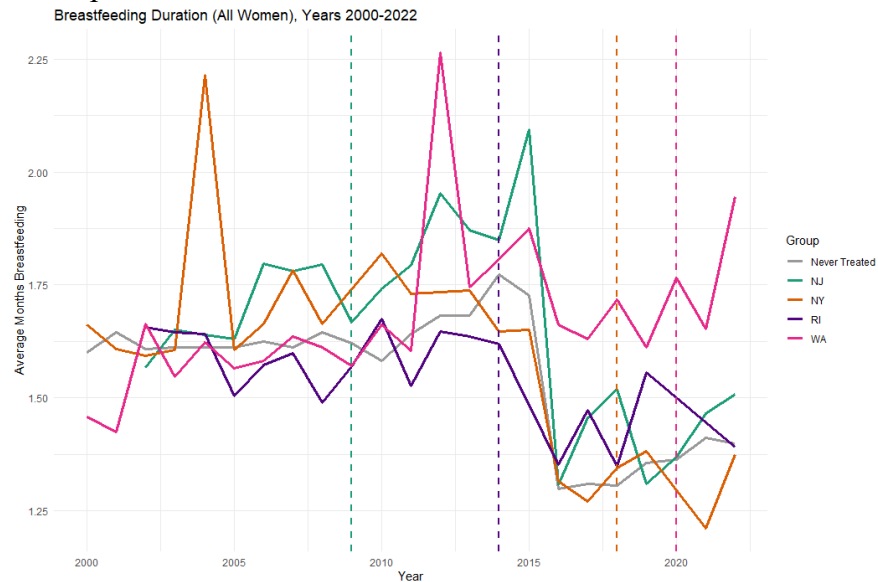
Note. Labor Force Participation (LFPR) data is from IPUMS CPS for Black women aged 25-35. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.

Appendix Figure B3. Black Women, Among Women Aged 25-35 in Each State



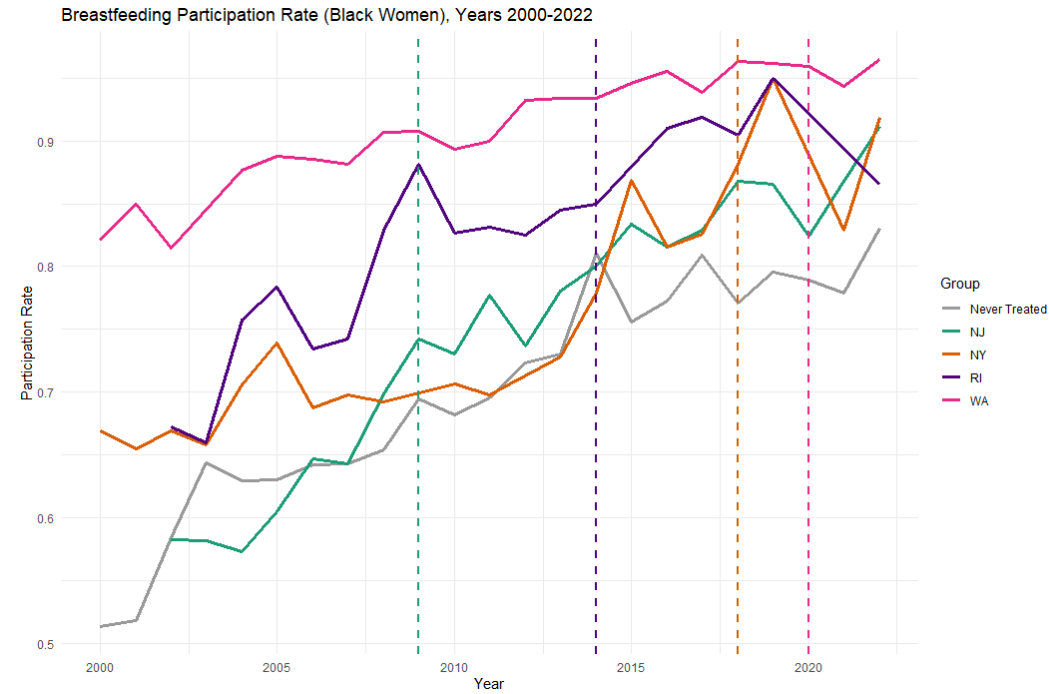
Note. Proportion indicates the proportion of Black women in the age group 25-35. Labor Force Participation (LFPR) data is from IPUMS CPS for Black women aged 25-35. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.

Appendix Figure B4. Average Breastfeeding Duration, Conditional on Breastfeeding Participation



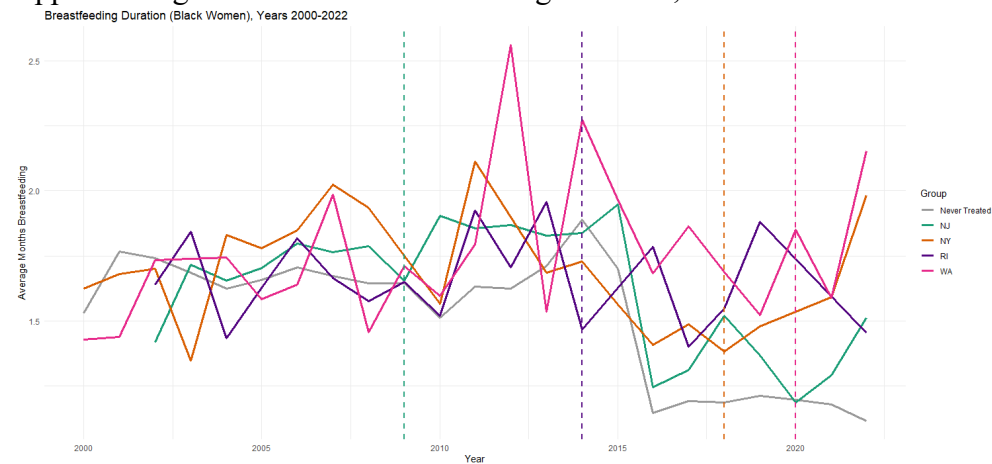
Note. Breastfeeding data is from 2000-2022 CDC PRAMS. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.

Appendix Figure B5. Black Breastfeeding Participation Rate in Years 2000-2022



Note. Breastfeeding data is from 2000-2022 CDC PRAMS. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.

Appendix Figure B6. Black Breastfeeding Duration, Conditional on Breastfeeding Participation



Note. Breastfeeding data is from 2000-2022 CDC PRAMS. Treated states: New Jersey, Washington, Rhode Island, and New York. Never treated states: Arkansas, Colorado, Hawaii, Illinois, Maine, Maryland, Michigan, Minnesota, Nebraska, New Mexico, Oregon, Utah, and West Virginia.