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THE EFFECT OF PAID SICK LEAVE MANDATES
ON INDIVIDUALS WITH DISABILITIES:
EVIDENCE FROM SOCIAL SECURITY DISABILITY CLAIMS

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ABSTRACT

Paid sick leave mandates (PSLs), which have been adopted by 18 states and the District of Columbia, require employers to provide regular wages when workers take short-term leave for their own or a family member's medical needs. This study is the first to explore the effects of PSL adoption on participation in the Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) programs, as well as the health of persons with disabilities. We find that statewide PSLs are associated with a 6-9 percent increase in initial claims for SSI and joint SSI/SSDI benefits. These applications translate to an increase in beneficiaries, strongest among children under age 18. An exploration of the primary mechanisms likely underlying this result reveals PSL-induced (1) increases in time spent offering informal caregiving of those with disabilities, which may reduce the costs of applying to SS(D)I programs, and (2) increases in health care utilization among children with disabilities. Evidence for negative work hours effects of PSLs is weaker, concentrated among spouses of persons with disabilities. Finally, we find that PSL mandates lead to modest improvements in health among both children and adults with disabilities.

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Abstract. Paid sick leave mandates (PSLs), which have been adopted by 18 states and the District of Columbia, require employers to provide regular wages when workers take short-term leave for their own or a family member's medical needs. This study is the first to explore the effects of PSL adoption on participation in the Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) programs, as well as the health of persons with disabilities. We find that statewide PSLs are associated with a 6-9 percent increase in initial claims for SSI and joint SSI/SSDI benefits. These applications translate to an increase in beneficiaries, strongest among children under age 18. An exploration of the primary mechanisms likely underlying this result reveals PSL-induced (1) increases in time spent offering informal caregiving of those with disabilities, which may reduce the costs of applying to SS(D)I programs, and (2) increases in health care utilization among children with disabilities. Evidence for negative work hours effects of PSLs is weaker, concentrated among spouses of persons with disabilities. Finally, we find that PSL mandates lead to modest improvements in health among both children and adults with disabilities.

JEL codes: J14; J18

Keywords: paid sick leave mandates; SSI; SSDI; Social Security Disability Benefits

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1. Introduction

Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) collectively cover over 11 million people under age 65 with disabilities (Social Security Administration (SSA) 2025a). SSI is among the most important means-tested programs for people with disabilities, reducing the poverty rate for child recipients by nearly half when accounting for SSI's benefits (Romig 2017). SSDI covers working-age adults with disabilities who meet work history requirements and children with a qualifying parent who is retired, disabled, or deceased. Similar to SSI, SSDI serves an important role in providing financial support to eligible families (Meyer & Wu 2018).

After a period of steady rise, SSI and SSDI applications have declined in recent years (Hemmeter, Levere, & Wittenburg 2024; Mohamed, Burns, & Cubanski 2024). For example, SSDI applications and awards fell by about 35% and 50%, respectively, from 2010-2023 (SSA 2025b). Similarly, the number of child SSI recipients fell by more than 25% from 2013-2023 (Hemmeter et al. 2024). Understanding application patterns is important for policymakers aiming to optimally target program availability.

Previous research has identified several important determinants of SS(D)I participation: Social Security Administration (SSA) field office closures (Deshpande & Li 2019), increased application processing times (Kearney, Price, & Wilson 2021), increased continuing disability reviews (Hemmeter et al. 2024), diminished access to high-speed internet (Foote, Grosz, & Rennane 2019; Zuo & Powell 2023), less information about program eligibility (Hemmeter et al. 2025), and diminished access to childcare via in-person schooling (Levere, Hemmeter, & Wittenburg 2024) have each been found to reduce SS(D)I participation.¹ In addition, there is strong evidence that SS(D)I applications are

¹ For example, Deshpande & Li (2019) find that SSA field office closures are associated with a 10% decline in disability applications and a 16% reduction in disability recipients, suggesting that SSA field offices play an important role in assisting applicants and identifying those most likely to be approved. In terms of children's SSI enrollment, Hemmeter et al. (2024) find that continuing disability reviews may explain up to two-thirds of recent declines.

responsive to labor market conditions: higher rates of unemployment and higher minimum wages (which may diminish employment opportunities²) have been found to increase SS(D)I applications, reflecting that the opportunity cost of participation is lower when labor markets tightness diminishes.³ Collectively, these findings indicate that increased administrative and application burden may reduce SS(D)I participation while poor economic and labor market conditions and greater access to program information may increase participation.

This paper is the first to study a policy designed to increase workplace flexibility — statewide paid sick leave mandates (PSLs) — on SS(D)I participation. PSLs require employers to offer compensated time off for illness and to access medical care. By broadly shifting access, incentives to participate, and the opportunity cost of participation — channels highlighted by the previous studies as important drivers of SS(D)I participation, such mandates may affect SS(D)I application rates in several ways. Paid sick leave may be used to complete application steps including screenings, in-person interviews, obtaining help at an SSA field office, and acquiring documentation to ascertain disability, income, and resource status. In addition to potential effects on employed working-age adults with disabilities, working spouses, parents, and other familial caregivers may use compensated time to assist a family member with their application process. Indeed, recent studies suggest that PSLs increase the amount of time devoted to childcare and eldercare (Arora & Wolf 2018; Maclean & Pabilonia 2024; Guo & Peng 2025). Complementary evidence from paid family leave policies also suggests increases in caregiving (Abramowitz & Dillender 2023).

² While a controversial literature in the U.S., there is at least some credible evidence to suggest that some less educated, lower-skilled, less experienced individuals may experience negative employment effects from state minimum wage increases. See, for example, Clemens and Strain (2024), Neumark and Shirley (2022), and Sabia et al. (2016; 2012).

³ Finally, several papers find that Medicaid expansion is associated with a reduction in SSI participation, likely due to decoupling SSI's receipt from Medicaid eligibility and allowing individuals with disabilities to independently qualify for Medicaid (from the expanded income thresholds) who previously were only categorically eligible for Medicaid due to their SSI receipt (Burns & Dague 2017; Levere et al. 2019; Staiger, Helfer & Van Parys 2024). Though, a few other studies find mixed or null results (Anand 2018; Schmidt, Shore-Sheppard, & Watson 2020).

PSL mandates may also have important employment effects that impact SS(D)I participation. Mandating employers to provide a non-wage attribute such as paid sick leave would raise total labor compensation costs, and may incentivize employers to cut the number of positions or to reduce wages and other benefits, which in turn may generate increases in SS(D)I applications. While research on paid sick leave mandates and labor market outcomes generally suggests positive or null effects (Pichler & Ziebarth 2020; Maclean, Popovici, & Ruhm 2023; Slopen 2024), there is limited evidence among working adults with disabilities or among parents and spouses who have a family member with a disability. On the other hand, positions that offer paid sick leave may be more attractive to adults with disabilities and caregivers, which, in the presence of imperfectly competitive markets (due to monopsony power or job search frictions), may increase employment.⁴ If PSL mandates increase work activity and therefore earnings, SS(D)I program participation may decrease (Duggan & Autor 2003; Autor & Goda 2020). Overall, the direction of the impact of PSLs on SS(D)I participation is theoretically ambiguous. This study is the first to empirically explore this question.

Using 2005-2022 SSA administrative data and a variety of difference-in-differences approaches — including two-way fixed effects (TWFE), Sun and Abraham (2021), and stacked difference-in-differences estimates (Cengiz et al. 2019) — we find that PSL mandates are associated with a 5.7% (or 2.29 initial SSI claims per 100,000 persons) increase in new SSI applications. We also find PSLs are associated with a 2.6%-5.7% decline in initial claims for SSDI, though these results are less precisely estimated. When examining exclusive vs. joint applications, we find the strongest evidence that PSLs increase exclusive SSI and joint SSI/SSDI initial claims. These findings may reflect that PSLs most effectively overcome barriers to access for the disability program that has more extensive

⁴ Furthermore, additional medical care received during paid sick days could improve health and functioning among workers who are at risk of relying on SS(D)I over their life course, allowing for increased labor force engagement and less need to rely on SS(D)I. Health improvements may also extend beyond “own effects” on directly impacted workers due to reduced presenteeism among coworkers (Callison & Pesko 2022).

eligibility requirements and higher application costs (SSI). In our analysis of program enrollees, we find that these effects are largest for children with disabilities (under age 18). Event study estimates are generally consistent with the parallel trends assumption and there is little evidence that our estimates are contaminated by heterogeneous and dynamic treatment effects.

Auxiliary analysis using the American Community Survey (ACS) and the Behavioral Risk Factor Surveillance System (BRFSS) Survey point several possible mechanisms that may explain our findings. First, we find evidence consistent with PSL-induced improvements in program access. In particular, we uncover complementary evidence that PSLs increase time spent caregiving of those with disabilities, which may be an important pathway through which PSLs reduce application costs. Second, we find that PSLs are associated with a 0.67 percentage-point reduction in the probability of full-time employment among spouses of adults with disabilities, which could suggest increased labor costs are reducing work hours. While this reduction in hours for the spouse and potential caretaker may reduce the opportunity cost of SS(D)I participation for adults with disabilities, we note that this adverse employment effect does not extend to adults with disabilities or parents of children with disabilities. Third, we find that PSLs are associated with a 2.15 percentage point increase in children's mental health visits, which could indicate that parents are using paid sick days to obtain medical disability documentation. About 72% of child SSI recipients qualify based on a mental disorder including intellectual and developmental disabilities (66%), mood disorders (3%), and other mental health conditions (3%) (SSA 2019).

Finally, using data from BRFSS and the National Survey of Children's Health (NSCH), we explore the net effects of PSL adoption on health. We find strong evidence that PSL adoption is associated with an improvements in self-reported health among adults and children with disabilities. This may reflect PSL-induced increased access to medical care or, perhaps, the health benefits of SS(D)I participation.

2. Background

2.1 SSI and SSDI: Institutional Background

Supplemental Security Income (SSI) is a means-tested program established in 1972 and funded by general revenues. SSI provides monthly cash assistance for people with disabilities and older adults who meet income and resource requirements. Work history is not a requirement for eligibility and does not determine payment amounts. In most states, SSI recipients also qualify for Medicaid. The program provided funds to 7.4 million people as of January 2024, including about 4 million working-age adults and 1 million children (Center for Budget and Policy Priorities (CBPP) 2024). About 85% of program enrollees qualify based on disability or blindness (SSA 2024). SSI payment amounts were \$967 per month per eligible individual and \$1450 per month per eligible couple in 2025 (SSA 2025c).

Social Security Disability Insurance (SSDI), established in 1956 and financed by the Social Security payroll tax, currently covers 8.1 million disabled workers including spouses and children (SSA 2025a). SSI and SSDI both require that working-age adults have a severe impairment to qualify. However, unlike SSI, SSDI eligibility requires that applicants have worked for at least one-quarter of their adult life and for five of the prior 10 years (CBPP 2025). Payment amounts are also directly tied to work history.

We contribute to the literature examining causal determinants of SSI and SSDI participation rates. In particular, while existing research has identified a variety of administrative, economic, and social factors associated with program participation, no research to our knowledge has examined the impacts of workplace flexibility policies such as PSLs.

2.2 PSL Mandates Background and Labor Market Effects

The Family and Medical Leave Act of 1993 requires US employers to offer up to 12 weeks of unpaid leave for qualifying medical and familial reasons (US Department of Labor (DOL) N.D.). Although many private employers elect to offer paid sick leave as a fringe benefit, there is currently no federally mandated requirement. Recent data suggest that about 77% of US private sector workers have access to paid sick leave, but only 38% of workers in the lowest wage decile have these benefits (Bureau of Labor Statistics (BLS) 2023). San Francisco was the first city to adopt a mandate in 2007 (City and County of San Francisco N.D.). Currently, 18 states and the District of Columbia have a mandate in place (Mitchell 2024). PSLs are typically intended to cover shorter durations of absence to address healthcare needs for the employee or an eligible family member. While the definition of an eligible family member differs by state, all state PSLs include children and spouses/domestic partners. The annual amount of time available ranges from 3-8 days, depending on the state (Mitchell 2024). In most states, employers must adhere to the mandates regardless of size, though there are some exceptions for small employers. Pichler and Ziebarth (2024) provide a comprehensive review of US paid leave policies and their implications in the US and international settings.

Research on PSLs provides robust evidence of a first-stage effect on access to and use of paid sick leave. Callison & Pesko (2022) use within-county variation in the likelihood of gaining paid sick leave after mandate enactment and find increases in PSL coverage rates and work absences, and corresponding reductions in presenteeism. Ahn & Yelowitz (2016) provide complementary evidence that access to paid sick leave is associated with about 0.9-1.2 additional work absences per year. Finally, Maclean et al. (2025) find that PSLs increase the likelihood that private employers offer paid sick leave by 32% and increase the use of paid sick leave by 22% using establishment-level data.

Given these findings, a natural question is whether PSLs influence labor market activity. Overall, research suggests null or positive impacts. Pichler & Ziebarth (2020) can reject reductions in employment and wages larger than 2-3%. Other research finds evidence of increases in employment among women of reproductive age (Maclean et al. 2023) and increases in women's earnings and reductions in poverty rates (Slopen 2024). Related evidence suggests that potential caregivers are less likely to reduce their working hours in response to a spouse's health shock when they have access to paid family leave (Anand et al. 2022; Coile et al. 2022). While PSLs raise costs for employers, research suggests that these costs are relatively low or possibly even net positive. Maclean et al. (2025) estimate that the mandates are associated with an increase in paid sick leave costs of about six cents per employee-hour worked. Furthermore, there is evidence to suggest that PSL mandates reduce rates of influenza transmission (Pichler et al. (2021)) and aggregate illness-related leave taking (Stearns & White 2018), likely because of reductions in presenteeism. Nonetheless, PSLs could increase employment activity via improvements in health and functioning and because additional benefits induce increased engagement in the labor market.

We are not aware of research examining the impacts of PSLs on labor market outcomes that focuses on people with disabilities and their families. It is plausible that impacts could differ relative to the general adult population for several reasons. First, employers may be more likely to discriminate against people with disabilities and caregivers after mandate implementation if they project that they will use relatively more paid sick days. Second, people with disabilities and caregivers may be more marginally attached to the labor force and also more responsive to the availability of paid sick leave benefits. Finally, workers with disabilities and caregivers may achieve relatively greater health gains from additional compensated time for illness and medical appointments. Since the impacts of PSLs on labor market outcomes among this population is an

empirical question, we examine intensive and extensive employment measures and find some evidence of a decline in full-time work among spouses of adults with a disability.

Taken together, the literature offers evidence that PSLs increase paid sick leave access and use from both employee- and employer-reported data, providing a strong foundation for our analysis of PSLs and SS(D)I. Moreover, existing work indicates null or positive impacts on intensive and extensive margins of labor supply. We find mostly consistent results among people with disabilities and their family members, though we find some evidence of a reduction in labor market activity on the intensive margin among working spouses.

2.3 PSL Mandates: Healthcare and Caregiving Impacts

A recent and expanding literature has examined the impacts of PSLs on healthcare utilization, finding increases in primary care and specialist visits, vaccinations, prescriptions, screenings, and contraception (Lamsal et al. 2021; Callison et al. 2023; Maclean et al. 2024; Maclean, Popovici et al. 2023; Callison et al. 2025) and decreases in emergency department visits (Ma et al. 2022). Using health insurance claims data, Callison et al. (2025) find that PSLs increase the likelihood of having a past-year primary care visit by 4.79 percentage points and also increase the average number of visits including specialist and outpatient diagnostic care. These findings are relevant to our work given the possibility that additional medical care visits may allow people with disabilities to receive an official disability diagnosis and required documentation.

Fewer quasi-experimental studies have directly addressed the health impacts of PSLs. Research indicates that PSLs reduce presenteeism and also reduce transmission of influenza and COVID (Pichler et al. 2020; Pichler et al. 2021; Andersen et al. 2020). Recent work also finds that PSLs induce more intensive mental healthcare treatment with suggestive improvements in mental health outcomes (Eisenberg et al. 2025). While not examining state PSLs, one analysis found that

variation in local PSL mandates was associated with lower mortality from suicide and homicide among men and from homicide and alcohol-related deaths among women (Wolf et al. 2022).

Overall, this research suggests the potential for PSLs to improve health. We provide complementary evidence on the association between PSLs and healthcare outcomes finding that mandates increase mental healthcare visits among children and improve reported general health status among children and adults.

Evidence that PSLs increase healthcare use among likely affected individuals raises the question of whether workers may use paid sick days to care for family members. A small literature investigates these impacts and finds that PSLs are associated with increases in caregiving. For example, Maclean & Pabilonia (2024) find that PSLs increase time spent on childcare by 5.8%, with larger effects among women with young children. Relatedly, Deza et al. (2025) find that the mandates are associated with an 8% reduction in child maltreatment reports. In terms of caregiving for adults, Arora & Wolf (2024) find PSL adoption is associated with an increase in caregiving for older parents. Finally, Guo & Peng (2024) find that PSLs are associated with an increase in caregiving driven by care provided to adults, though these impacts are only significant among workers in industries more likely to be affected by the mandates. We provide complementary evidence that PSLs increase caregiving activity in our analysis of mechanisms.

Collectively, the literature provides strong evidence that PSLs increase healthcare utilization across multiple service types. While research is more limited, there is also evidence of improvements in health and increased time spent with children and on caregiving activities. These findings support potential mechanisms underlying our research, including increased access to medical care and required disability documentation and increased time spent with working caregivers.

2.4 Contributions

This paper makes several contributions to existing research. First, while a growing recent literature evaluates the impacts of PSLs, we are among the first to examine SS(D)I applications or any public program participation among persons with disabilities. Our analysis complements work suggesting that PSLs increase time spent with children and other family members by pointing to one potential use of that time: assisting with applications for public programs.

Second, this paper contributes to the literature on familial spillovers in health and public program enrollment. For example, there is evidence that adult Medicaid expansions have impacts on children's Medicaid enrollment (Hudson & Moriya 2017, Hamersma et al. 2019) and healthcare use (Venkataramani et al. 2017; Lipton 2021). Other work demonstrates that shocks to one household member's health can influence other family members' labor supply and program participation (see for example, Babiarz & Yilmazar 2017; Fadlon & Nielsen 2021; Arrieta & Li 2023; Di Meo & Eryilmaz 2025). Perhaps most relevant to our work, research on paid parental and family leave has shown that such policies can improve children's healthcare utilization, health, and long-term economic outcomes (see for example, Ruhm 2000; Rossin 2011; Caneiro et al. 2015; Bullinger et al. 2019, Bartel et al. 2023). We contribute to this literature by examining how parental access to paid sick leave affects public program participation among children with disabilities.

Finally, our work builds on literature seeking to understand drivers of SS(D)I application rates. Collectively, this research suggests that administrative burden (Deshpande & Li 2019; Kearney et al. 2021; Guo & Powell 2023; Hemmeter et al. 2024) and labor market conditions (Autor & Duggan 2003; Duggan & Goda 2020) play an important role in SS(D)I applications and awards. We contribute to this line of inquiry by examining how increased workplace flexibility affects SS(D)I participation.

3. Data

3.1 Social Security Disability Benefit Programs

Our primary analysis uses administrative data from SSA to measure participation in Social Security Disability Benefit programs. First, we compile state-by-month counts of new applications (initial claims) for SSI and SSDI using data drawn from the SSA's State Agency Monthly Workload (MOWL) files, spanning the period January 2005 through December 2022. These data include the state-by-month counts of initial claims filed for SSI and SSDI benefits. A key strength of these administrative data is that they capture every state-level claim for each program and thus have little measurement error. A limitation, however, is that they do not include any demographic information on the claimant. Thus, we are unable to measure age, education, household characteristics, family income, or type of disability of each claimant.

Using counts of initial claims, we construct state-by-month rates of initial claims per 100,000 population. *SSI Claims* is the rate of new SSI application filings per 100,000 population. This measure includes initial claims for SSI benefits only or SSI benefits along with SSDI benefits. Along the same lines, *SSDI Claims* is the per 100,000 rate of SSDI new claims (which include initial applications for SSDI alone or SSDI along with SSI). We also generate separate measures of *SSDI Only* and *SSI Only*, which isolate claims made exclusively for each program. *Joint SSI and SSDI* counts applications for both SSDI and SSI.

Appendix Table 1 shows weighted means of our key dependent variables. Over the sample period under study, we find that the average rate of new SSI claims per 100,000 population is 45.2 while the average rate of new SSDI claims per 100,000 population is 42.8. When we separate initial claims by whether the applications were for isolated versus joint claims, we find that the mean rates of *SSI Only*, *SSDI Only*, and *Joint SSI and SSDI* claims were 26.4, 24.0, and 18.8 per 100,000 population, respectively.

In addition to data on initial claims, we also draw on administrative counts of program recipients from the SSA. The advantages of these data are that they provide information on (1) beneficiaries rather than applications, and (2) demographic characteristics of beneficiaries, including the age of recipients, including those who are working age adults ($< \text{age } 65$), spouses of those with disabilities (for SSDI recipients), and children ($< \text{age } 18$). This is important to the extent that PSLs may have heterogeneous effects on adults as compared to children with disabilities.⁵ A limitation of these data are that they are not available monthly, but rather only annually.

Using these data, we construct age-specific measures of the net year-over-year state-level changes in SSI or SSDI beneficiaries per 100,000 population, *SSI Beneficiaries* and *SSDI Beneficiaries*, respectively. The number of beneficiaries can change due to newly added beneficiaries (from new approved applications) or exits (due to death or loss of eligibility). These changes serve as a complementary measure for new claims while also providing information on the beneficiary characteristics unavailable in the application files. Appendix Table 1 shows the means of the levels of and changes in our key outcome measures.

Figure 1 plots trends in the flow of initial SS(D)I claims over the sample period of 2005-2022, distinguishing states that ever adopted a PSL mandate (dashed line) from those that never did (solid line). In every panel, the treated states start and remain below the untreated states. SS(D)I claims surge during the Great Recession, peaking around 2010-2011, and then trend downward. The only exception is SSDI-only applications among untreated states, which increased modestly starting during the late 2010s.

Figure 2 shows trends in the stock of beneficiaries, which exhibit slower-moving but qualitatively similar patterns. States that adopt PSL mandates again display lower beneficiary counts

⁵ Specifically, each year, the Social Security Administration reports the number of SSI and SSDI beneficiaries who are children (under age 18) and who are working-age adults. For SSDI, it further distinguishes benefits paid to disabled workers and to their spouses.

per capita throughout the sample period, except that SSI beneficiaries aged 18-64 are slightly higher in treated states before 2009. SSI and SSDI beneficiary counts rose markedly during the Great Recession and have since steadily trended downwards.

3.2 PSL Mandates

We collect data on state-level paid sick leave (PSL) mandates from the National Partnership for Women and Families' (2023) compilation of *Paid Sick Days Statutes*. Over our analysis period (2005-2022), state-wide PSL policies were adopted in 13 states and the District of Columbia (D.C.). Effective dates of these policies are listed in Table 1. The first to implement a PSL mandate was the District of Columbia in November 2008 and the most recent state to do so was New Mexico in July 2022. Mandates were also implemented in 17 cities and 4 counties during the study period. Our main analysis focuses on the more far-reaching statewide mandates. However, we explore whether our results are sensitive to using an alternative treatment measure that incorporates these county- and city-level paid sick leave mandates as well as the statewide PSL mandates.

3.3 Employment and Caregiving

To measure mechanisms through which PSL mandates may affect SS(D)I program participation, we draw data from the American Community Survey (ACS), the Behavioral Risk Factor Surveillance System (BRFSS) Survey, and the National Survey of Children's Health (NSCH). Analyses are harmonized across data sources to the extent possible including similar individual level controls, time-varying state controls, and sample definitions, where applicable.

First, to measure labor market outcomes that may be affected by PSLs, we draw data from the 2005-2022 ACS. Collected by the U.S. Census Bureau, the ACS is a nationally representative, annual household survey of adults that provides detailed information on individuals' household

composition, socio-demographic characteristics, economic well-being, labor market outcomes, and disability status. Our primary focus is on working-age adults under age 65. We focus on persons with disabilities, spouses of those with disabilities, and parents of children with disabilities. We examine sub-samples of this primary sample, including by (1) educational attainment, (2) household size, and (3) gender, age, and race/ethnicity.

To define disability status in the ACS, we use information on six functional domains: sensory (vision or hearing), cognitive, physical, mobility, self-care, and independent living. Following Census Bureau definitions, we classify an individual (adult or child) as having a disability if they report any difficulty in at least one of these domains.

With respect to labor market outcomes, we measure *Employment*, a dummy variable set equal to 1 if the respondent reports being employed at the time of the survey and 0 otherwise. We measure labor supply at the intensive margin among employed individuals using a dummy variable set equal to 1 if the respondent reports usually working 35 or more hours per week (i.e., full-time) and 0 if working fewer than 35 hours per week (i.e., part-time) (*Full-Time Worker*).

We measure caregiving behaviors using the 2015-2022 BRFSS. The BRFSS is a telephone-based survey coordinated by the Centers for Disease Control and Prevention (CDC) and designed to be nationally representative of the non-institutionalized U.S. adult population. Established in 1984, the BRFSS is the world's largest continuously conducted health survey and collects data from adults aged 18 and older on a wide range of health-related topics.

We use the BRFSS caregiving modules — available in 40 states and the District of Columbia continuously since 2015 — to examine how PSL mandates affect the likelihood of providing care to individuals with disabilities. We construct four measures of caregiving: (i) *Any Caregiving in the Past Month*, an indicator equal to 1 if the respondent provided any care in the past 30 days; (ii) and (iii) both measure recent initiations of caregiving, defined by indicators equal to 1 if having *Provided Any*

Caregiving (up to 30 days) or (*up to 6 months*), respectively; and (iv) an indicator of *Part-time Caregiving (<20 Hours/Week)* defined among caregivers and equal to 1 if fewer than 20 hours per week are provided. The latter allows us to assess the time commitment of new caregivers. We would anticipate that marginal caregivers induced to engage in caregiving by PSLs would likely provide part-time assistance.

3.4 Healthcare use and Health

We measure routine annual healthcare visits and self-reported health outcomes of those with disabilities, which could capture both proxies for healthcare access as well as resultant outcomes associated with SS(D)I benefit receipt. We begin by measuring past-year routine check-ups and self-reported general health status among adults with disabilities and disability prevalence using the 2016–2022 BRFSS. We begin this analysis in 2016 to ensure consistent availability of disability questions. We construct an indicator equal to 1 if the respondent reports an annual *Routine Checkup* and zero otherwise. Health status is self-reported on a five-category scale (Excellent, Very good, Good, Fair, Poor); we construct an indicator equal to 1 if the respondent reports *Excellent or Very Good Health*. This outcome is evaluated in a sample restricted to adults ages 18–64 who report at least one disability (hearing, vision, cognition, mobility, self-care, and independent living).

Finally, to measure healthcare outcomes of children, we turn to the 2016-2022 NSCH. Collected by the U.S. Census Bureau and directed by the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCHB), the NSCH is a nationally representative household survey of children aged 0-17 years. We pool data from the 2016-2022 waves (the survey was redesigned in 2016) for our analysis sample. The NSCH includes parental reports on whether a child has a functional, developmental, or emotional/behavioral limitation. Specifically, we classify children as having a functional disability if parents report that the child has

“a lot of difficulty” or “cannot do” certain activities due to a health condition. We define cognitive disability as parental report of at least one of the following: developmental delay, intellectual disability, learning disability, or speech impairment. We define emotional or behavioral disability as parental report that the child has ever been diagnosed with anxiety, depression, behavioral or conduct problems, attention-deficit/hyperactivity disorder (ADHD), or autism spectrum disorder.

In parallel with our analysis of adults with disabilities in BRFSS, we examine the impact of PSLs on annual *Preventative Visit* and *Excellent or Very Good Health*. We also examine *Mental Health Care* visits, equal to one if a child had at least one past year mental health visit and zero otherwise.⁶ When examining health status, we estimate separate impacts by child disability type to assess the potential for varying effectiveness of PSLs in improving children’s health.

4. Empirical Approach

To estimate the effect of state PSL mandates on initial SS(D)I claims, we begin by estimating the following two-way fixed effects (TWFE) difference-in-differences regression model:

$$Y_{st} = \beta_0 + \beta_1 \text{PSL}_{st} + \mathbf{X}_{st} \beta_2 + \theta_s + \tau_t + \varepsilon_{st} \quad (1)$$

where Y_{st} is the number of new (initial) SSI or SSDI applications per 100,000 residents in state s during year-by-month t . Our key right-hand side variable of interest, PSL_{st} , is set equal to 1 if a statewide paid sick leave law is in effect in state s in year-by-month t and is set equal to 0 otherwise. The vector $\mathbf{X}_{st}$ includes state-level, time-varying controls, including:

⁶ An equivalent outcome for adults is not available in BRFSS during our study years.

- demographic characteristics (the proportion of the population that is non-Hispanic White and aged 18-64 years)
- macroeconomic conditions (state unemployment rate, housing price index, and the natural log of real per capita personal income in 2022\$),
- COVID-19 conditions (the cumulative COVID-19 death and case rates per 100,000 population, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals),
- healthcare investments (Medicaid eligibility income thresholds for parents and non-parents, number of community health centers per capita, and primary care providers per capita), and
- the minimum wage (the higher of the state or federal minimum wage, adjusted by the average state private sector wage).⁷

Finally, θ_s is a state fixed effect τ_t is a year-by-month fixed effect and ε_{st} is the error term. All regressions are weighted by the relevant aged state population, and standard errors are clustered at the state level (Bertrand et al. 2004).

When we turn to our state-by-year data on changes in SS(D)I beneficiaries, we estimate an equation similar to (1). However, because the beneficiary outcomes are annual, PSI_{st} is set equal to

⁷ Demographic composition and age-specific population counts come from Surveillance, Epidemiology, and End Results (SEER) data. Monthly state unemployment rates are from the Bureau of Labor Statistics' (BLS) Local Area Unemployment Statistics (LAUS). Local wealth shocks are proxied by the Housing Price Index (HPI) from the Federal Housing Finance Agency (FHFA) to measure local wealth shocks. Real per capita personal income data is drawn from Federal Reserve Economic Data (FRED). Cumulative COVID-19 deaths and cases from *The New York Times* COVID-19 repository (<https://github.com/nytimes/covid-19-data>), while the government-response index and share of fully vaccinated residents are from the Oxford Covid-19 Government Response Tracker (OxCGRT). Medicaid income eligibility thresholds are drawn from KFF, the number of community health center per capita are drawn from the Health Resources and Services Administration, and primary care provider density are drawn from the Area Health Resources File. Minimum wage combines the series compiled by Vaghul and Zipperer (2022) with the U.S. Department of Labor's minimum wage table (<https://www.dol.gov/agencies/whd/state/minimum-wage/history>).

the share of the year that state s has a statewide PSL mandate in effect. Then τ_t is a year fixed effect and all covariates are measured at the annual level.

Our key parameter of interest in equation (1) is β_1 , the “reduced-form” estimated effect of a PSL mandate on SS(D)I program participation, operating through all reinforcing and/or counteracting pathways. A key identifying assumption of our TWFE DiD model is the parallel trends assumption. That is, in the absence of the adoption of a PSL mandate, the treated states would have evolved similarly with respect to SS(D)I claims rates as did “control” states where PSL mandates were not adopted or were previously adopted. Therefore, our estimate of β_1 in equation (1) will only be unbiased in the absence of (1) unobserved state-level factors that change over time and are correlated with both PSL adoption and SS(D)I take-up, (2) reverse causality, whereby participation in Social Security Disability benefit programs influences the adoption of PSL policies (or influences difficult-to-measure characteristics that influence the likelihood of PSL adoption), and (3) heterogeneous and dynamic treatment effects.

We examine the sensitivity of our results to incorporating city- and county-level PSL mandates by replacing our main treatment variable with an alternative that measures the share of the state population covered by a city, county, or statewide PSL mandate. We use the 2010 Decennial Census to measure city, county, and state populations.

To assess the sensitivity of our estimate of β_1 to state-specific time-varying unobservables, we estimate equation (1) with census-division-specific and state-specific linear time trends. These trends absorb time-varying spatial heterogeneity, specifically any division- or state-level factors that evolve linearly over time and may be correlated with both PSL adoption and our outcome under study. However, adding such trends may not always mitigate bias but can sometimes exacerbate it (see, for example, Neumark et al. 2014; Meer and West 2016; Burkhauser et al. 2025). We therefore

treat the exercise as a descriptive robustness check rather than as a definitive test of omitted variable bias.

With respect to reverse causality, we address the concern by estimating an event-study regression of the following form:

$$Y_{st} = \gamma_0 + \sum_{j \neq j_r} \pi_j D_{st}^j + \mathbf{X}_{st} \boldsymbol{\gamma}_1 + \theta_s + \tau_t + \mu_{st} \quad (2)$$

j indexes event time (that is, the number of years before and after a state adopts a PSL), D_{st}^j is set equal to 1 if state s in year-by-month t is j years before or after adoption and is set equal to 0 otherwise, and π_j are event study coefficients on each of the leads ($j < 0$) and lags ($j \geq 0$). The set of reference event periods, j_r , includes 1-2 and 6-10 years prior to the adoption of a statewide PSL. We choose multiple lead periods as a reference to ensure a more generalizable, and perhaps less idiosyncratic, narrower reference period (Miller 2023). However, our findings are qualitatively similar when restricting the reference period to just the immediate periods prior to treatment.⁸

If estimates of π_j for $j < 0$ in equation (2) are statistically indistinguishable from zero, this would suggest that the parallel trends assumption is supported. Moreover, such a finding would also suggest that reverse causality, whereby trends in SS(D)I participation lead states to adopt PSLs, is unlikely to be an important source of bias.

A final threat to identification is that heterogeneous and dynamic treatment effects can bias TWFE estimates of the effect of PSL adoption, as well as corresponding event-study coefficients (Goodman-Bacon 2021; Sun and Abraham 2021; Callaway and Sant’Anna 2021). To address this possibility, we employ the approach of Sun and Abraham (2021). By using never adopters of PSLs as counterfactuals, we avoid the “bad comparisons” problem in TWFE models in which earlier

⁸ As discussed below, these alternative event study estimates appear in Appendix Figure 4.

adopters of PSLs (e.g., D.C., Connecticut, California) can serve as controls for later adopters (e.g., New Mexico, New York). Moreover, we prevent any negative weighting of treatment effects from already treated states. An important advantage of the Sun and Abraham estimator is that it allows a rich set of state-specific time-varying covariates in our specification, which may be important to the extent that economic and healthcare conditions are associated with both SS(D)I take-up and PSL adoption. In some robustness checks, we also experiment with estimating event studies using a stacked DiD estimator (Cengiz et al. 2019).

5. Results

Our main estimates appear in Tables 2-7 and Figures 3-6 while our analysis of mechanisms appears in Tables 8-10. Supplemental analyses appear in the appendix.

5.1 SSI and SSDI Initial Claims

We begin with estimates reported in Table 2A that examine the relationship between PSL adoption and initial applications for SSI (panel I) and SSDI (panel II). Controlling for state and year-by-month fixed effects, we find that PSL adoption is associated with 3.79 additional SSI claims per 100,000 persons (panel I, column 1). This represents a 9.4% increase relative to the pre-PSL mean of new SSI claims in PSL adopting states. The inclusion of demographic characteristics (column 2) as well as controls for COVID-19, macroeconomic conditions, and healthcare investments (column 3) slightly attenuates the estimated treatment effect, as does controlling for the prevailing minimum wage (column 4). In our fully specified model (panel I, column 4), we find that PSL adoption is associated with an increase of 2.29 SSI claims per 100,000 persons, or approximately 5.7% relative to the pre-treatment mean. This finding could be consistent with several hypothesis, including (1) declines in employment of persons with disabilities in response to

increased costs to firms of complying with PSL mandates, (2) increased time available to workers with disabilities (or spouses or parents of those with disabilities) to learn about and go to SSA offices to apply for SSI benefits, and/or (3) increased access to healthcare necessary to medically document a qualifying disability.

In panel II, we turn to initial claims for SSDI. While less precisely estimated and much smaller in magnitude, our findings generally point to a positive relationship between PSLs and new claims for SSDI. In columns (3) and (4), we find that PSL adoption is associated with an increase in the SSDI claim rate of 1.00-1.56 initial applications per 100,000 persons (2.6-4.1% relative to the pre-treatment mean of SSDI claims), though these estimated PSL effects are, at most, statistically distinguishable from zero at the 10 percent level.

An examination of pre-treatment event-study coefficients in panels (a) and (b) of Figure 3 supports the common trends assumption, suggesting that SSI and SSDI initial claims were trending similarly in treatment and control states prior to PSL adoption. For SSI (panel a), new applications rise immediately following PSL adoption by 2 to 3 applications per 100,000 persons. The event study for SSDI initial claims shows a pattern of coefficients that is similar to SSI initial claims, but the magnitude of the effect is more muted.⁹

Figure 4 repeats the event-study exercise in Figure 3, but instead of using TWFE estimates uses Sun and Abraham (2021) estimates. Counterfactuals are restricted to states that never adopted PSLs. The findings shown in these event studies are similar to those shown in Figure 3 and suggest that heterogeneous and dynamic treatment effects do not appear to cause bias in our estimated PSL effects.¹⁰

⁹ Appendix Figure 1 shows event studies using TWFE estimates and an alternative reference period of 1-2 years prior to PSL adoption. The pattern of estimates is qualitatively similar to those obtained when using a broader reference period.

¹⁰ Appendix Figure 2 shows Sun and Abraham (2021) event studies using an alternative reference period of 1-2 years prior to PSL adoption and Appendix Figure 3 uses a stacked difference-in-differences estimator rather than a Sun and Abraham (2021) estimator. In each case, the pattern of event study estimates remains qualitatively similar.

Table 2B presents results for initial SSI and SSDI applications using the alternative treatment variable that measures the share of the state’s population with a city, county, or statewide mandate in place in the relevant month. Our findings are, in the main, consistent with those presented in Table 2A, though we note that our estimated marginal effects are slightly larger and more likely to be statistically distinguishable from zero, particularly for new SSDI claims. In our preferred specification (column 4 of Table 2B), we find that adoption of a PSL mandate is associated with a statistically significant 7.7 percent increase in the rate of new SSI claims per 100,000 population and a 5.8 percent increase in the rate of new SSDI claims per 100,000 population.¹¹

In Table 3, we explore heterogeneity in the effect of PSLs on SSI and SSDI initial claims by whether the new claims were for SSI only (panel I), SSDI only (panel II), or joint SSI and SSDI claims (panel III). We find strong evidence that PSLs increase new SSI claims both when it is the sole program for which the person applies and when it is part of a joint application with SSDI. We find that PSL adoption is associated with an increase in new SSI sole applications by 1.29-1.90 claims per 100,000 persons (5.4-8.0%) and an increase in new joint SSI/SSDI applications by 0.99-2.26 claims per 100,000 persons (6.1-13.8%). The effect of PSLs on new sole SSDI claims is small, occasionally negative, and nowhere near statistically distinguishable from zero at conventional levels. Event-study analyses in Figure 5 (using both TWFE estimates and Sun and Abraham estimates) and Appendix Figure 4 show a pattern of results that are consistent with the parallel trends assumption as well as with evidence suggesting that PSLs causally impact SSI initial claims and joint SSI/SSDI initial claims.

¹¹ We focus the remainder of our analyses on the more far-reaching statewide mandates. Since the administrative data are at the state level, linking these to mandates at a more granular, local level may add measurement error in the treatment assignment. For instance, if employees are working outside their residential locality, and these shares are correlated with the presence or absence of a local mandate, then this may introduce noise to our treatment variable. These caveats notwithstanding, our results and conclusions are not materially affected by incorporating the local PSL mandates.

Table 4 explores the sensitivity of estimates of β_1 from equation (1) to additional controls for time-varying spatial heterogeneity: census division-specific linear time trends (panel II) and state-specific linear time trends. Our findings suggest that unobservables trending linearly at the census division and state levels are an unimportant source of bias in the estimated effect of PSLs on initial SS(D)I claims.

Finally, in Table 5, we compare estimated treatment effects obtained from TWFE estimates to those obtained using Sun and Abraham (2021) estimates. The magnitudes of the estimated treatment effects are very similar across these estimators, confirming our prior findings (based on the alternate event study analyses) that dynamic treatment heterogeneity does not present a significant source of bias in our analyses.

Together, the pattern of findings above suggests that PSLs increase new applications for SSI and SSI/SSDI jointly. Below, we explore whether this relationship persists when we examine beneficiaries as compared to applications, and exhibits any meaningful differences across adult vs. child recipients.

5.2 SSI and SSDI Beneficiaries

Next, we present estimates of the effect of PSL adoption on year-to-year changes in state-level SSI and SSDI beneficiaries.¹² We split our sample into beneficiaries who are children (under age 18) and those who are working-age adults. Table 6 focuses on the SSI program and presents TWFE (columns 1-4) and Sun and Abraham (columns 5-8) estimates.

We find strong evidence that PSL adoption increases the rate of change in SSI beneficiaries who are children (panel I). Specifically, our results show that PSLs are associated with an increase in

¹² Appendix Table 2 shows estimated effects of PSL adoption on initial claims using state-level data on new applications aggregated to the year level to mimic the annual data we have for beneficiaries. The pattern of findings is qualitatively similar to that obtained when using monthly data.

net child SSI beneficiaries by 24.5-37.0 recipients per 100,000 children. This estimated effect is relative to a baseline mean of 1344.8 beneficiaries per 100,000 children, or about 2-3%. In sharp contrast, when we examine working-age adults (panel II), we find no evidence that PSLs affect the rate of change in SSI beneficiaries, either using TWFE (columns 1-4) or Sun and Abraham (columns 5-8) estimates.

Turning to SSDI in Table 7, we find a similar pattern of results. While somewhat less precisely estimated, we find that PSL adoption is associated with an increase in net child SSDI beneficiaries by approximately 23.2-43.0 recipients per 100,000 children (panel I). Relative to the level of child SSDI beneficiaries, this represents a 1.2-2.2% increase. For adults (panel II), the PSL effect on SSDI beneficiaries is generally positive, but with the exception of the sparse specifications without any time-varying state controls (save state and year-by-month fixed effects; columns 1 and 5), the estimated treatment effects are not statistically distinguishable from zero at conventional levels and are well under 1 percent in magnitude. In the main, event-study analyses, shown in Figure 6, are consistent with the parallel trends assumption and suggest that following PSL adoption, there is a net increase in the year-over-year SSI beneficiary rate, particularly for children. For SSDI, the estimated post-treatment effects are smaller in magnitude.

In Appendix Table 3, we disentangle SSDI adult beneficiaries by whether they are spouses of those with disabilities or working-age persons with disabilities. While the estimated relationship between PSL adoption and the year-over-year change in SSDI beneficiaries is positive, it is relatively small in magnitude and not statistically distinguishable from zero at conventional levels.

Event-study analyses, shown in Figure 6 using both TWFE and Sun and Abraham estimates, show evidence consistent with the parallel trends assumption as well as with a PSL-induced increase in year-over-year child SS(D)I beneficiaries.

In Appendix Table 4, we explore the sensitivity of our estimates in Tables 5 and 6 to controls for census division-specific linear time trends (panel II) and state-specific linear time trends (panel III). The estimated treatment effects are, indeed, smaller with these controls, but given that event studies without such trends support the common trends assumption, we do not necessarily interpret these findings as evidence of unmeasured heterogeneity bias, but rather as potentially obscuring some of the dynamics in the estimated treatment effects.

Finally, in Appendix Table 5, we explore the effect of PSL adoption on “levels” of SSI and SSDI beneficiary rates (rather than year-over year changes in beneficiaries). Our estimated treatment effects in specifications that pass tests of parallel pre-treatment trends (see Appendix Figure 5) are suggestive of small, positive post-treatment effects on SSI beneficiaries involving children, but these effects are imprecisely estimated.¹³ Specifically, we find that PSL adoption is associated with (1) an increase in the SSI child beneficiary rate of 54.3 recipients per 100,000 children, or about 4.0% relative to the pre-treatment mean ($p\text{-value} = 0.14$), and (2) an increase in the SSDI child beneficiary rate of 39.1 recipients per 100,000 children, or about 2.0% relative to the pre-treatment mean (statistically indistinguishable from zero).

Together, our findings discussed thus far suggest that PSL adoption largely affects the margin of initial SSI applications (either solely or jointly with SSDI), and that these applications generally translate into additional Social Security program beneficiaries who are children. In the remaining section, we empirically explore the mechanisms that may be at work to explain our findings.

5.3 Mechanisms

¹³ The inclusion of state-specific linear time trends in event study regression specifications generates pre-treatment event study coefficients that are statistically indistinguishable from zero while their exclusion does not. Hence, we choose to present results from models that pass this diagnostic test.

To understand the mechanisms underlying the observed increases in SSI and SSDI participation following the adoption of paid sick leave (PSL) mandates, we examine how these policies affect (1) employment outcomes among adults in households affected by disability, (2) caregiving behaviors within these households, and (3) health and care access among individuals with disabilities across both adult and child populations. These analyses assess whether PSLs enable household members to allocate more time to caregiving and health needs—thereby improving documentation and application success for disability benefits—without causing broad labor-market withdrawal.

Employment. Table 8 presents the estimated effects of PSL mandates on employment among adults with disabilities and their spouses, as well as among parents of children with disabilities. In the ACS data, we generally find no evidence that PSL adoption affects the probability of employment or full-time vs. part-time work among adults with disabilities (Table 8, Panel I) or among parents of children with disabilities (Table 8, Panel III). By contrast, we detect statistically significant adjustments along the intensive margin among *spouses* of adults with disabilities (Table 8, Panel II). We find that PSLs reduce full-time employment among spouses by approximately 0.67 percentage points (model 2). This effect appears to be concentrated among men and individuals with less than a college degree (Table 8, Panel II). While it is possible that these results represent an employer response (cutting hours for working spouses), it is also plausible that PSLs induce working spouses to reduce hours or shift to part-time schedules either to provide short-term caregiving or administrative support related to disability applications without fully exiting the labor force.¹⁴

Caregiving. We estimate the effects of PSL mandates on caregiving in Table 9. The finding in column (1) shows that PSLs increase the probability of providing any recent caregiving (in the past

¹⁴ Appendix Table 6 reports subgroup estimates for the extensive-margin specification. Across sex, age, and education groups, the estimates are generally close to zero and statistically insignificant, showing no systematic heterogeneity in employment effects by demographic subgroup. We also estimate employment effects for parents of children with disabilities and find no impacts (results are available upon request).

month) by about 2.4 percentage points, an 11% rise relative to the pre-PSL baseline. Columns (2) and (3) show PSL-induced increases in the likelihood of initiating care for the current care recipient for up to 30 days by 1.1 percentage points, or about 29%, and for up to 6 months by 1.3 percentage points, or 20%. Additionally, among current caregivers, PSL mandates are associated with a 3.5–percentage point increase in the share providing part-time care. This pattern of findings is consistent with an important caregiving channel through which those with disabilities may be able to overcome application costs. Taken together, these findings suggest that PSL reforms expand caregiving to people with disabilities and health problems—serving as a mechanism of informal care—along both the extensive and intensive margins.

Healthcare use. We estimate the effects of PSL mandates on healthcare visits among adults and children with disabilities in Table 10. Our estimates for any past-year routine check-up/preventative visit are small in magnitude and statistically indistinguishable from zero among both adults (column 1) and children (column 3). We are unable to measure changes on the intensive margin and it is possible that annual routine care is too coarse of a measure to capture PSL-induced changes in utilization. By contrast, we estimate a statistically significant 2.15 percentage point increase in mental health care visits among children with disabilities, which represents a 7% increase relative to baseline. These findings complement existing work on PSLs and healthcare utilization and suggest that parents may use paid sick leave to take their children for mental health care visits, possibly providing an opportunity to document a qualifying disability.

5.4 Health of Adults and Children with Disabilities

Finally, we explore the effect of PSL mandates on self-reported health, a downstream outcome that could be affected by both access to healthcare and additional financial resources from SS(D)I. We begin by examining adults ages 18–64 with disabilities in the BRFSS. The results in

column (2) of Table 10 show that PSLs increase the likelihood that an adult with disabilities reports excellent or very good health by 1.3 percentage points, or a 5.5% increase. Columns (5) and (6) of Table 10 use data from the NSCH to explore the effects of PSLs on child health. We examine results separately for children with functional and cognitive disabilities to assess differences among these groups. Among children with functional disabilities, PSL mandates are associated with a 1.9 percentage-point, or 2.3%, increase in the probability of being reported in excellent or very good health. A similar improvement is observed for children with cognitive disabilities. This finding suggests that PSL mandates may be associated with improved overall health among individuals with disabilities.

5.6 Test of Increased Disabilities Reporting (Sample Selection)

We close in Appendix Table 7 by exploring the effect of PSLs on the probability of reporting a disability, both among adults in the BRFSS and children in the NSCH. These estimates allow us to assess potential changes in sample composition among people with disabilities following the implementation of PSL mandates and to identify increases in diagnoses and self-perceived disability. Across both samples and all disability measures, the estimated coefficients are small and statistically insignificant, indicating that PSL mandates are not associated with changes in disability prevalence; rather, they are linked to increased healthcare access, improved health, and perhaps diminished work hours among family members of those with existing disabilities.

6. Conclusions

This study is the first to explore the impact of PSL mandates on participation in two important public programs that provide benefits to children and adults with disabilities: Supplemental Security Income and Social Security Disability Insurance. Our findings provide strong

evidence that PSL adoption increases new applications for participation in SS(D)I, which translates into increases in year-to-year beneficiaries in these programs. The effects are particularly strong for children under age 18.

Specifically, difference-in-differences estimates show that adoption of a state PSL mandate is associated with a 5.7 to 9.4 percent rise in new SSI and joint SSI/SSDI claims. In addition, we find that following PSL adoption, there is a 1.8 to 2.8 percent increase in the SSI beneficiary rate among children and a 1.2 to 2.2 percent increase in the SSDI beneficiary rate among children. Event-study regressions provide evidence to support the parallel trends assumption, including in both estimation strategies using TWFE and Sun and Abraham (2021) estimates. This suggests that a causal interpretation of these findings is credible.

An examination of the mechanisms that drives these findings suggests that PSLs increase caregiving and may increase healthcare access among those with disabilities. We also find some evidence of reduced labor market activity on the intensive margin among spouses of adults with disabilities, though these effects are relatively small in magnitude. A back-of the envelope calculation suggests that our estimated magnitudes are reasonable. Based on survey data, about 11% of adults under 65 and 20% of children have a reported disability (Health Resources and Services Administration (HRSA) 2022; KFF 2024). Moreover, about 80% of US households have at least one employed family member who may therefore be affected by PSLs (BLS 2025). Maclean et al. (2025) find that PSLs result in about a 13-18% increase in paid sick leave coverage rates. Since children comprise 28% of people under age 65 (KFF 2023), a rough estimate suggests that per 100,000 persons, 582 children ($=28,000 \times 0.20 \times 0.80 \times 0.13$) with a disability reside in a home where an adult gains paid sick leave coverage after a mandate is adopted. Similarly, 824 adults ($=72,000 \times 0.11 \times 0.80 \times 0.13$) with a disability reside in a household that gains coverage. Our main results indicate an increase of 2.29 initial SSI applications per 100,000 individuals, which would translate to about

0.16% ($=2.29/1406$) of the “treated” population, that is people affected by a mandate, submitting an application. This calculation is approximate and may overstate the number of newly covered individuals. However, this relatively small share implies a plausible response that is consistent with our reported effect sizes on likely channels. We conclude that improving access to SS(D)I may be important for the most vulnerable Americans with disabilities to avoid financial hardship, increase their healthcare access, and improve their health.

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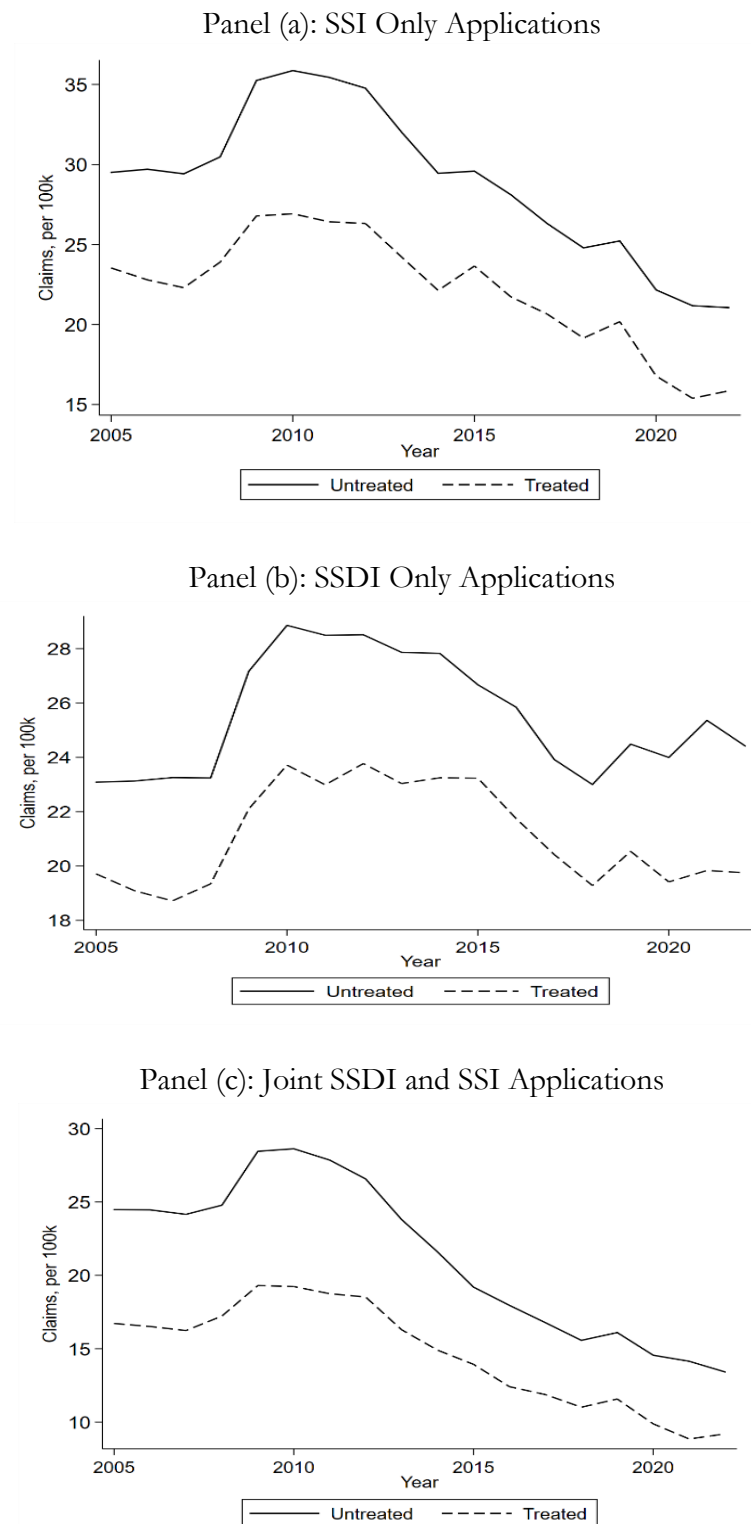
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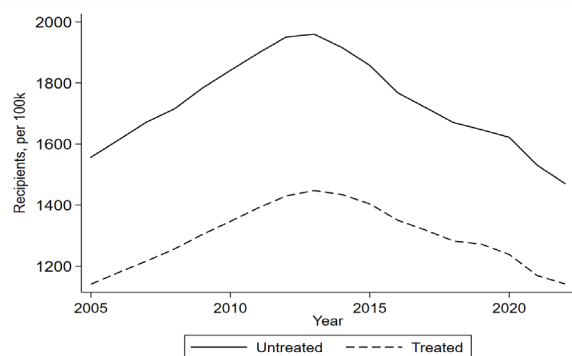
Figure 1. Trends in SS(D)I Initial Claims Rate Per 100,000 Persons, by Whether State Adopted a PSL Mandate



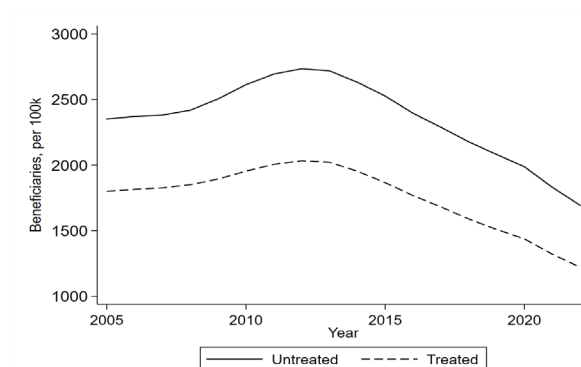
Notes: Data are generated from the Social Security Administration's State Agency Monthly Workload (MOWL) files spanning the period January 2005 through December 2022

Figure 2. Trends in SS(D)I Beneficiaries Rate Per 100,000 Persons, by Whether State Adopted a PSL Mandate

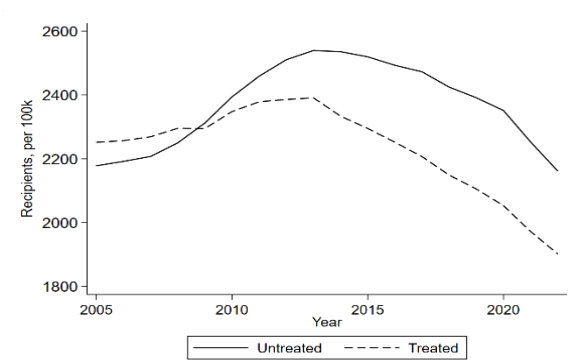
Panel (a): SSI Beneficiaries
Under Age 18 (Children)



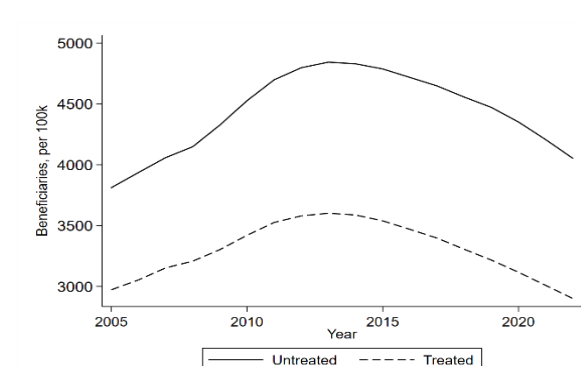
Panel (b): SSDI Beneficiaries
Under Age 18 (Children)



Panel (c): SSI Beneficiaries
Ages 18 to 64

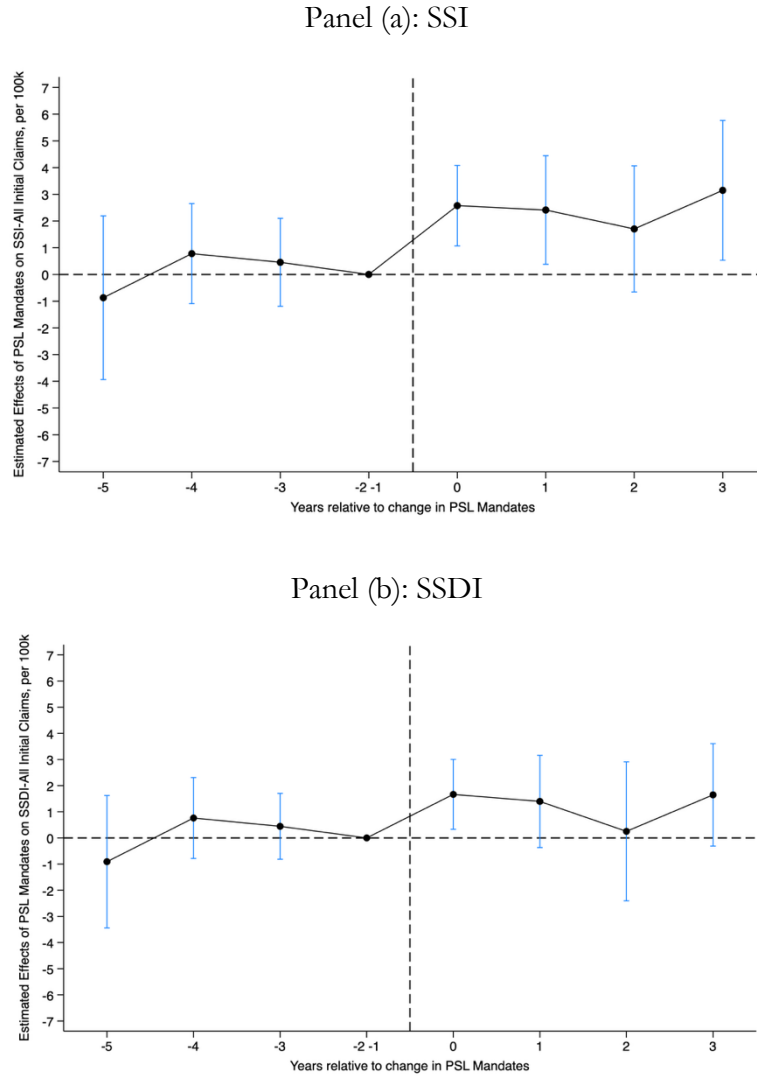


Panel (d): SSDI Beneficiaries who
are Adults



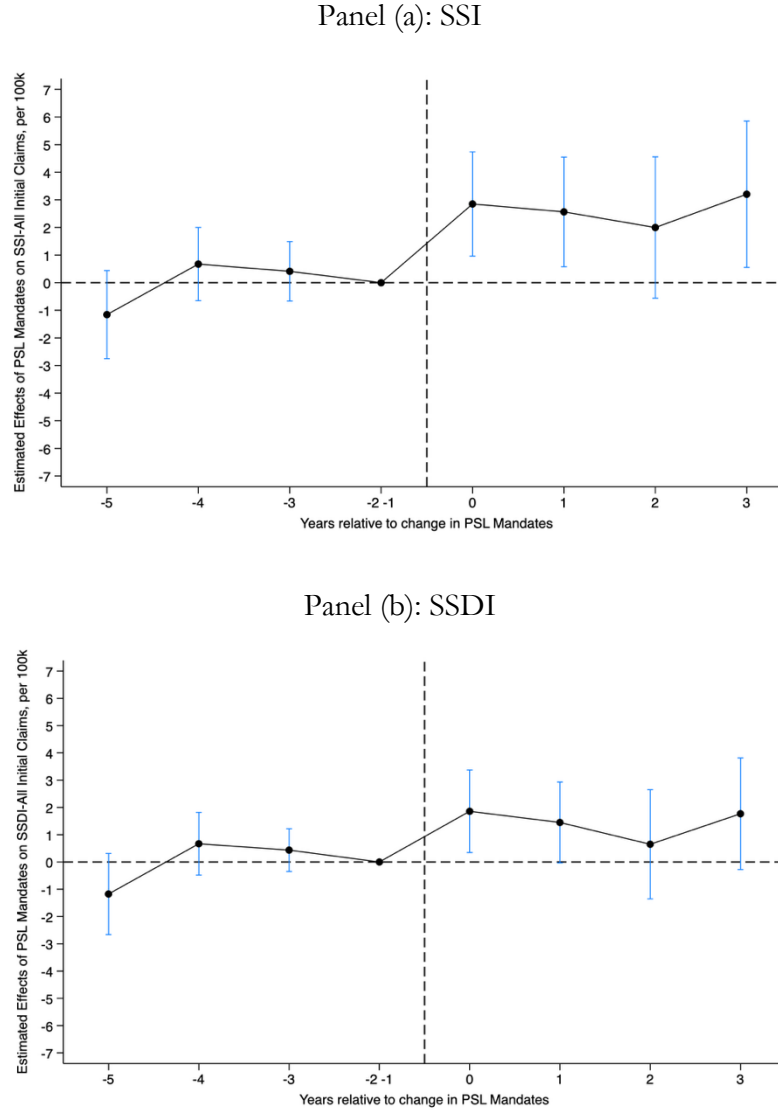
Notes: Data are generated from the Social Security Administration annual beneficiary data spanning the period 2005-2022.

Figure 3. Event-Study Analysis of PSL Adoption and SS(D)I Initial Claims Using TWFE Estimates



Notes: Event-study regressions are estimated using TWFE models with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (a) is the number of initial claims for SSI divided by the state population (in 100,000s) and the dependent variable in panel (b) is the number of initial claims for SSDI divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Figure 4. Event-Study Analysis of PSL Adoption and SS(D)I Initial Claims, Using Sun and Abraham Estimates



Notes: Event-study regressions are estimated Sun and Abraham (2021) estimators with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (a) is the number of initial claims for SSI divided by the state population (in 100,000s) and the dependent variable in panel (b) is the number of initial claims for SSDI divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

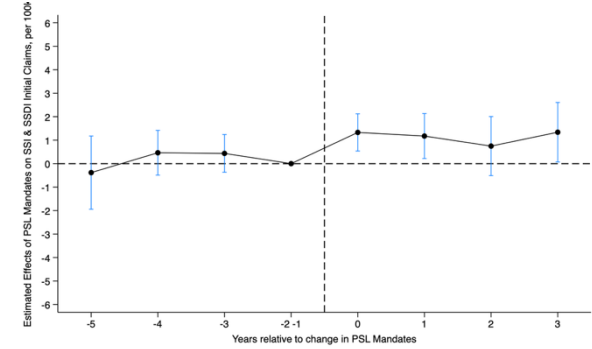
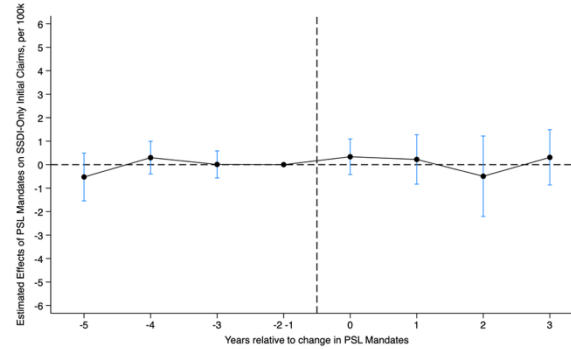
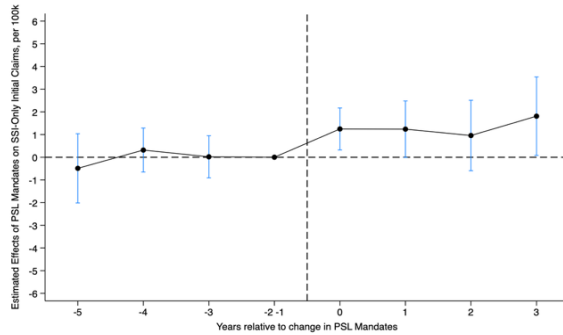
Figure 5. Heterogeneity in Event-Study Estimates, by Whether SSI Only, SSDI Only, or Joint SSI and SSDI Initial Claims

Panel (a): SSI Only Panel

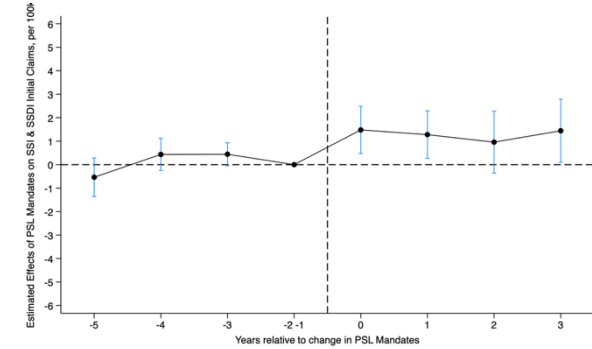
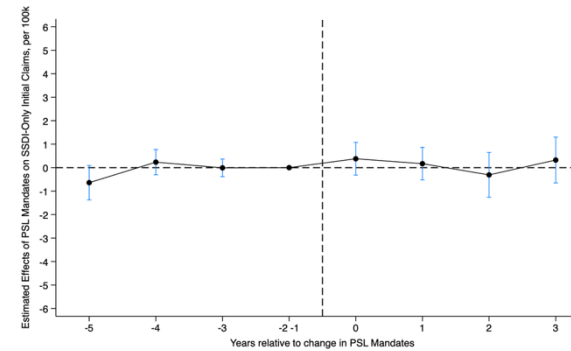
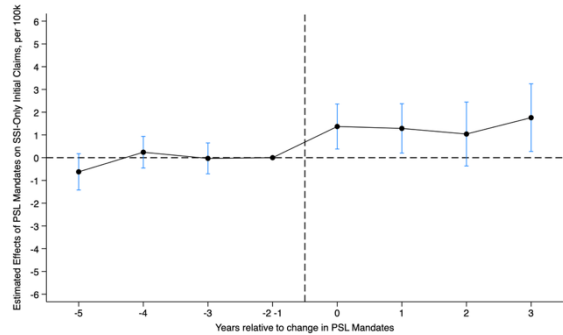
Panel (b): SSDI Only Panel

Panel (c): Joint SSDI and SSI

(I) Using TWFE Estimates (Upper Row)

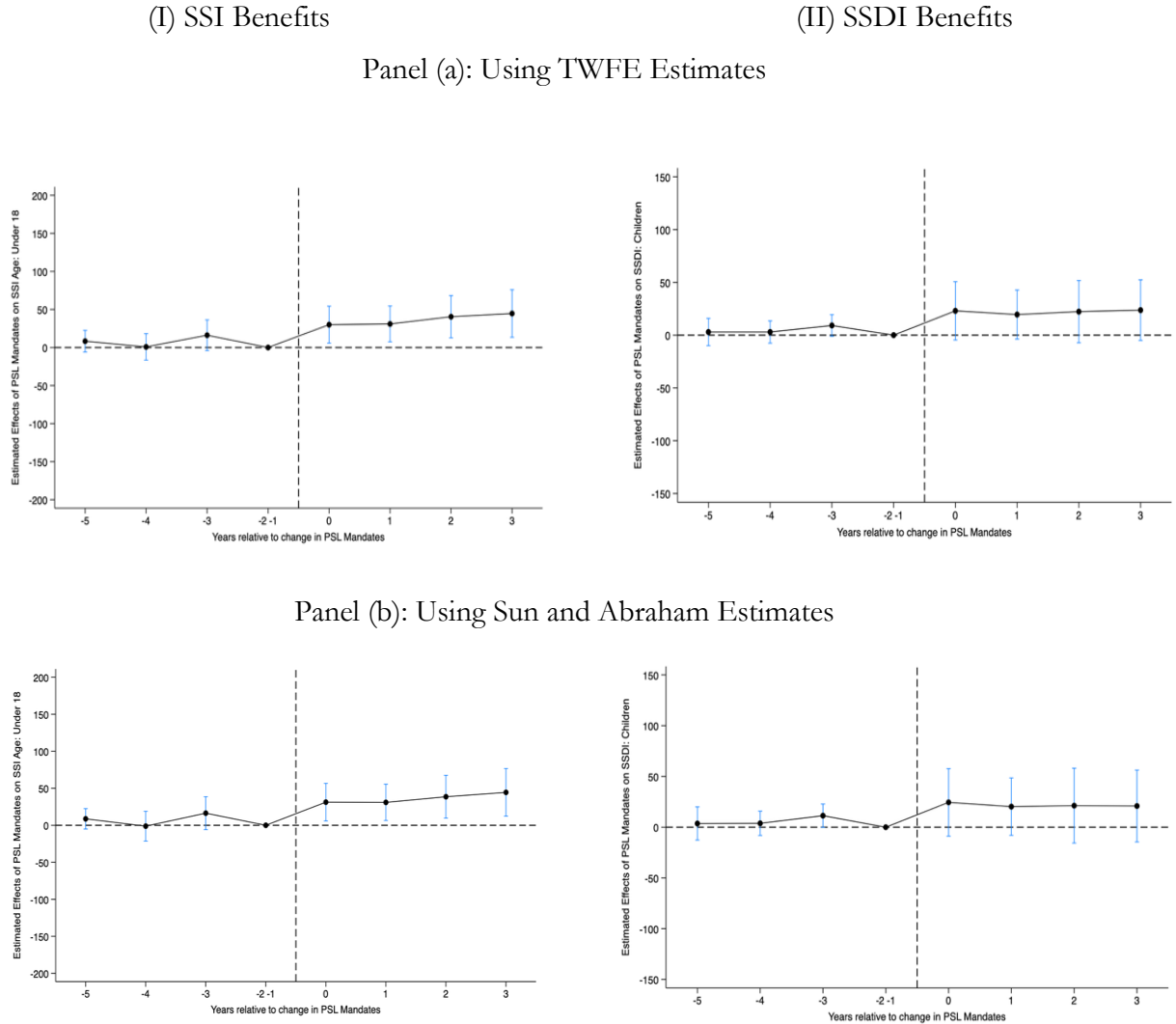


(II) Using Sun and Abraham Estimates (Lower Row)



Notes: Event-study regressions are estimated using TWFE (I) Sun and Abraham (2021) (II) estimators with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (a) is the number of initial claims for SSI only divided by the state population (in 100,000s), the dependent variable in panel (b) is the number of initial claims for SSDI only divided by the state population (in 100,000s), and the dependent variable in panel (c) is the number of initial claims for joint SSDI and SSI benefits divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Figure 6. Event-Study Analysis of PSL Adoption and Changes in SS(D)I Beneficiaries Among Children Under Age 18



Notes: Event-study regressions are estimated using TWFE (a) Sun and Abraham (2021) (b) estimators with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (I) is the change in number of beneficiaries for SSI divided by the state population (in 100,000s), and the dependent variable in panel (II) is the change in number of beneficiaries for SSDI divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Table 1. Statewide Paid Sick Leave (PSL) Mandates

State	Effective Date
Arizona	July 2017
California	July 2015
Colorado	January 2021
Connecticut	January 2012
District of Columbia	November 2008
Maryland	February 2018
Massachusetts	July 2015
New Jersey	October 2018
New Mexico	July 2022
New York	January 2021
Oregon	January 2016
Rhode Island	July 2018
Vermont	January 2017
Washington	January 2018

Source: National Partnership for Women and Families' (2023) compilation of *Paid Sick Days Statutes*

Table 2A. TWFE Estimates of Effects of PSL Mandate on SS(D)I Initial Claims, 2005-2022

	(1)	(2)	(3)	(4)
Panel I: SSI Initial Claims				
PSL Mandate	3.7946*** (1.0693)	2.5624*** (0.9167)	3.3002*** (0.9242)	2.2859** (1.0095)
Pre-Treatment Mean of DV	40.1576	40.1576	40.1576	40.1576
Panel II: SSDI Initial Claims				
PSL Mandate	2.1554** (0.9084)	1.0677 (0.9253)	1.5571* (0.8384)	1.0031 (0.9697)
Pre-Treatment Mean of DV	38.1273	38.1273	38.1273	38.1273
N	11016	11016	11016	11016
<i>Control Variables:</i>				
State and Year-by-Month FE?	Yes	Yes	Yes	Yes
Demographic Characteristics?	No	Yes	Yes	Yes
Macroeconomic, COVID-19, Healthcare?	No	No	Yes	Yes
Minimum Wage?	No	No	No	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel I is the number of initial claims for SSI divided by the state population (in 100,000s) and the dependent variable in panel II is the number of initial claims for SSDI divided by the state population (in 100,000s). State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

**Table 2B. TWFE Estimates of Effects of PSL Mandate on SS(D)I Initial Claims,
Incorporating City, County, and Statewide Mandates,
2005-2022**

	(1)	(2)	(3)	(4)
Panel I: SSI Initial Claims				
PSL Mandate	4.5308*** (1.2049)	3.3132*** (1.0904)	4.3194*** (1.0789)	3.2761*** (1.1461)
Pre-Treatment Mean of DV	42.7753	42.7753	42.7753	42.7753
Panel II: SSDI Initial Claims				
PSL Mandate	2.9934*** (1.1132)	1.9249 (1.2413)	2.8079*** (0.9212)	2.3481** (0.9492)
Pre-Treatment Mean of DV	40.4754	40.4754	40.4754	40.4754
N	11016	11016	11016	11016
<i>Control Variables:</i>				
State and Year-by-Month FE?	Yes	Yes	Yes	Yes
Demographic Characteristics?	No	Yes	Yes	Yes
Macroeconomic, COVID-19, Healthcare?	No	No	Yes	Yes
Minimum Wage?	No	No	No	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. These regressions replace the main treatment variable with an alternative equal to the share of the state's population with a city, county, or statewide PSL mandate in that month. The dependent variable in panel I is the number of initial claims for SSI divided by the state population (in 100,000s) and the dependent variable in panel II is the number of initial claims for SSDI divided by the state population (in 100,000s). State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Table 3. Exploring Heterogeneity in the Effects of PSL Adoption on Initial SS(D)I Claims by Whether Joint or Exclusive Applications for SS(D)I, 2005-2022

	(1)	(2)	(3)	(4)
Panel I: SSI Only Initial Claims				
PSL Mandate	1.5329** (0.7189)	1.1034* (0.5865)	1.9049*** (0.5948)	1.2927** (0.5847)
Pre-Treat. Mean of DV	23.8185	23.8185	23.8185	23.8185
Panel II: SSDI Only Initial Claims				
PSL Mandate	-0.1063 (0.4658)	-0.3913 (0.5732)	0.1618 (0.5091)	0.0099 (0.5415)
Pre-Treat. Mean of DV	21.7882	21.7882	21.7882	21.7882
Panel III: SSI & SSDI Initial Claims				
PSL Mandate	2.2617*** (0.5461)	1.4590*** (0.4710)	1.3953*** (0.4726)	0.9932* (0.5728)
Pre-Treat. Mean of DV	16.3391	16.3391	16.3391	16.3391
N	11016	11016	11016	11016
<i>Control Variables:</i>				
State and Year-by-Month FE?	Yes	Yes	Yes	Yes
Demographic Characteristics?	No	Yes	Yes	Yes
Macroeconomic, COVID-19, Healthcare?	No	No	Yes	Yes
Minimum Wage?	No	No	No	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel I is the number of initial claims for SSI only divided by the state population (in 100,000s), the dependent variable in panel II is the number of initial claims for SSDI only divided by the state population (in 100,000s), and the dependent variable in panel III is the number of initial claims for SSI and SSDI jointly divided by the state population (in 100,000s). State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Table 4. Sensitivity of Estimates in Tables 1 and 2 to controls for Census Division- and State-Specific Linear Time Trends, 2005-2022

	(1)	(2)	(3)	(4)	(5)
	SSI	SSDI	SSI Only	SSDI Only	SSI and SSDI
Panel I: Baseline Estimates from Tables 1 and 2 (Column 4 Specification)					
PSL Mandate	2.2859** (1.0095)	1.0031 (0.9697)	1.2927** (0.5847)	0.0099 (0.5415)	0.9932* (0.5728)
Pre-Treat. Mean of DV	40.1576	38.1273	23.8185	21.7882	16.3391
Panel II: Added Controls for Census Division-Specific Linear Time Trends					
PSL Mandate	2.0165** (0.8928)	1.4900 (1.1110)	1.0915** (0.4744)	0.5649 (0.6879)	0.9251* (0.5059)
Pre-Treat. Mean of DV	40.1576	38.1273	23.8185	21.7882	16.3391
Panel III: Added Controls for State-Specific Linear Time Trends					
PSL Mandate	1.8498* (1.0999)	1.2369 (1.1579)	0.9858* (0.5626)	0.3729 (0.6974)	0.8640 (0.5791)
Pre-Treat. Mean of DV	40.1576	38.1273	23.8185	21.7882	16.3391
N	11016	11016	11016	11016	11016
<i>Control Variables:</i>					
State and Year-by-Month FE?	Yes	Yes	Yes	Yes	Yes
All Controls?	Yes	Yes	Yes	Yes	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Estimates are from population weighted TWFE regressions using state-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in column 1 is the number of initial claims for SSI divided by the state population (in 100,000s), the dependent variable in column 2 is the number of initial claims for SSDI divided by the state population (in 100,000s), the dependent variable in column 3 is the number of initial claims for only SSI divided by the state population (in 100,000s), the dependent variable in column 4 is the number of initial claims for only SSDI divided by the state population (in 100,000s), and the dependent variable in column 5 is the number of initial claims for both SSI and SSDI divided by the state population (in 100,000s). All controls include demographic characteristics, macroeconomic controls, COVID-19 controls, healthcare controls, and a minimum wage control. Demographic characteristics include the state-by-year proportion of the population that are white non-Hispanic and proportion that are aged 18 to 64 years. Macroeconomic controls include state-by-year-by-month levels of the unemployment rate, the housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 related controls include cumulative death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility lines for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate in the state, is included in the final column (4). Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Table 5. Sensitivity of Estimated Treatment Effects to Use of Sun and Abraham Estimator, 2005-2022

	(1)	(2)	(3)	(4)	(5)
	SSI	SSDI	SSI Only	SSDI Only	SSI and SSDI
Panel I: Baseline Estimates from Tables 1 and 2 (Column 4 Specification)					
PSL Mandate	2.2859** (1.0095)	1.0031 (0.9697)	1.2927** (0.5847)	0.0099 (0.5415)	0.9932* (0.5728)
Pre-Treat. Mean of DV	40.1576	38.1273	23.8185	21.7882	16.3391
Panel II: Sun & Abraham Estimates					
PSL Mandate	2.2592* (1.2076)	1.0131 (1.0457)	1.2768** (0.5825)	0.0307 (0.3954)	0.9824 (0.7392)
Pre-Treat. Mean of DV	40.1576	38.1273	23.8185	21.7882	16.3391
N	11016	11016	11016	11016	11016
<i>Control Variables:</i>					
State and Year-by-Month FE?	Yes	Yes	Yes	Yes	Yes
All Controls?	Yes	Yes	Yes	Yes	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in column 1 is the number of initial claims for SSI divided by the state population (in 100,000s), the dependent variable in column 2 is the number of initial claims for SSDI divided by the state population (in 100,000s), the dependent variable in column 3 is the number of initial claims for only SSI divided by the state population (in 100,000s), the dependent variable in column 4 is the number of initial claims for only SSDI divided by the state population (in 100,000s), and the dependent variable in column 5 is the number of initial claims for both SSI and SSDI divided by the state population (in 100,000s). All controls include demographic characteristics, macroeconomic controls, COVID-19 controls, healthcare controls, and a minimum wage control. State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Table 6. TWFE and Sun and Abraham Estimates of Effect of PSL Mandate on Changes in SSI Beneficiaries, 2005-2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel I: Children Under Age 18								
PSL Mandate	23.4849*	29.5970	37.0409***	33.1911**	24.5347*	33.3056*	37.7768***	34.2702**
	(12.4707)	(18.0871)	(12.8508)	(13.5437)	(12.8213)	(19.2480)	(13.9153)	(14.9715)
Pre-Treat. Mean of DV (Total)	1344.76	1344.76	1344.76	1344.76	1344.76	1344.76	1344.76	1344.76
Panel II: Working-Age Adults								
PSL Mandate	9.7067	6.0967	8.1609	1.4832	8.4064	4.0297	5.5152	-2.1009
	(6.8503)	(6.4231)	(9.1443)	(9.3940)	(5.0214)	(5.2668)	(8.4915)	(8.8744)
Pre-Treat. Mean of DV (Total)	2292.44	2292.44	2292.44	2292.44	2292.44	2292.44	2292.44	2292.44
N	918	918	918	918	918	918	918	918
<i>Control Variables:</i>								
State and Year FE?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Characteristics?	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Macroeconomic, COVID-19, Healthcare?	No	No	Yes	Yes	No	No	Yes	Yes
Minimum Wage?	No	No	No	Yes	No	No	No	Yes
TWFE or Sun and Abraham (SA)?	TWFE	TWFE	TWFE	TWFE	SA	SA	SA	SA

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by year data from the 2005-2022 Social Security Administration (SSA) State and County annual reports for Supplemental Security Income (SSI) recipients. The dependent variable in panel I is the change in the number of beneficiaries for SSI under 18 divided by the state population that is younger than 18 (in 100,000s), and the dependent variable in panel II is the change in the number of beneficiaries for SSI aged between 18 and 64 divided by the state population aged between 18 and 64 (in 100,000s). State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population of interest.

Table 7. TWFE and Sun and Abraham Estimates of Effect of PSL Mandate on Changes in SSDI Beneficiaries, 2005-2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel I: Children								
PSL Mandate	39.8228** (19.7189)	26.6918 (17.0705)	31.0697** (14.8011)	23.1768 (14.8929)	43.0407** (17.2099)	29.9684* (17.5511)	36.1888** (17.6802)	28.2243 (18.4535)
Pre-Treat. Mean of DV Levels	1918.11	1918.11	1918.11	1918.11	1918.11	1918.11	1918.11	1918.11
Panel II: Adults								
PSL Mandate	43.5928*** (16.2485)	20.4247 (13.0185)	17.0939 (13.0584)	6.2671 (13.4067)	47.1414*** (14.0377)	22.1938 (14.3362)	21.4424 (15.1807)	10.3272 (16.5849)
Pre-Treat. Mean of DV Levels	3420.72	3420.72	3420.72	3420.72	3420.72	3420.72	3420.72	3420.72
N	918	918	918	918	918	918	918	918
<i>Control Variables:</i>								
State and Year FE?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demographic Characteristics?	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Macroeconomic, COVID-19, Healthcare?	No	No	Yes	Yes	No	No	Yes	Yes
Minimum Wage?	No	No	No	Yes	No	No	No	Yes
TWFE or Sun and Abraham (SA)?	TWFE	TWFE	TWFE	TWFE	SA	SA	SA	SA

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by year data from the 2005-2022 Social Security Administration (SSA) State and County annual reports for Old-Age, Survivors, and Disability Insurance (OASDI) recipients. The dependent variable in panel I is the change in the number of child beneficiaries for SSDI divided by the state population that is younger than 18 (in 100,000s), and the dependent variable in panel II is the change in the number of adult beneficiaries for SSDI (disabled workers + spouses) divided by the state population aged between 18 and 64 (in 100,000s). State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population of interest.

Table 8. Estimates of the Effects of PSL Mandates on Labor Market Outcomes Among Adults with Disabilities, Spouses of Adults with Disabilities, and Parents of Children with Disabilities, American Community Survey

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Employed	Full-Time vs Part-Time Employment									
	All	All	Age 18-34	Age 35-54	Age 55+	Males	Females	< HS	HS/GED	Some Coll	College +
Panel I: Adults with Disabilities											
PSL Mandate	-0.000582 (0.00189)	-0.00280 (0.00304)	-0.0102 (0.00819)	0.00220 (0.00466)	-0.000031 (0.00280)	-0.0023 (0.0033)	-0.0039 (0.0048)	-0.006 (0.0074)	-0.00344 (0.00562)	-0.00168 (0.00565)	-0.00343 (0.00471)
Pre-Treat Mean DV	0.204	0.636	0.561	0.729	0.608	0.682	0.581	0.542	0.621	0.649	0.704
N	7,654,508	1,975,281	409,163	693,342	851,423	1,072,001	903,280	294,407	613,586	658,776	408,512
Panel II: Spouses of Adults with Disabilities											
PSL Mandate	0.00118 (0.00380)	-0.0067** (0.0031)	-0.0131 (0.00816)	-0.0055 (0.00368)	-0.0049 (0.00537)	-0.0080** (0.0030)	-0.0050 (0.0044)	-0.0142 (0.0094)	-0.00653 (0.00426)	-0.00791* (0.00469)	-0.00027 (0.0043)
Pre-Treat Mean DV	0.659	0.817	0.781	0.836	0.802	0.886	0.745	0.769	0.812	0.814	0.853
N	1,510,210	1,087,812	146,171	570,881	370,760	532,654	555,158	127,898	346,714	363,134	250,066
Panel III: Parents of Children with Disabilities											
PSL Mandate	-0.0071 (0.0065)	0.0037 (0.0068)	0.0076 (0.0076)	0.0076 (0.0076)	-0.0127 (0.0175)	-0.0075 (0.0079)	0.0140 (0.0100)	0.0250 (0.0230)	-0.0204 (0.0161)	0.0005 (0.0142)	0.0165* (0.0095)
Pre-Treat Mean DV	0.696	0.752	0.799	0.793	0.907	0.696	0.745	0.793	0.785	0.836	0.752
N	190,913	144,624	7,773	122,932	13,914	68,416	76,208	17,604	37,986	49,069	39,965

* p<.1, ** p<.05, *** p<.01

Notes: Estimates are from population-weighted two-way fixed effects (TWFE) regressions using individual-level data from the 2005–2022 American Community Survey (ACS). Each regression includes state and year fixed effects and is clustered at the state level. The dependent variable in Column (1) is a binary indicator for employment. Columns (2) onward present regressions where the dependent variable is a binary indicator for full-time status, defined as working more than 35 hours per week (versus part-time). These include subgroup regressions based on respondent age group, sex, and educational attainment. Covariates include race/ethnicity indicators, age, marital status, family size, number of children, and several state-level controls such as COVID-19 case and death rates, Medicaid eligibility thresholds for parents and non-parents, community health center density, an index of government COVID response, unemployment rate, housing price index, minimum wage levels, and indicators of functional limitations and health access barriers. Regressions are weighted by ACS person weights. Standard errors clustered at the state level are reported in parentheses.

Table 9. Estimates of the Effects of PSL Mandates on Adult Caregiving, Behavioral Risk Factor Surveillance System

	(1)	(2)	(3)	(4)
	Caregiving for Individuals with Disabilities			
	Any Caregiving in the Past Month	Provided Any Caregiving (Up to 1 month)	Provided Any Caregiving (Up to 6 months)	Part-Time Caregiving (<20 hrs/w) Caregiving
PSL Mandate	0.024*** (0.009)	0.011** (0.004)	0.013** (0.005)	0.035 (0.028)
Pre-Treat Mean DV	0.222	0.038	0.065	0.656
Dataset	BRFSS	BRFSS	BRFSS	BRFSS
N	342,442	342,442	342,442	74,833

* p<.1, ** p<.05, *** p<.01

Notes: Estimates are from population weighted TWFE regressions using state-by-year data from the 2015-2022 Behavioral Risk Factor Surveillance System (BRFSS). The dependent variables for caregiving for individuals with disabilities include: an indicator for any caregiving in the past month (Column (1)); an indicator for having provided caregiving for up to 1 month for this person (Column (2)); an indicator for having provided caregiving for up to 6 months for this person (Column (3)); and an indicator for providing part-time caregiving (fewer than 20 hours per week) among current caregivers (Column (4)) in the BRFSS. Individual demographics include age, gender, education level, race and ethnicity, marital status, and numbers of children and adults in the household. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Table 10. Estimates of the Effects of PSL Mandates on Adult and Child Healthcare and Health Outcomes, Behavioral Risk Factor Surveillance System and National Survey of Children's Health

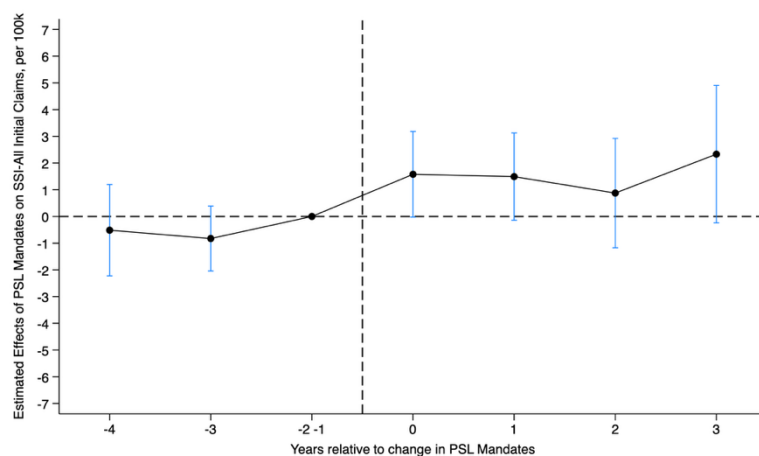
	(1)	(2)	(3)	(4)	(5)	(6)
	Adult healthcare outcomes		Child healthcare outcomes			
	Routine checkup	Excellent / Very Good Health	Preventative Visit	Mental Health Care	Excellent / Very Good Health Functional Disability	Excellent / Very Good Health Cognitive Disability
PSL Mandate	-0.007 (0.010)	0.013** (0.006)	-0.00437 (0.00454)	0.0215*** (0.00693)	0.0193** (0.0075)	0.0202** (0.0087)
Pre-Treat Mean DV	0.767	0.237	0.848	0.303	0.754	0.790
Dataset	BRFSS	BRFSS	NSCH	NSCH	NSCH	NSCH
N	417,708	426,201	84231	79897	37,837	34,104

* p<.1, ** p<.05, *** p<.01

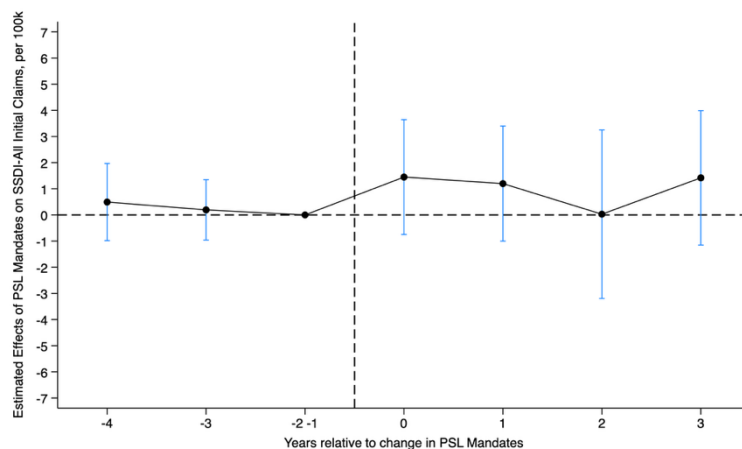
Notes: Estimates are from population weighted TWFE regressions using state-by-year data from the 2015-2022 Behavioral Risk Factor Surveillance System (BRFSS) and 2016–2022 National Survey of Children's Health (NSCH). Individual demographic controls include age, gender, education level, race and ethnicity, marital status, and numbers of children and adults in the household. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Appendix Figure 1. Event-Study Analysis of PSL Adoption and SS(D)I Initial Claims Using TWFE Estimates

Panel (a): SSI



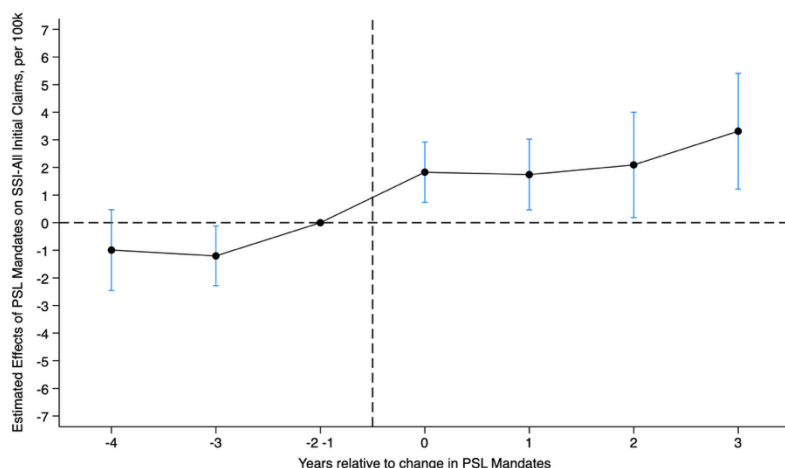
Panel (b): SSDI



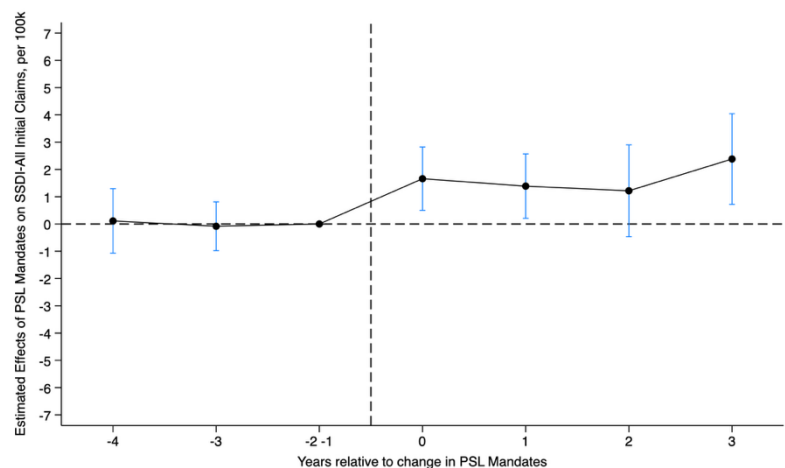
Notes: Event-study regressions are estimated using TWFE models with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (a) is the number of initial claims for SSI divided by the state population (in 100,000s) and the dependent variable in panel (b) is the number of initial claims for SSDI divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Appendix Figure 2. Event-Study Analysis of PSL Adoption and SS(D)I Initial Claims, Using Sun and Abraham Estimates

Panel (a): SSI



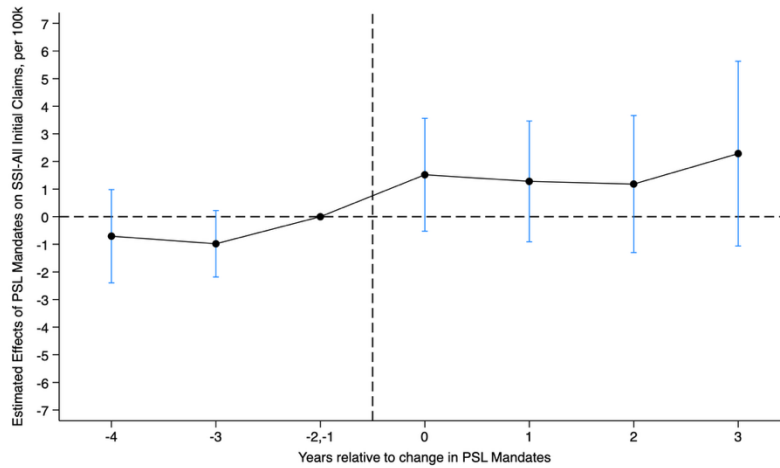
Panel (b): SSDI



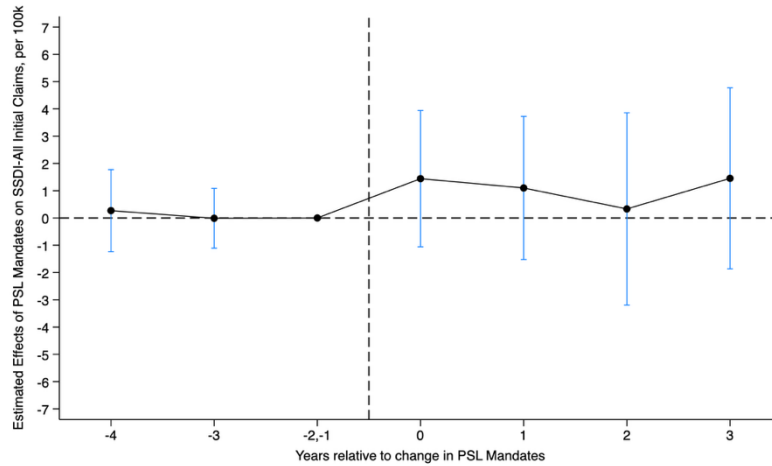
Notes: Event-study regressions are estimated Sun and Abraham (2021) estimators with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (a) is the number of initial claims for SSI divided by the state population (in 100,000s) and the dependent variable in panel (b) is the number of initial claims for SSDI divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Appendix Figure 3. Event-Study Analysis of PSL Adoption and SS(D)I Initial Claims, Using Stacked Difference-in-Differences Estimates

Panel (a): SSI



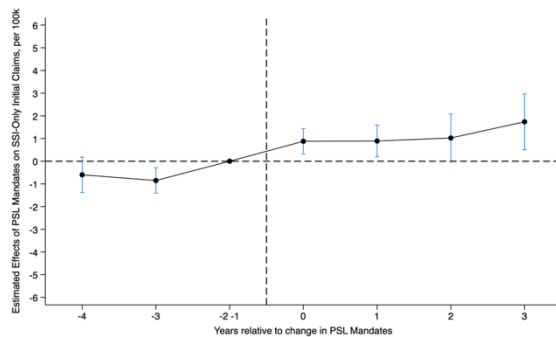
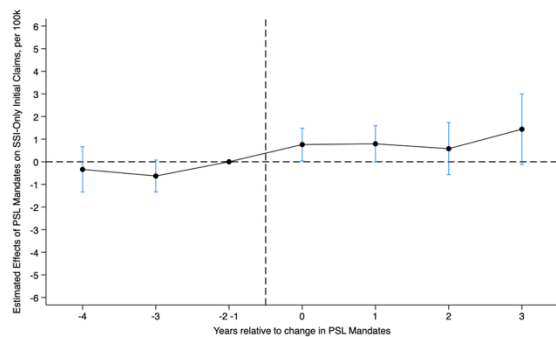
Panel (b): SSDI



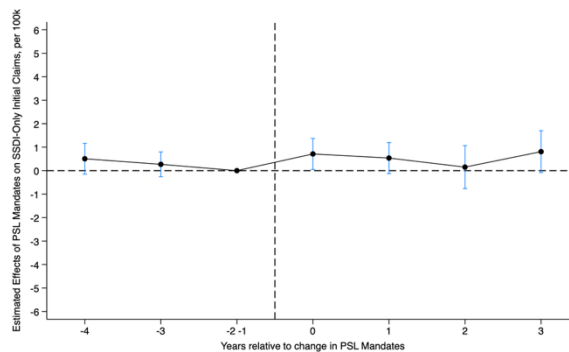
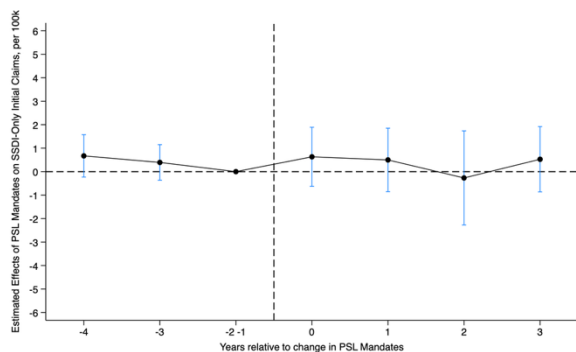
Notes: Event-study regressions are estimated Gardner (2021) estimators with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (a) is the number of initial claims for SSI divided by the state population (in 100,000s) and the dependent variable in panel (b) is the number of initial claims for SSDI divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Appendix Figure 4. Heterogeneity in Event-Study Estimates, by Whether SSI Only, SSDI Only, or Joint SSI and SSDI Initial Claims (I) Using TWFE Estimates (II) Using Sun and Abraham Estimates

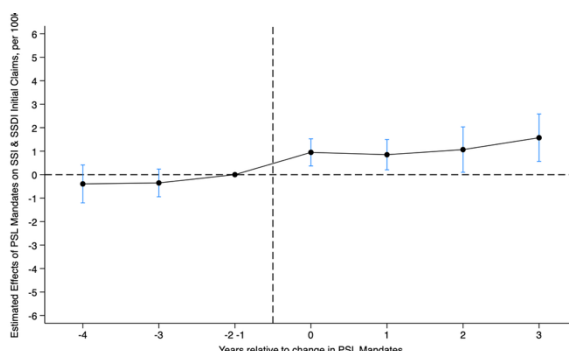
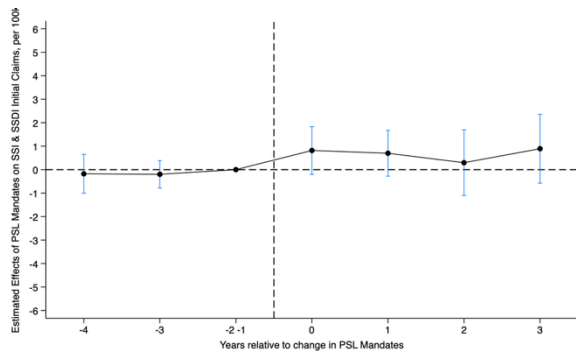
Panel (a): SSI Only



Panel (b): SSDI Only



Panel (c): Joint SSDI and SSI



Notes: Event-study regressions are estimated using TWFE (I) Sun and Abraham (2021) (II) estimators with state-by-year-by-month data from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel (a) is the number of initial claims for SSI only divided by the state population (in 100,000s), the dependent variable in panel (b) is the number of initial claims for SSDI only divided by the state population (in 100,000s), and the dependent variable in panel (c) is the number of initial claims for joint SSDI and SSI benefits divided by the state population (in 100,000s). All models include controls for state fixed effects, year-by-month fixed effects, the state-by-year proportion of the population that are white non-Hispanic, the proportion that is aged 18 to 64 years, the unemployment rate, the housing price index, the natural log of real per capita personal income (2022\$), the cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, the percentage of fully vaccinated individuals, the Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, primary care providers per capita, and the real prevailing minimum

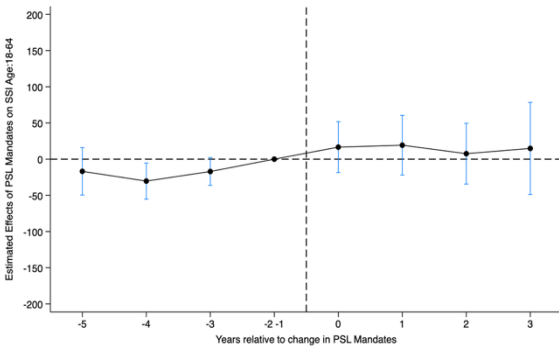
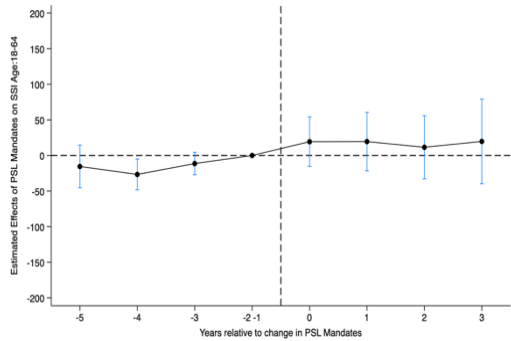
wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Appendix Figure 5. Event-Study Analysis of PSL Adoption on Levels of SSI and SSDI Beneficiaries Per 100,000 Population

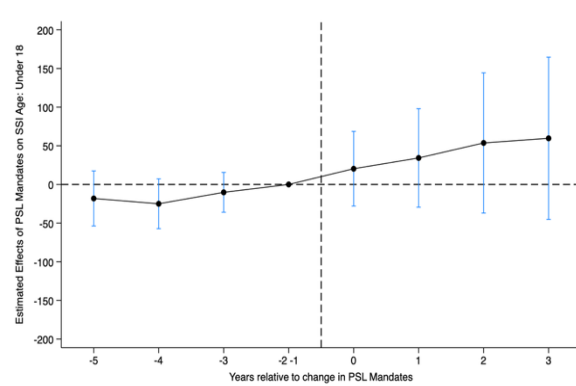
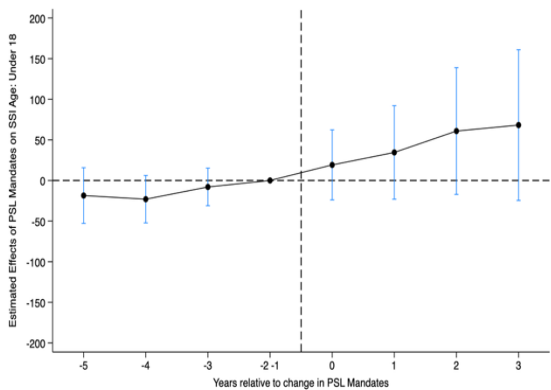
(I) Using TWFE Estimates

(II) Using Sun and Abraham Estimates

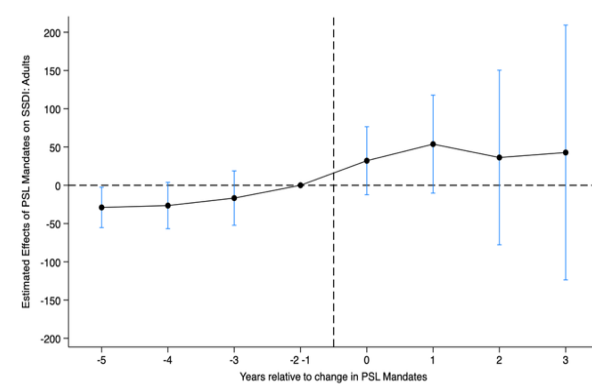
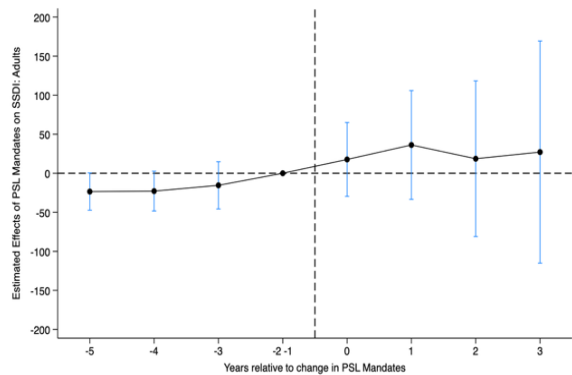
Panel (a): SSI Aged 18-64



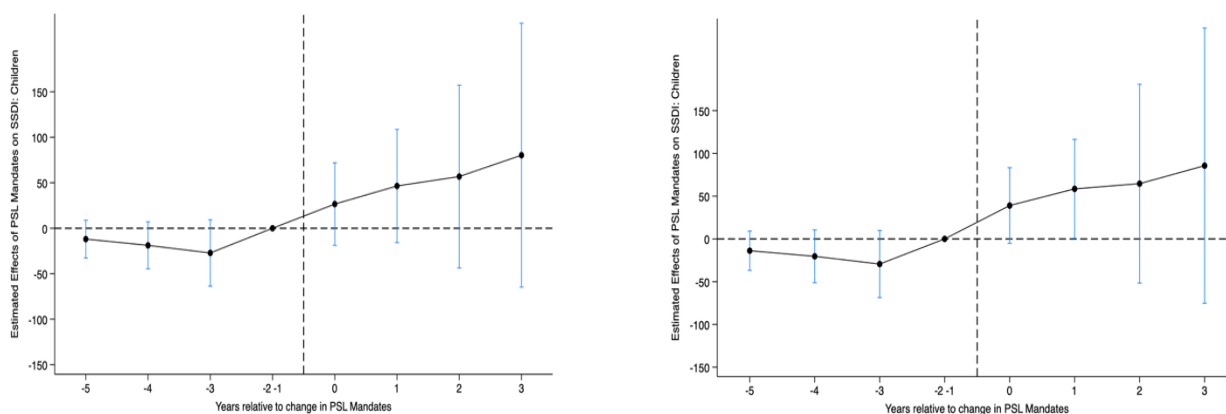
Panel (b): SSI Aged Under 18



Panel (c): SSDI for Adults



Panel (d): SSDI for Children



Notes: Event-study regressions are estimated using TWFE (I) Sun and Abraham (2021) (II) estimators with state-by-year from the 2005-2022 Social Security Administration (SSA) State and County annual reports for Supplemental Security Income (SSI) recipients, and reports for Old-Age, Survivors, and Disability Insurance (OASDI) recipients. The dependent variable in panel (a) is the number of beneficiaries for SSI aged between 18 and 64 divided by the state population aged between 18 and 64 (in 100,000s), the dependent variable in panel (b) is the number of beneficiaries for SSI under 18 divided by the state population that is younger than 18 (in 100,000s), the dependent variable in panel (c) is the number of adult beneficiaries (disabled workers and spouses) for SSDI divided by the state population that is 18 and older but younger than the full age of retirement (in 100,000s), and the dependent variable in panel (d) is the number of child beneficiaries for SSDI divided by the state population that is younger than 18 years of age (in 100,000s). All controls include demographic characteristics, macroeconomic controls, COVID-19 controls, healthcare controls, a minimum wage control, and state-specific linear time trends. State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population. Event study coefficients are represented by the black circles and 95% confidence intervals are shown with vertical lines.

Appendix Table 1A. Descriptive Statistics, 2005-2022 (Monthly SSA Data)

	Full Sample	Untreated States	Treated States
<i>Outcome Variables*</i>			
All SSI Claims Rate	45.22 (17.43)	49.86 (18.55)	36.55 (10.65)
All SSDI Claims Rate	42.76 (13.87)	46.59 (14.61)	35.59 (8.60)
SSI Only Claims Rate	26.44 (9.83)	28.78 (10.58)	22.07 (6.21)
SSDI Only Claims Rate	23.97 (6.68)	25.51 (7.13)	21.11 (4.54)
Joint SSI & SSDI Claims Rate	18.78 (8.16)	21.08 (8.54)	14.48 (5.12)
<i>Demographic Characteristics</i>			
Population Prop. non-White Hispanic	0.63 (0.15)	0.68 (0.14)	0.55 (0.14)
Population Prop. age 18-64	0.62 (0.01)	0.62 (0.01)	0.63 (0.01)
<i>Macroeconomic Controls</i>			
Per Capita Personal Income**	59098.56 (9426.33)	55098.59 (6401.37)	66575.77 (9620.53)
Housing Price Index	164.41 (49.11)	153.98 (46.04)	183.93 (48.72)
Unemployment Rate	6.04 (2.48)	5.82 (2.39)	6.46 (2.59)
<i>COVID-19 Controls</i>			
Cumulative Case Rate	0.02 (0.07)	0.02 (0.07)	0.02 (0.06)
Cumulative Death Rate	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Government Response Index	8.16 (18.83)	7.85 (18.01)	8.72 (20.26)
Fully Vaccinated Population (%)	6.02 (18.16)	5.70 (17.06)	6.63 (20.03)
<i>Healthcare Controls</i>			
Community Health Centers, per 100k	3.40 (2.47)	3.85 (2.77)	2.55 (1.44)
Primary Care Doctors, per 10k	6.32 (0.94)	5.89 (0.72)	7.14 (0.75)
Medicaid Eligibility Line: Parents	0.95 (0.54)	0.76 (0.54)	1.31 (0.29)
Medicaid Eligibility Line: Non-parents	0.47 (0.65)	0.32 (0.58)	0.76 (0.68)
<i>Minimum Wage Control</i>			
Simplified Kaitz Index	0.47 (0.06)	0.46 (0.05)	0.51 (0.07)
N	11016	7992	3024

Notes: Dependent variables are measured in rates per 100,000 persons.

Appendix Table 1B. Descriptive Statistics, 2005-2022 (Annual SSA Data)

	Full Sample	Untreated States	Treated States
SSI Recipients Rate Under 18	1583.42 (557.92)	1732.81 (579.15)	1296.22 (374.16)
SSI Recipients Rate Ages 18-64	2320.49 (647.45)	2370.72 (717.62)	2228.50 (481.42)
SSDI Children Recipients Rate	2148.96 (770.89)	2353.96 (780.13)	1754.87 (576.03)
SSDI Adult Recipients	4036.13 (1171.40)	4437.74 (1194.26)	3300.09 (661.14)
SSDI Disabled Worker Recipient Rate	3970.94 (1148.53)	4363.77 (1169.84)	3251.01 (654.88)
SSDI Spouse Recipient Rate	65.18 (32.63)	73.97 (36.10)	49.08 (15.06)
N	918	666	252

Notes: Dependent variables are measured in rates per 100,000 (age-specific) persons.

Appendix Table 2. Sensitivity of Estimated Effect of PSL Mandate Adoption on SS(D)I Initial Claims to Aggregating to the State-by-Year Level, 2005-2022

	(1)	(2)	(3)	(4)
Panel I: SSI Only Initial Claims				
PSL Mandate	19.4429** (8.8339)	14.1333* (7.2786)	26.4541*** (7.5338)	14.0629* (7.9080)
Pre-Treat. Mean of DV	286.1654	286.1654	286.1654	286.1654
Panel II: SSDI Only Initial Claims				
PSL Mandate	-1.8684 (5.8047)	-5.5763 (7.1153)	2.6726 (6.3937)	-0.8734 (7.3048)
Pre-Treat. Mean of DV	261.6405	261.6405	261.6405	261.6405
Panel III: SSI & SSDI Initial Claims				
PSL Mandate	28.2052*** (6.8605)	18.1542*** (5.9160)	17.9022*** (6.3686)	9.8197 (8.8149)
Pre-Treat. Mean of DV	197.3171	197.3171	197.3171	197.3171
N	918	918	918	918
<i>Control Variables:</i>				
State and Year FE?	Yes	Yes	Yes	Yes
Demographic Characteristics?	No	Yes	Yes	Yes
Macroeconomic, COVID-19, Healthcare?	No	No	Yes	Yes
Minimum Wage?	No	No	No	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by-month data aggregated to the year level from the 2005-2022 Social Security Administration (SSA) State Agency Monthly Workload (MOWL) data for Supplemental Security Income (SSI) and Social Security Disability Insurance (SSDI) initial claims. The dependent variable in panel I is the number of initial claims for only SSI divided by the state population (in 100,000s), the dependent variable in panel II is the number of initial claims for only SSDI divided by the state population (in 100,000s), and the dependent variable in panel III is the number of initial claims for both SSI and SSDI divided by the state population (in 100,000s). State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Appendix Table 3. Disentangling the Effect of PSL Adoption on Adult SSDI Beneficiaries, by Workers versus Spouses

	(1)	(2)	(3)	(4)
Panel I: SSDI Disabled Worker Beneficiaries				
PSL Mandate	42.7591** (16.1932)	19.9898 (12.9070)	16.4267 (12.8590)	6.0085 (13.1422)
Pre-Treat. Mean of DV Levels	3365.81	3365.81	3365.81	3365.81
Panel II: SSDI Spousal Beneficiaries				
PSL Mandate	0.8337*** (0.3053)	0.4349 (0.3229)	0.6671* (0.3591)	0.2587 (0.4027)
Pre-Treat. Mean of DV Levels	54.91	54.91	54.91	54.91
N	918	918	918	918
<i>Control Variables:</i>				
State and Year FE?	Yes	Yes	Yes	Yes
Demographic Characteristics?	No	Yes	Yes	Yes
Macroeconomic, COVID-19, Healthcare?	No	No	Yes	Yes
Minimum Wage?	No	No	No	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by year data from the 2005-2022 Social Security Administration (SSA) State and County annual reports for Old-Age, Survivors, and Disability Insurance (OASDI) recipients. The dependent variable in panel I is the change in the number of disabled worker beneficiaries for SSDI divided by the state population that is 18 and older but younger than the full age of retirement (in 100,000s), and the dependent variable in panel II is the change in the number of spousal beneficiaries for SSDI divided by the state population that is 18 and older but younger than the full age of retirement (in 100,000s). State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Appendix Table 4. Sensitivity of Estimates in Tables 5 and 6 to controls for Census Division- and State-Specific Linear Time Trends, 2005-2022

	(1) SSI Aged 18-64	(2) SSI Under 18	(3) SSDI Adults	(4) SSDI Children
Panel I: Baseline Estimates from Tables 5 and 6 (Column 4 Specification)				
PSL Mandate	1.4832 (9.3940)	33.1911** (13.5437)	6.2671 (13.4067)	23.1768 (14.8929)
Pre-Treat. Mean of DV Levels	2292.44	1344.76	3420.7232	1918.11
Panel II: Added Controls for Census Division-Specific Linear Time Trends				
PSL Mandate	8.5990 (7.3752)	12.2526 (11.9847)	1.3595 (11.1033)	11.7167 (10.9415)
Pre-Treat. Mean of DV Levels	2292.44	1344.76	3420.7232	1918.11
Panel III: Added Controls for State-Specific Linear Time Trends				
PSL Mandate	2.1306 (12.7379)	5.0252 (15.2357)	-6.7722 (13.1968)	2.2263 (13.7116)
Pre-Treat. Mean of DV Levels	2292.44	1344.76	3420.7232	1918.11
N	918	918	918	918
<i>Control Variables:</i>				
State and Year FE?	Yes	Yes	Yes	Yes
All Controls?	Yes	Yes	Yes	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by year data from the 2005-2022 Social Security Administration (SSA) State and County annual reports for Supplemental Security Income (SSI) recipients, and reports for Old-Age, Survivors, and Disability Insurance (OASDI) recipients. The dependent variable in column 1 is the change in the number of beneficiaries for SSI aged between 18 and 64 divided by the state population aged between 18 and 64 (in 100,000s), the dependent variable in column 2 is the change in the number of beneficiaries for SSI under 18 divided by the state population that is younger than 18 (in 100,000s), the dependent variable in column 3 is the change in the number of adult beneficiaries (disabled workers + spouses) for SSDI divided by the state population that is 18 and older but younger than the full age of retirement (in 100,000s), and the dependent variable in column 4 is the change in the number of child beneficiaries for SSDI divided by the state population that is younger than 18 years of age (in 100,000s). All controls include demographic characteristics, macroeconomic controls, COVID-19 controls, healthcare controls, and a minimum wage control. State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Appendix Table 5. Effects of PSL Mandate on Levels of SSI and SSDI Beneficiaries Per 100,000 Population

	(1)	(2)	(3)	(4)
	SSI Aged 18-64	SSI Under 18	SSDI Adults	SSDI Children
PSL Mandate	25.7874 (29.1878)	54.2686 (36.1842)	30.8045 (42.3265)	39.0583 (33.9088)
Pre-Treat. Mean of DV	2292.44	1344.76	3420.7232	1918.11
<i>Control Variables:</i>				
State and Year FE?	Yes	Yes	Yes	Yes
All Controls?	Yes	Yes	Yes	Yes

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: Estimates are from population weighted TWFE regressions using state-by year data from the 2005-2022 Social Security Administration (SSA) State and County annual reports for Supplemental Security Income (SSI) recipients, and reports for Old-Age, Survivors, and Disability Insurance (OASDI) recipients. The dependent variable in column 1 is the number of beneficiaries for SSI aged between 18 and 64 divided by the state population aged between 18 and 64 (in 100,000s), the dependent variable in column 2 is the number of beneficiaries for SSI under 18 divided by the state population that is younger than 18 (in 100,000s), the dependent variable in column 3 is the number of adult beneficiaries (disabled workers + spouses) for SSDI divided by the state population that is 18 and older but younger than the full age of retirement (in 100,000s), and the dependent variable in column 4 is the number of child beneficiaries for SSDI divided by the state population that is younger than 18 years of age (in 100,000s). All controls include demographic characteristics, macroeconomic controls, COVID-19 controls, healthcare controls, a minimum wage control, and state-specific linear time trends. State-level demographic characteristics include the proportion of the population that are white non-Hispanic and the proportion that are aged 18 to 64 years. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. All models also include controls for state-specific linear time trends. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.

Appendix Table 6. Estimates of the Effects of PSL Mandates on Employment Among Persons with Disabilities or Spouses of Persons with Disabilities, American Community Survey

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	All	Age 18-34	Age 35-54	Age 55+	Males	Females	< HS	HS/GED	Some Coll	College +
Panel I: Spouses of Persons with Disabilities										
PSL Mandate	0.0016 (0.0040)	-0.0047 (0.0107)	0.0028 (0.0052)	0.0011 (0.0048)	0.0067 (0.0042)	-0.0031 (0.0055)	-0.0086 (0.0103)	0.0015 (0.0059)	0.0034 (0.0054)	0.0045 (0.0048)
Pre-Treat Mean DV	0.817	0.781	0.836	0.802	0.886	0.745	0.769	0.812	0.814	0.853
N	1,510,210	180,287	739,785	590,138	719,411	790,799	231,544	502,103	481,995	294,568
Panel II: Parents of Children with Disabilities										
PSL Mandate	-0.0063 (0.0085)	-0.0072 (0.0399)	-0.0118 (0.0092)	0.0161 (0.0217)	-0.0040 (0.0116)	-0.0071 (0.0112)	-0.0055 (0.0245)	-0.0168 (0.0125)	0.0009 (0.0188)	-0.0010 (0.0113)
Pre-Treat Mean DV	0.696	0.752	0.799	0.793	0.907	0.696	0.745	0.793	0.785	0.836
N	190,913	10,590	159,251	21,056	80,091	110,822	29,663	52,425	63,148	45,677

* p<.1, ** p<.05, *** p<.01

Notes: This table reports estimates from population-weighted two-way fixed effects regressions using individual-level data from the American Community Survey (ACS) spanning 2005–2022. Each model includes state and year fixed effects and clusters standard errors at the state level. Panel I presents results for spouses of adults with disabilities, while Panel II focuses on parents of children with disabilities. The dependent variable in all columns is a binary indicator equal to 1 if the respondent reported working full-time (i.e., more than 35 hours per week), and 0 otherwise. Columns (2) through (10) present subgroup estimates by age, sex, and educational attainment. All regressions control for demographic covariates (race/ethnicity, age, marital status, family size, number of children), and state-level time-varying controls including COVID-19 case and death rates, Medicaid eligibility thresholds for parents and non-parents, community health center density, minimum wage, unemployment rate, housing price index, EITC policy, an index of state government COVID response, and indicators of disability-related functional limitations (mobility, hearing, vision, etc.). Regressions are weighted using ACS person-level survey weights. Standard errors are shown in parentheses.

Appendix Table 7. Estimates of the Effects of Paid Sick Leave Mandates on Disability-Related Outcomes Among Adults and Children, Behavioral Risk Factor Surveillance System and National Survey of Children’s Health

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Adult Disability Outcomes							Child Disability Outcomes		
	Any Limitation	Hearing	Vision	Cognition	Mobility	Self-care	Independent living	Functional Limitation	Cognitive Disability	Emotional/ Behavioral Disability
PSL Mandate	-0.001 (0.005)	-0.002 (0.002)	0.002 (0.001)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.002)	0.001 (0.002)	-0.0069 (0.00484)	0.00075 (0.0056)	0.0039 (0.0050)
Pre-Treat Mean DV	0.244	0.050	0.045	0.122	0.120	0.038	0.070	0.141	0.127	0.195
Dataset	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS	BRFSS	NSCH	NSCH	NSCH
N	1,520,629	1,517,844	1,513,955	1,505,637	1,506,907	1,506,171	1,501,308	268,083	268,380	268,380

* p<.1, ** p<.05, *** p<.01

Notes: Estimates are from population weighted TWFE regressions using state-by-month data from the 2015-2022 Behavioral Risk Factor Surveillance System (BRFSS) and 2016–2022 National Survey of Children’s Health (NSCH). The dependent variables for adult disability outcomes in BRFSS are indicators for having any disability limitation and specifically in hearing, vision, cognition, mobility, self-care, and independent living (Columns (1) to (7)). The dependent variables for child disability outcomes include indicators for having any functional limitation, any cognitive disability, and any emotional and behavioral disability (Columns (8) to (10)). Individual demographics include age, gender, education level, race and ethnicity, marital status, and numbers of children and adults in the household. State-level macroeconomic controls include the unemployment rate, housing price index, and the natural log of real per capita personal income (2022 \$). COVID-19 controls include state-by-year cumulative COVID-19 death and case rates, an index for overall government response to the pandemic, and the percentage of fully vaccinated individuals. Healthcare related controls include Medicaid eligibility income thresholds for parents and non-parents, the number of community health centers per capita, and primary care providers per capita. The minimum wage control is the real prevailing minimum wage divided by the average wage rate. Standard errors adjusted to account for clustering at the state level are reported in parentheses and regressions are weighted by the state population.