Paid Sick Leave Mandates and Household Portfolio Choice

This version: 31 July 2024

Preliminary version

Abstract

The United States (US) is the only industrialized country without universal access to paid sick leave. Using the staggered difference-in-differences adoption of paid sick leave in the US, we find that paid sick leave mandates significantly increase household stock market participation. We show that the results be explained by three non-mutually exclusive explanations: (1) insurance-like protection, (2) subjective expectations, and (3) wealth accumulation. We show various tests to demonstrate the validity of our results, including the parallel trend, heterogenous treatment effect, and a large set of placebo and robustness tests. This paper sheds new light on the economic benefits of the public safety net on household financial decision-making.

1. Introduction

In the US, employees missed an average of 14 workdays annually due to sickness, with 10 days taken for personal illness and 4 days used for caring for family members in 2007 (Agency for Healthcare Research and Quality, 2010). Moreover, employees without paid sick leave (PSL) are 3 times (1.6 times) more likely to delay needed medical care for themselves (their family members) relative to those with paid sick leave benefits (DeRigne et al., 2016). Despite this, the US is only one of two Organization for Economic Co-operation and Development (OECD) countries that do not provide a federal paid sick leave law (World Policy Analysis Center, 2023). As of 2009, the Bureau of Labor Statistics (BLS) estimates that around 39% (45 million workers) of the US private sector do not have access to paid sick leave provisions. In response, several US states, cities, and counties have enacted legislations requiring firms to provide minimum levels of paid sick leave (Al-Sabah and Ouimet, 2021). These laws enable workers to accrue paid sick time to recover from

their own short-term illnesses or to take care of sick family members. As of 2019, 11 states and 32 localities have enacted paid sick leave mandates.

Without paid sick leave, sick workers face a trade-off: either going to work with illness or taking unpaid leave. If they decide on unpaid leave and stay at home, apart from the loss of wages, they may also face the pressure of presenteeism and the risk of job termination (Miller, 2022; Susser and Ziebarth, 2016). If they opt to go to work while sick, their recovery process may be slow down, and the productivity may be decreased (Chunyu et al., 2022; Goetzel et al., 2004). Conversely, with access to paid sick leave, sick employees have the option of taking paid time off for necessary medical treatment (Gilleskie, 1998), thereby avoiding their health conditions from worsening due to delayed treatment and reducing the likelihood of needing long-term sick leave in the future (Grinyer and Singleton, 2000). Existing literature has found that offering paid sick leave has numerous benefits to employees, including improvement of employment security, income stability, and decrease in consumer bankruptcy (Miller, 2022).

The implementation of PSL can have far-reaching economic benefits, extending beyond individual well-being to broader household financial health and investment capacity. By alleviating the financial pressures associated with unpaid sick leave, PSL can allow households to better manage their resources and plan for future investments. This increased financial stability and income predictability can enable households to allocate risky assets more confidently. Motivated by this, this paper examines the impact of paid sick leave mandates on household stock market participation.

We use household survey data from the Panel Study of Income Dynamics (PSID). The PSID offers three primary advantages for our research purposes. First, the PSID tracks the same household over time, thus we can include household fixed effects and thus identify the effects of

PSL *within* the same household. Second, the PSID provides a rich set of information on the health conditions, both current and anticipated future health conditions, of each household member. This enables us to offer direct evidence on how individual-level health concerns affect their stockholding behavior. Finally, we can observe household locations at the county-level[1] and the exact date in which households complete the survey questionnaire. This allows us to accurately identify the dynamic timing effects of local and state PSL mandates on stock market participation.

Following the literature on household finance, our measure of household stock market participation is a dummy variable that equals one if the household holds any shares in public companies, mutual funds, or investment trusts on the survey date t, and zero otherwise (Giannetti and Wang, 2016). All of our regressions control for a large set of household demographics and financial conditions. We also include household, county, and survey year fixed effects. This means we compare stock market participation behavior of the same household before and after the passage of PSL, while controlling for time-invariant county characteristics and macroeconomic fluctuations that could affect stockholding. Furthermore, we control for other safety net programs, including Paid Family Leave, Affordable Care Act, and Unemployment Insurance in the state.

Our findings indicate that, following the enactment of the PSL mandates, households are on average 3.52% more likely to participate in the stock market. Given that the average stock market participation rate in our sample is 18.5%, this increase in stockholding corresponds to a substantial marginal effect of 19%. Moreover, the treatment effect is stronger when the law mandates a more generous paid sick leave or when households have limited access to paid sick leave benefits prior to the mandate. We show various tests to demonstrate the validity of our results, including the parallel trend, heterogenous treatment effect (e.g., Callaway and Sant'Anna (2021)),

[1] Data on county-level household location come from the restricted-use PSID county-level identifiers.

and a large set of placebo and robustness tests. We also show that the adoption of PSL mandates is not likely to be driven by economic trends or political conditions in the state.

Next, we propose three non-mutually exclusive mechanisms through which PSL mandates can increase households' propensity to hold stocks: (1) insurance-like protection, (2) subjective expectations, and (3) wealth accumulation. The first channel—*insurance-like protection*—posits that paid sick leave mandates function like insurance, allowing households to feel more insured and protected against the financial consequences of illness. To test for this, first, we find that following the enactment of PSL mandates, the composition of household portfolios shift toward riskier financial assets. Second, we show that the effect of the PSL mandates on promoting stock market participation is pronounced among marginal households with greater health and job security concerns.

The second channel—*subjective expectations*— states that the provision of paid sick leave improve households' future expectations, leading to increased stock market participation. We find that following the enactment of PSL mandates, household heads with poorer health are more likely to plan on remaining in the workforce longer and experience an increase in life satisfaction. The third channel—*wealth accumulation*— demonstrates that the increase in household income and wealth following the enactment of PSL mandates can explain the rise in household stock market participation. Our findings indicate that the implementation of PSL mandates enhances households' income and non-housing wealth. Additionally, households experiencing an increase in liquid wealth following PSL mandates are more likely to invest this wealth in the stock market.

In the final section of the paper, we broadly investigate the impact of PSL mandates on other household financial decisions. The adoption of PSL laws does not have a detectable impact on household consumption or borrowing behavior. It is possible that households use the extra

disposable income and wealth provided by PSL to invest, while maintaining the same consumption and indebtedness level (e.g., Bornstein and Indarte, 2023).

Our paper contributes to several active strands of the literature. First, it extends the literature on limited household stock market participation and portfolio choice, as explored by previous studies (e.g., Agarwal et al., 2022; Bharath and Cho, 2023; Bogan and Fertig, 2013; Feng et al., 2023; Giannetti and Wang, 2016; Guiso et al., 2008; Hong et al., 2004). While existing research suggests that exogenous changes in investment environments, such as corporate scandals, political uncertainty, and natural disasters, influence stock market participation, our study adds to this by demonstrating that an exogenous public safety net, specifically paid sick leave mandates, can also impact stock market participation.

Second, we contribute to the literature on paid sick leave. Previous studies have highlighted various health benefits associated with paid leave, including reductions in population-level infectious disease rates (Stearns and White, 2018), improved mental health (Stoddard-Dare et al., 2018), and fewer workplace injuries (Asfaw et al., 2012). In the context of financial behavior, Pichler and Ziebarth (2017) found that paid sick leave mandates had an insignificant impact on county employment and wages using a broader sample of events. Our findings build upon this research by examining household financial decisions. We show that households are more inclined to take financial risks following paid sick leave mandates.

Lastly, our paper relates to the literature on parental and family leave in the US. Studies such as those by Waldfogel (1999) and Baum (2003) demonstrate that the Family and Medical Leave Act (FMLA), which provides unpaid leave, did not significantly impact women's employment or wages. Bennett et al. (2020) showed that paid family leave mandates are associated with better corporate performance, lower turnover, and higher productivity. Our results indicate

that paid sick leave mandates, which cover more workers and apply to any short-term illness but offer a shorter duration of leave, have positive effects on household stockholding decisions.

2. Theory and Institutional Background

2.1 Theoretical background

In this section, we discuss a theoretical model of the optimal portfolio choice. Our model is based on Gormley et al. (2010) that highlight how exposure to a significant negative wealth shock impacts household investment.

2.1.1 Optimal portfolio choice without safety net

Consider a basic two-period model where a household derives utility from consumption today c_0 and consumption next period c_1. The household starts with an initial wealth W_0 and the wealth endowment in the next period $\widetilde{W_1}$,

where

$$\widetilde{W_1} = \begin{cases} -D < 0, & if\ \varepsilon \\ W_1 \geq 0, & if\ 1-\varepsilon, \end{cases} \quad (1)$$

ε denotes a small probability that the household experiences a significant negative shock $-D$, while 1- ε denotes a large probability that the household has nonnegative wealth W_1.

At time 0, the household can choose to consume, save, or invest in a stock. The initial stock price S_1 is normalized to 1, and the next period stock price is $\tilde{S}_1$,

where

$$\tilde{S}_1 = \begin{cases} u > 1, & if\ p \\ d < 1, & if\ 1-p, \end{cases} \quad (2)$$

p represents the probability that the stock price goes up in the next period.

The household aims to decide the consumption c_0, saving α, and stock investment θ at the subjective time discount rate of δ over the two periods to maximize utility

$$\max_{c_0,\alpha,\theta}\{U(c_0) + \delta E[U(c_1)]\}, \tag{3}$$

subject to the budget constraints

$$\alpha = W_0 - c_0 - \theta \tag{4}$$

and

$$c_1 = \alpha + \theta\tilde{S}_1 + \widetilde{W}_1, \tag{5}$$

where

$$U(c) = \begin{cases} u(c), & if\ c \geq \underline{c} \\ -\infty, & otherwise, \end{cases} \tag{6}$$

The household has a subsistence level $\underline{c}$, below which the investor cannot survive. The $u(c)$ is strictly increasing and strictly concave for $c \geq \underline{c}$. We follow the assumption of Gormley et al. (2010) that $D = W_0 - 2\underline{c} > 0$ to have the Proposition 1.

Proposition 1. The household's optimal portfolio choice is $\theta^* = 0$.

Proposition 1 suggests that the household does not participate in stock market without safety net.

2.1.2 Optimal portfolio choice in the presence of safety net

In the presence of safety net, we assume that the amount provided by the safety net N does not cost any of the household's wealth. N can buffer at least the part of the negative wealth shock, i.e.,

$$N \leq D \tag{7}$$

The household's problem is still to solve Equation (3), subject to Equation (7) and the budget constraints (4)

and

$$c_1 = \alpha + \theta \tilde{S}_1 + \widetilde{W}_1 + N1_{\widetilde{W}_1 = -D}. \tag{8}$$

We then derive Proposition 2.

Proposition 2. The household's optimal portfolio choice is $\theta^* \neq 0$ with safety net if the stock risk premium is not zero.

Proposition 2 suggests that the household participates in stock market in the presence of safety net.

Overall, the model predicts that the adoption of PSL makes household participate in the stock market to maximize utility if the stock has nonzero risk premium.

2.2 Paid Sick Leave Mandates in the US

The introduction of paid sick leave dates back to the Sickness Insurance Law of 1883 in Germany, which is an important component of the world's first social insurance system. Other European countries adopt similar sick leave mandates over the subsequent decades. Currently, all European countries guarantee universal access to paid sick leave for employees (Maclean et al., 2020). In

contrast, the US is one of the few high-income countries without a federal paid sick leave law (World Policy Analysis Center, 2023). As of 2009, the Bureau of Labor Statistics (BLS) estimates that around 39% (45 million workers) of the US private sector do not have access to paid sick leave provisions.

In response, several US states, cities, and counties have enacted legislations requiring firms to provide minimum levels of paid sick leave (Al-Sabah and Ouimet, 2021). These laws enable workers to accrue paid sick time to recover from their own short-term illnesses or to take care of sick family members. Importantly, PSL mandates also protect workers from being fired for taking this paid time off due to their illness (Miller, 2022).

As of 2019, 11 states and 32 localities have enacted paid sick leave mandates, which are detailed in Appendix 1. As shown in Appendix 1, the generosity of PSL mandates varies across states and localities. In our sample, the accrual rates, which indicate how quickly paid sick leave is earned per hour worked, range from one hour for every 30 hours worked to one hour for every 87 hours worked. The annual cap, which is the maximum paid sick leave hours that can be accrued each year, varies from 24 hours to 80 hours per year. With a few exceptions, PSL policies cover both full-time and part-time and temporary workers (Al-Sabah and Ouimet, 2021). Most PSL laws apply to all firms within the mandate's jurisdiction, although in some states such as Michigan, the smallest firms are exempted from providing paid sick leave.

[Figure 1 around here]

We conduct various tests to evaluate the political economy around the passage of the PSL mandate and its potential impact on households. First, we show in Table 3 that the adoption of PSL mandates is unlikely to be driven by local socioeconomic or political factors. Instead, grassroots ballot initiatives have been instrumental to the mandates' adoption in many states in our

sample (Maclean et al. 2020). Second, we show in Appendix 3 that workers take two additional days off a year to recover from their own illness following the enactment of PSL mandates (Maclean et al., 2020). This indicates that workers do rely on the PSL provisions to take time off to recover from their illness. Finally, we follow Al-Sabah and Ouimet (2021) and use Google search volume for "sick leave" to measure the public interest in PSL mandates. As shown in Panels A to D of Figure 1, we observe a spike in each state following the enactment of PSL mandates in the state. For example, Panel A shows that the internet search interest on "sick leave" peaks around July 2015 when the PSL mandate becomes effective in California. Conversely, states without PSL mandates, such as Virginia (Panel E) and Alabama (Panel F), do not exhibit specific trends in search interest. The patterns in Figure 1 indicate that households are aware of and actively seek information about the adoption of the PSL laws in locations where mandates are in effect.

2.3 Other Public Safety Nets in the US

In addition to paid sick leave mandates, there are several other public safety net programs in the US designed to provide financial and social support to individuals and families in need, particularly during times of hardship. For example, the Family and Medical Leave Act of 1993 (FMLA) is a federal law requiring companies with 50 or more employees to provide up to 12 weeks of *unpaid* leave to employees who have been with the company for at least one year. As a result, the FMLA excludes many part-time employees and employees in small companies, and only covers approximately 44% of the private sector workforce (Jorgensen and Appelbaum 2014). In response, numerous states enact the Paid Family Leave (PFL) programs. The PFL allows employees to take paid time off work to provide longer-term care for seriously ill family members, undergo medical treatment, recover from a serious illness, or bond with a new child entering the family.

Another public safety net program is the Affordable Care Act (ACA). The ACA expands medical coverage to include individuals under the age of 65 with income at or below 138% of the federal poverty level in eligible states. Finally, Unemployment Insurance (UI) is a social insurance program designed to provide temporary income to partially replace the earnings lost by eligible workers when they become involuntarily unemployed. While the UI provision is federally mandated, eligibility criteria and benefit amounts vary by state.

Paid sick leave mandates differ from other safety net program in several ways. First, the PSL program stands out by offering full wage replacement for the period of absence, in contrast to the UI and PFL programs, which only provide partial wage replacement. Second, PSL benefits are far more accessible compared to other programs. For instance, the ACA is available only to low-income households, while UI benefits are provided solely to unemployed individuals. Third, PSL mandates provide broader coverage for any medical reason requiring short-term leave, whereas PFL programs only target serious illnesses that require long-term leave. Finally, the funding for ACA, UI, and PFL is sourced from tax revenue, whereas the full costs of providing paid sick leave are covered by the employers (Al-Sabah and Ouimet, 2021; Miller, 2022).

3. Data and Methodology

3.1 Data and Sample Selection

Our analyses use household survey data from the Panel Study of Income Dynamics (PSID). The PSID started surveying a nationally representative sample of US households in 1968 and has continuously collected information on the same family and their descendants every year until 1997, and every two years since then (Hacamo, 2021). Information about each family member is

collected, but much greater detail is obtained about the household head[2] (and their spouse or long-term cohabitor). This includes detailed information on demographic characteristics such as age, education, and marital status, as well as household-level information such as household income, wealth, consumption, and borrowings.

The PSID offers three primary advantages for our research purposes. First, because the PSID tracks the same household over time, we are able to include household fixed effects and thus identify the effects of PSL *within* the same household. Second, the PSID provides a rich set of information on the health conditions, both current and anticipated future health conditions, of household members. This enables us to offer direct evidence on how individual-level health concerns affect their stockholding behavior. Finally, we can observe household locations at the county-level[3] and the exact date in which households complete the survey questionnaire. This allows us to accurately identify the dynamic timing effects of local and state PSL mandates on stock market participation.

Our sample period starts in 2009 and ends in 2019. Our sample starts in 2009 to avoid picking up the impact of the Global Financial Crisis on household financial decisions and ends in 2019 to avoid capturing any effects related to the Covid-19 pandemic when, among others, the US enacts PSL mandates at the federal-level through the Families First Coronavirus Response Act (Al-Sabah and Ouimet, 2023; Maclean et al., 2020). Our sample period covers the majority of PSL enactments when 11 states and 32 localities enact a PSL mandate. Because PSL mandates primarily impact employed individuals, we restrict our sample to households where either the

[2] The term "reference person" has replaced "household head" in the survey starting in 2017.
[3] Data on county-level household location come from the restricted-use PSID county-level identifiers.

household head or their spouse is employed.[4] This leaves us with 21,855 household-year observations covering six survey waves between 2009 and 2019.

3.2 Empirical Methodology

To examine the effect of the staggered adoption of PSL mandates on household stock market participation, we estimate the following household-level difference-in-differences (DiD) specifications:

$$Y_{ict} = \beta \times PSL_{ct} + X_{it} + \delta_i + \gamma_c + \eta_t + safety\ nets + \varepsilon_{it} \quad (9)$$

The dependent variable Y_{ict} is a dummy variable that equals one if household i residing in county c holds any shares in public companies, mutual funds, or investment trusts on the survey date t, and zero otherwise (Giannetti and Wang, 2016). Following the literature, this measure focuses on stock investment in non-retirement accounts only because investment in retirement accounts is typically the default option selected by the employer (Beshears et al., 2009; Giannetti and Wang, 2016). PSL_{ct} is a dummy variable that equals one if county c has effective local or state PSL mandates on survey date t, and zero otherwise.[5] The main coefficient of interest is the DiD coefficient β. The first difference is between households in counties that have effective PSL mandates and households in counties that do not yet have effective PSL mandates. The second difference is between the dates before and after the PSL mandates become effective.

We include a large set of fixed effects, including household fixed effects (δ_i), county fixed effects (γ_c), and survey year fixed effects (η_t). By adding household fixed effects, we compare

[4] We obtain similar results focusing on households in which only the household head is employed.
[5] If PSL mandates are implemented at the state-level, we consider all counties in that state to be "treated" by the law. For a county that is subject to both local and state PSL mandates, we use the earlier effective date.

stock market participation behavior of the *same* household before and after the passage of PSL. The inclusion of household fixed effects thus absorbs all time-invariant household characteristics that may influence stock market participation, such as slow-moving household preferences. We further include county fixed effects to account for time-invariant local conditions, such as proximity to major cities or county-specific laws and regulations that predate the sample period. Finally, we include survey year fixed effects to take out any seasonality and macroeconomic fluctuations that could affect household investment decisions.

X_{it} refers to our control variables. We start with a set of demographic characteristics of the household head, including *Age*, Age^2, and dummy variables indicating whether the household head is married (*Married*), has a college degree *(College),* and has poor health conditions *(Poor health)*. We further incorporate several household-level controls, including family size (*Family size*), the natural logarithm of total annual household income (*Ln(Total household income))*, the natural logarithm of total household wealth excluding housing wealth (*Ln(Total household wealth)),* and a dummy variable indicating whether the household owns a house (*House ownership*).

Moreover, all specifications control for other public safety net programs. In particular, following Miller (2021), we include two dummies that equal one if the household resides in a state with an effective *ACA* and an effective *PFL* mandate. We further control for state-level generosity of unemployment insurance benefits, measured as the natural logarithm of the maximum amount of weekly unemployment benefits times the maximum benefit duration (*UI benefits*) (Agrawal and Matsa, 2013). Appendix 2 presents detailed definitions of the variables used in the empirical analysis.

[Table 1 around here]

Table 1 presents summary statistics. Similar to Giannetti and Wang (2016), all variables are weighted using the population weights provided by the PSID to ensure that they are representative of the underlying population. On average, 11.8% of the household-level observations in our sample are "treated," that is, residing in a county with an effective PSL mandate. The average stock market participation rate is 18.5% and is in line with those reported in the prior literature (e.g., Jiang et al., 2022). The average household earns a total annual income of $96,280, has total wealth of $388,880, and 66% of households in our sample own a house.

4. Main Results

4.1 Baseline Results

Table 2 reports our baseline regression results on the impact of paid sick leave mandates on household stock market participation. Model specifications in Table 2 vary across columns in terms of the set of control variables and fixed effects included. We start with a basic model where only PSL and survey year fixed effects are included (Column (1)). We then include several characteristics of the household and the household head in Columns (2). In Column (3), we add household and county fixed effects and control for other public safety net programs. All *t*-statistics are computed based on robust standard errors clustered at the household level.

Across all specifications in Table 2, the coefficients on *PSL* are positive and statistically significant below the 1% level, indicating that households are more likely to participate in the stock market following the enactment of PSL mandates. The effect is economically meaningful. For instance, in Column (3), which includes the full set of control variables and fixed effects, the coefficient on *PSL* indicates that households are approximately 3.52% more likely to participate in the stock market after the adoption of PSL laws. The increase corresponds to a substantial

marginal effect of 19% (= 0.0352/ 0.185) from the average stock holding rate of 18.5% in our sample.

[Table 2 around here]

Moreover, the magnitude of the coefficient estimates on *PSL* is stable as we progressively include more control variables and fixed effects in the model. For example, the coefficient on *PSL* changes minimally from 0.0356 in Column (2) to 0.0352 in Column (3) when we introduce household and county fixed effects and measures of other safety net programs into the model. This suggests that our estimates are orthogonal to unobserved heterogeneity across households and locations.

4.2 Identification Concerns

In this section, we show various tests to demonstrate the validity of our results. Specifically, we show that both treated and control observations share a similar pre-event trend. Moreover, our results are robust when we allow for heterogenous treatment effect and survive a large set of placebo tests.

4.2.1 Exogeneity of PSL Mandates

An important assumption of the DiD design is that the implementation of PSL mandates is exogenous to household stock market participation. We perform three tests to support the exogeneity of PSL adoption.

First, we test for the parallel trend assumption, which requires that the treated observations and the control observations exhibit no significant differences in stockholdings prior to the adoption of PSL mandates. To that end, Figure 2 displays the dynamic timing effects of PSL mandates on household stock market participation for a window covering three years before the event and three years after the event. The time interval is six months, and the excluded period is

six months before the date when PSL mandate becomes effective. As shown in Figure 2, the positively significant treatment effects of PSL mandates on household stock participation take place after, and not before, the effective date. Thus, there is no evidence of pre-trends or anticipatory effects before the implementation of PSL mandates, suggesting that the parallel trends assumption is likely to be valid.

[Figure 2 around here]

Second, we show that the adoption of PSL mandates is not likely to be driven by economic trends or political conditions in the state. To do this, we aggregate the data at the state-year level and regress the PSL dummy in year t on various state characteristics in year $t-1$,[6] including *Log (Current GDP)* and *Log (Income)*, *Log (Social insurance)*,[7] *Log (Employment)*, *Unemployment rate*, and a dummy variable indicating whether the state has a *Democrat governor*. As shown in Panel A of Table 3, the coefficients on each state characteristics are statistically insignificant, indicating that the adoption of PSL mandates is plausibly exogenous to the economic or political conditions in the state.

[Table 3 around here]

Third, we show that our baseline results are robust to controlling for time-varying state-level economic and political conditions. Specifically, we re-estimate Equation (9) and additionally control for *Log (Current GDP)* and *Log (Income)*, *Log (Social insurance)*, *Log (Employment)*, *Unemployment rate*, and a dummy variable indicating whether the state has a *Democrat governor*. As shown in Panel B of Table 3, none of the state-level control variables are statistically significant. In contrast, we continue to find the coefficients on *PSL* to be positively significant. Overall, the

[6] The results are robust when regressing the PSL dummy in year t on state characteristics in year t.
[7] Social insurance is the annual contribution to government social insurance programs in a given state. Appendix 2 displays definitions of all variables used in the paper.

results in Table 3 suggest that our main findings are not driven by local economic or political conditions.

4.2.2 Alternative DiD Estimators

Recent studies show that a staggered treatment design could lead to a biased estimation of causal effects, particularly when the treatment effects evolve over time (e.g., Baker et al., 2022; Goodman-Bacon, 2021). This bias arises when the treated observations are potentially compared with control observations that have recently been treated, causing the estimated effect to capture the treatment effect that is in the process of materializing in the control observations. In Column (1) of Panel A of Table 4, we allow for treatment effect heterogeneity by estimating the group-time average treatment effects (ATE) based on a set of 2x2 comparisons (i.e., pre versus post treatment and control versus treated) following Callaway and Sant'Anna (2021).[8] We obtain robust results.

[Table 4 around here]

Moreover, recent studies show that the staggered DiD estimate (which is a weighted ATE in each group and period) can be problematic because some weights may be negative if the treatment effect is not constant across groups and over time. To circumvent this, we follow the approaches proposed by De Chaisemartin and d'Haultfoeuille (2020) (Column (2)) and Borusyak et al. (2021) (Column (3)), which are robust to the negative ATE weights when the treatment effect is heterogeneous across groups and over time. As shown Columns (2) and (3) in Panel A, our results remain robust.

[8] To fit the command setting with regular gaps, we use survey year as a time indicator and effective year as the treated time.

4.2.3 Placebo Tests

Next, if the enactment of PSL mandates is plausibly random, then in placebo tests where there is no difference in PSL, we should not observe significant differences in household stockholdings (Al-Sabah and Ouimet, 2021). To this end, we perform three placebo tests. Our first placebo test keeps the treatment location correct but alters the treatment date. Specifically, we assume that treatment starts earlier and lasts until the actual date when PSL becomes effective. Columns (1)-(4) of Panel B of Table 4 present results where placebo effective dates are set for three months, six months, nine months, and one year before the true treatment date, respectively. As shown in Columns (1)-(4), none of the placebo DiD coefficients are statistically significant.

Our second placebo test keeps the treatment date correct but alters the treatment location by allocating the placebo adoption of PSL mandates to households in similar but untreated counties. To do this, we use a one-to-one nearest neighbor matching with replacement to obtain placebo treated households with similar characteristics to those located in the actual treated counties.[9] We also drop all the actual treated households. As shown in Column (5), the placebo coefficient is statistically insignificant. Overall, if our results are driven by omitted variables such as differences in the economic or political conditions between locations with and without PSL mandates, we should continue to find significant effects when using the placebo time or placebo location.

Our third placebo test exploits the unsuccessful attempt to adopt a PSL mandate in Orange County, Florida. In particular, in 2012, a coalition gathers signatures from registered voters in Orange County to place an initiative called "Earned Sick Time" on the ballot. Although the local population strongly supports the initiative, the Florida Governor signs House Bill 655 in June 2013, which prohibits political subdivisions from mandating employers to provide specific

[9] We match based on all household covariates and survey year fixed effects.

benefits, including paid sick time. This effectively ends the effort to mandate PSL coverage in Orange County (Huang and Shu, 2024). If our baseline results are driven by local economic conditions, we should continue to observe an increase in household stockholdings in Orange County despite the unsuccessful attempt to adopt the PSL mandate. Following Huang and Shu (2024), our treated observations are households in Orange County and the control observations are households in other counties in Florida. The event year is 2013. As shown in Column (6), the placebo coefficient is statistically insignificant.

4.3 Mandate Intensity

In this subsection, we perform various cross-sectional tests exploiting variation in the potential impact of PSL mandates on households. If our baseline results are indeed driven by the expanded sick leave coverage, we should expect stronger treatment effects when the PSL mandates have a greater potential impact on households.

Our first test considers heterogeneity in PSL generosity. We use two measures of PSL generosity: (1) *Accrual rate* is the rate at which PSL is earned per hour worked. For example, in California, workers are able to accrue one hour of paid sick leave for every 30 hours worked, implying an accrual rate of 0.033 (= 1/30). A higher accrual rate means that employees are able to accumulate paid sick leave at a faster pace, and thus indicates a more generous PSL policy; (2) *Annual cap* is the maximum hours of PSL that employees can accrue each year. For example, the annual cap in California is 24 hours. A higher annual cap thus indicates a more generous PSL policy. We test our prediction by interacting the *PSL* dummy with each generosity measure.

Panel A of Table 5 presents the results. In line with our prediction, we find positive and statistically significant interaction coefficients between *PSL* and the accrual rate (Column (1)) and annual cap (Column (2)). The interaction coefficients indicate that household stock market

participation on average increases by 2.0% (=0.02 x 1.0463) following the adoption of a PSL mandate that has an accrual rate of 0.02. The estimated effect impact on stockholdings increases to 3.5% when the accrual rate is 0.033.

[Table 5 around here]

Our second test exploits heterogeneity in households' expected benefits from the PSL mandates. To test this prediction, we split our sample into two subsamples of (1) high-PSL access industries, where the household head is employed in information, financial activities, wholesale, or education and health services; and (2) low-PSL access industries, where the household head is employed in leisure and hospitality, construction, retail, or other services (Al-Sabah and Ouimet, 2021). Individuals working in high-PSL access industries typically already have access to voluntary paid sick leave benefits provided by their employers prior to the PSL mandates, making them less likely to be impacted by the new PSL mandates. Thus, we expect that the effect of PSL mandates on stock market participation is less salient when the household head is employed in high-PSL access industries.

Consistent with our expectation, the results in Panel B indicate that the enactment of PSL mandates does not have a statistically significant effect on stockholdings when the household head works in industries that provide high access to paid sick leave benefits prior to the mandates (Column (1)). In contrast, stockholdings increase by 5.2% following the enactment of PSL mandates when the household head is employed in low-PSL access industries (Column (2)).

5. Economic Mechanisms

In this section, we evaluate three non-mutually exclusive economic mechanisms through which paid sick leave mandates may affect household stock market participation: (1) insurance-like

protection, (2) subjective expectations, and (3) wealth accumulation. In discussing the underlying mechanisms, it is important to stress that households do not receive an upfront cash payment following the enactment of PSL laws. Instead, it is the *anticipation* that households will be protected by a paid leave when falling sick that affects their stock market participation behavior.

5.1 Insurance-like Protection

The first hypothesis—*insurance-like protection*—posits that paid sick leave mandates function like insurance, allowing households to feel more insured and protected against the financial consequences of illness. Because the majority of private sector workers in the US are "at will" employees, their employment can be terminated for any non-illegal reason. Thus, in the absence of sick leave, workers can be fired for missing too much work due to illnesses that are not severe enough to be covered by the FMLA, or if the worker is not eligible for FMLA protection (Al-Sabah and Ouimet 2021). In fact, nearly one in four workers report that they have lost a job or were threatened with job termination for taking time off due to illness (Smith and Kim, 2010), and workers without paid sick leave face a 25% higher probability of job separation (Hill, 2013).

Therefore, paid sick leave can be seen as a form of insurance that mitigates the risk of job and income loss due to illness. By providing an insurance-like protection, PSL laws could reduce the need for precautionary savings and encourage households to take more financial risk (e.g., Chou et al., 2003; Engen and Gruber, 2001; Hubbard et al., 1995).

As a first test of this channel, we hypothesize that following the enactment of PSL mandates, the composition of household portfolios will shift toward riskier financial assets. To this end, our dependent variable is the natural logarithm of the value of risky assets divided by the

value of safe assets.[10] Safe assets include checking and savings accounts, certificates of deposit, government bonds, treasury bills, and money market funds.[11] Risky assets include stocks in publicly held corporations, stock mutual funds, and investment trusts, which indicate the value of the stocks held in the household. The model specifications are based on Equation (9). Table 6 displays the results.

[Table 6 around here]

As shown in Table 6, the ratio of risky over safe assets is significantly lower following the implementation of paid sick leave mandates, indicating that households tilt their portfolios toward riskier financial assets. The results are consistent with the insurance-like channel that the PSL mandate insures households against job and income loss due to illness. This reduces their need for precautionary savings and encourages them to invest in the risky stock market.

Our second test of this channel focuses on marginal households with greater health and job security concerns. Economic theory predicts that a reduction in background risk should increase financial risk-taking, even when the reduced background risk is not financially related (e.g., Gollier and Pratt, 1996). Consistent with this, prior studies show that health insurance programs such as Medicare for over-65 Americans offset the negative impact of poor health on households' willingness to take financial risk (Angrisani et al., 2018). Similarly, labor protection laws that reduce layoff risk facilitate household stock market participation (Jo, 2022).

Since PSL mandates protect workers from being fired due to short-term illnesses and promotes a healthier workplace (Al-Sabah and Ouimet, 2021; Pichler and Ziebarth, 2019), it could reduce background risk, particularly for marginal workers with poor health and insecure

[10] We use natural logarithm because this variable has a skewed distribution. We find similar results otherwise.
[11] The PSID does not include a variable specifically for savings and bank deposits. However, investments in money market funds and assets issued by the US government are considered risk-free and can be categorized as safe assets.

employment situations. If this is the case, the effect of the law on promoting stock market participation should be particularly pronounced among these marginal workers. Table 7 tests for this idea by looking at variation in households' health (Panel A) and employment status (Panel B).

[Table 7 around here]

Panel A of Table 7 considers heterogeneity in health status. We use two proxies: one focuses on the current health status of the household head, and the other captures their health trend over time. Specifically, *Poor health* is a dummy variable that equals one if the self-rated health of the household head is fair or poor, and zero if it is excellent, very good, or good; and *Declining health* is a dummy that equals one if self-rated health of the household head is worse compared to two years ago, and zero if it is about the same or better compared to two years ago. We test our prediction by interacting the *PSL* dummy with each health measure.

Panel A displays the results. Consistent with the insurance-like protection of PSL mandates, we find that the effect of PSL mandates is particularly salient among households with greater health concerns. In particular, the interaction coefficients between *PSL* and *Poor Health* (Column (1)) and *Declining Health* (Column (2)) are both positive and statistically significant at the 10% level. The interaction coefficients indicate that households where the household head is in *Poor health* (*Declining Health*) are 3.4% (6%) more likely to participate in stock market following the adoption of PSL mandates compared to the healthier counterparts.

In Panel B, we present the cross-sectional results for job insecurity. Our first proxy is *Re-enter workforce*, which is a dummy variable that equals one if the household head is unemployed in the previous survey wave but is employed in the current survey wave (Column (1)).[12] Individuals

[12] The household head's employment status in the previous survey wave is constructed from the Employment History Calendar. Since this analysis focuses on household heads who are unemployed in the past, our sample includes both unemployed and employed households (i.e., the household head or their spouse or both is employed). We find similar results focusing only on employed households.

who re-enter the workforce after a period of unemployment often have obsolete skills and limited networks, leading to a heightened sense of job insecurity. Our second proxy is *Mass Layoffs/Employment*, which is a county-level ratio of workers who experience mass layoffs to total county employment.[13] We expect that workers in areas that experience greater mass layoffs face a higher level of unemployment risk (Arslan et al., 2024). As before, we test our prediction by interacting the *PSL* dummy with each measure of job insecurity.

As shown in Panel B, the interaction coefficients are positive and statistically significant. This indicates that the effect of PSL mandates on stock holdings is stronger for households with greater job insecurity: households where the head recently re-enters the workforce following a period of unemployment (Column (1)) and households located in counties with higher mass layoff rates (Column (2)). Overall, the results in Table 7 are consistent with PSL mandates providing an insurance-like protection to households with greater health and/or job security concerns.

5.2 Subjective Expectations

The second hypothesis—*subjective expectations*— states that the provision of paid sick leave can improve households' future expectations, leading to increased stock market participation. Since PSL policies provide job security during short-term illnesses and promote a healthier workplace, they could make workers happier and also encourage them to remain employed for longer periods. This increase in life satisfaction and job retention could, in turn, increase stock market participation (Choi and Robertson, 2020; Puri and Robinson, 2007).

[13] Data on mass layoffs come from the Worker Adjustment and Retraining Notification (WARN) database. According to the WARN act, when firms intend to perform a mass layoff, they will need to notify local governments in advance so that suitable support to the laid off workers can be provided. Employment data come from the Bureau of Economic Analysis (BEA).

To test for this channel, we examine the impact of PSL mandates on the household head's future expectations.[14] We use two outcome variables: (1) *Plan to work for longer,* a dummy variable that equals one if the household head's planned retirement age in the current survey wave is higher than in the previous survey wave, and (2) *Positive change in life satisfaction*, a dummy variable that equals one if the household head's self-reported life satisfaction in the current survey wave is better than in the previous survey wave.

[Table 8 around here]

Table 8 displays the results. We find that following the enactment of PSL mandates, household heads with poorer health are more likely to plan on remaining in the workforce longer (Columns (1) and (2)) and experience an increase in life satisfaction (Columns (3) and (4)) following the enactment of PSL mandates. Overall, the results are consistent with the subject expectations channel that the provision of paid sick leave improve the future expectations of households, particularly the marginal households. This could, in turn, encourage stock market participation.

5.3 Wealth Accumulation

Finally, our results could be driven by an increase in household income and wealth following the enactment of PSL mandates (*wealth accumulation)*. The provision of paid sick leave could allow workers to stay home to recover from their illness while still getting paid, and also reduces the risk of job termination due to illness. Moreover, PSL policies could affect wealth accumulation by incentivizing workers to work for longer hours or take on additional jobs knowing that they are protected if falling sick. In contrast, in the absence of paid sick leave, workers may opt to continue

[14] We use changes in expectations for the same household head because the absolute expected retirement age is related to age (see Puri and Robinson, 2007; Ye and Post, 2020).

working while being ill. This could result in even higher healthcare expenses and worse financial outcomes as their health worsens (Angrisani et al., 2018; Miller, 2022).

As a first test, we examine the impact of PSL mandates on households' total income and wealth. Panel A of Table 9 displays the results. The dependent variables are the natural logarithm of total household income, i.e., *Ln(Total income)* (Column (1)), the natural logarithm of total household wealth that excludes home equity, i.e., *Ln(Non-housing wealth)* (Column (2)), and the natural logarithm of the value of home equity, i.e., *Ln(Housing wealth)* (Column (3)). The model specifications are based on Equation (9). We find that households experience an increase in total income and non-housing wealth, which is similar to findings in Al-Sabah and Ouimet (2021) that the provision of paid sick leave has a positive impact on household income and wealth. This effect arises not only from the paid income during sick time, but also from the increased job security and worker productivity. Conversely, housing wealth does not exhibit a similar increase following the PSL mandates. Compared to non-housing equity, home equity is relatively less liquid, making access to PSL less likely to impact a household's housing wealth.

[Table 9 around here]

Our second test examines the link between the growth in household income and wealth following PSL mandates and stock market participation. To this end, we interact the *PSL* dummy with *Growth of wealth (income),* defined as the natural logarithm of wealth (income) in current survey wave minus the logarithm of wealth (income) in the prior survey year. The dependent variable is household stock market participation. Panel B of Table 9 displays the results.

As shown in Panel B, the interaction coefficient between the *PSL* dummy and *Growth of non-housing wealth* is positive and statistically significant (Column (2)). In contrast, the coefficients on the interaction between *PSL* x *Growth of total income* (Column (1)) and *PSL* x

Growth of housing wealth (Column (3)) are statistically insignificant. This suggests that households that experience an increase in liquid wealth following PSL mandates can easily invest this wealth in the stock markets, which is consistent with our findings in Panel A.

6. Additional tests

6.1 Other household financial decisions

In this subsection, we broadly investigate the impact of PSL mandates on other household financial decisions. Panel A of Table 10 focuses on household consumptions. We look at total household expenditure (Column (1)), and then decompose it into discretionary expenditure (Column (2)) and necessary expenditure (Column (3)). We also specifically examine health care expenditure (Column (4)) and spending on health insurance premiums (Column (5)). All the outcome variables in Panel A are in natural logarithm. The model specifications are based on Equation (9).

Across all columns in Panel A, the coefficient estimates on PSL are statistically insignificant, suggesting that the adoption of PSL laws does not have a detectable impact on household consumption. It is possible that households use the extra disposable income and wealth provided by PSL to invest, while maintaining the same consumption level (Bornstein and Indarte, 2023).

[Table 10 around here]

Panel B of Table 10 examines the impact of PSL on household borrowing decisions. Following the literature, we focus on three categories of loans: (i) mortgage loans (Columns (1)-(2)), (ii) credit card debt (Columns (3)-(4)), and (iii) other types of debts, including student loans, medical bills, legal bills, loans from relatives (Columns (5)-(6)). The dependent variables in odd-numbered columns are dummy variables indicating whether the household has any of these loans,

and the dependent variables in even-numbered columns are the natural logarithm of the dollar value of these loans. As shown in Panel B, none of the coefficients on the *PSL* dummy are statistically significant, indicating that households do not change their borrowing behavior after the enactment of PSL laws.

6.2 Do workers take more days off following PSL?

In Appendix 3, we validate that paid sick leave mandates indeed incentive workers to take time off from work to recover from short-term illnesses. In particular, after the adoption of PSL mandates, employees miss, on average, 1.86 additional days of work a year due to self-illness (Column (1)). The adoption of PSL does not affect the number of days that employees miss work to take care of other family members (Column (2)). Moreover, in Column (3), we show that that the enactment of PSL mandates does not have any effect on the number of days that employees miss work due to a vacation.[15] Overall, the results in Appendix 3 indicate that households utilize their paid sick leave to recover from their illnesses and not for recreational purposes.

6.3 Other Robustness Tests

Appendix 4 presents other robustness tests. We find that our results are robust to the following empirical variations: (i) excluding households that move to other states during the sample period (Column (1)); (ii) excluding households in locations that already have an effective paid sick leave mandate before 2009 (Column (2)); (ii) excluding households in the large treated states of California (Column (3)), Washington (Column (4)), Oregon (Column (5)), and all of these three states ((Column (6)); (iii) using only the state-level PSL mandates (Column (7)); (iii) using

[15] One may argue that survey participants could misreport the number of days they miss work. This is very unlikely because the responses are anonymous and participants do not receive any benefits based on the answers they provide.

unweighted variables from the PSID (Column (8)); (iv) considering the size of the firm that employs the household head when defining the *PSL* dummy (Column (9));[16] (v) using a propensity score matched (PSM) of households in treated counties to those in untreated counties (Column (10)); (vi) using a PSM sample and further requiring the control observations to be located in coastal counties only (Column (11)).[17]

7. Conclusions

In this paper, we investigate the impact of PSL mandates on household stock market participation. using household survey data from the Panel Study of Income Dynamics (PSID), we find that households are on average 3.52% more likely to participate in the stock market following the PSL laws. Our results are not likely to be driven by economic trends or political conditions in the state, and we show various tests to demonstrate the validity of our results, including the parallel trend, heterogenous treatment effect, and a large set of placebo and robustness tests. We propose three non-mutually exclusive mechanisms through which PSL mandates can increase households' propensity to hold stocks: (1) insurance-like protection, (2) subjective expectations, and (3) wealth accumulation.

Our findings have important socioeconomic implications. PSL ensures financial stability by preventing income disruptions during illness and enabling confident investment in the stock market. It also improves health outcomes by allowing timely medical care and enhances work-life balance by providing necessary time off for self and family care. Overall, PSL mandates foster

[16] In some states, the PSL accrual rates and annual caps are different for smaller firms with occasional exemptions for the smallest firms. Our baseline models do not consider firm size because this variable has many missing values.
[17] In Columns (10) and (11), we perform a one-to-one match based on all household covariates and survey year fixed effects.

economic mobility, reduce financial stress, and contribute to the well-being of both society and households.

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Figure 1: Google Trends for PSL
This figure displays the search interest for the keyword "paid sick leave" from 2009 to 2019 on Google Trends. The search data is normalized on a scale from 1 to 100, where 100 represents the maximum search interest within the selected period and location. Panels A to F display the search interest in California, Arizona, Washington, New York, Virginia, and Alabama, respectively. The data come from Google Trends.

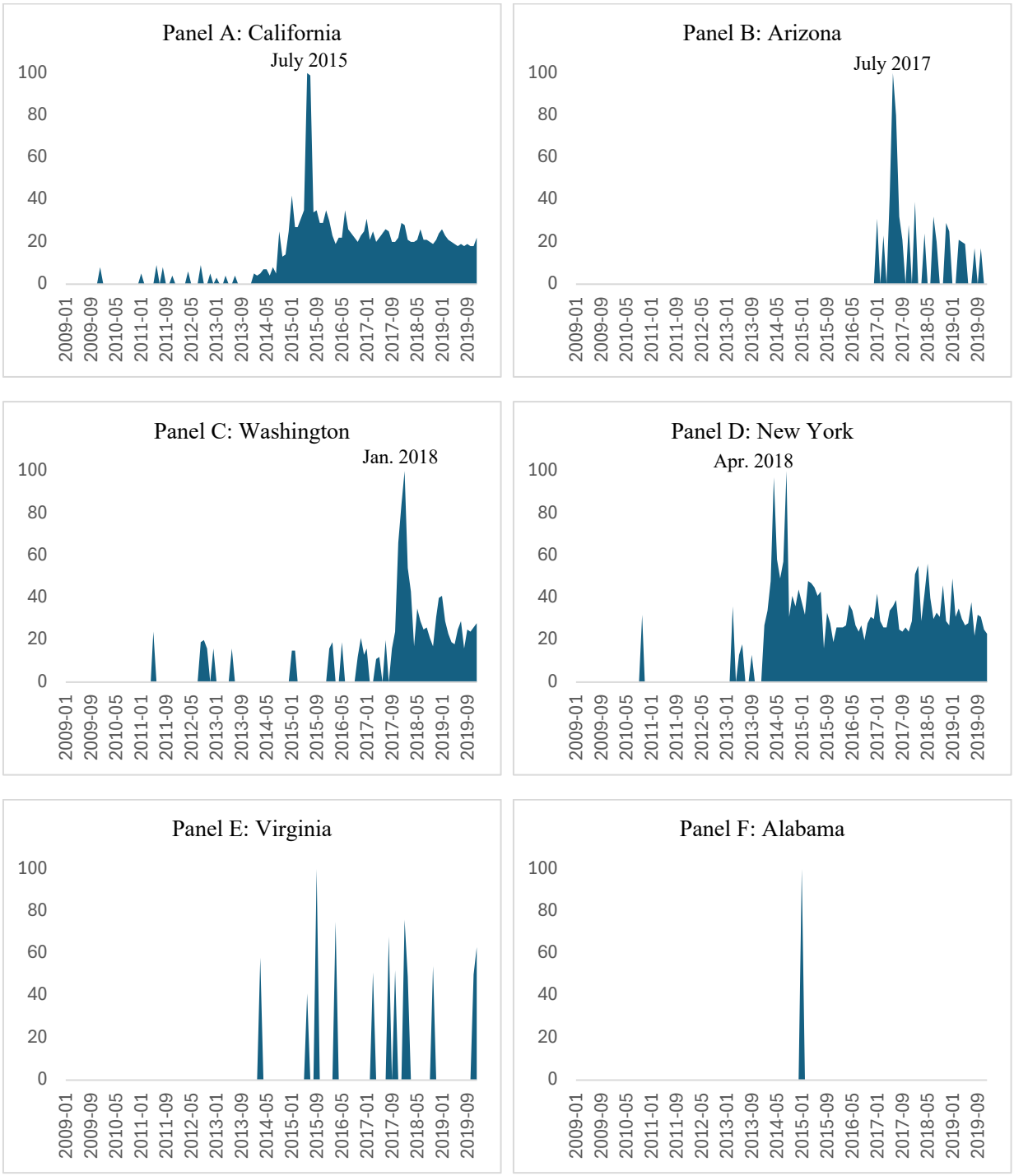

Figure 2: Dynamic Effects of PSL on Household Stock Market Participation
This figure shows the dynamic effects of the adoption of PSL on household stock market participation with point estimates and a 95% confidence interval. On the y-axis, the graph plots the coefficient estimates from Equation (9) where we decompose the *PSL* variable into a series of dummy variables: $PSL_{\leq -6}$, PSL_{-5}, PSL_{-4}, PSL_{-3}, PSL_{-2}, PSL_{0}, PSL_{+1}, PSL_{+2}, PSL_{+3}, PSL_{+4}, PSL_{+5}, and $PSL_{\geq +6}$. PSL_t, where $t \in \{-5, -4, \ldots +4, +5\}$, is a dummy variable equal to one in the counties that enact a PSL law in the t-th 180 days relative to the date of enactment, and zero otherwise. Control variables are identical to those in Table 2. Standard errors are clustered at the household level.

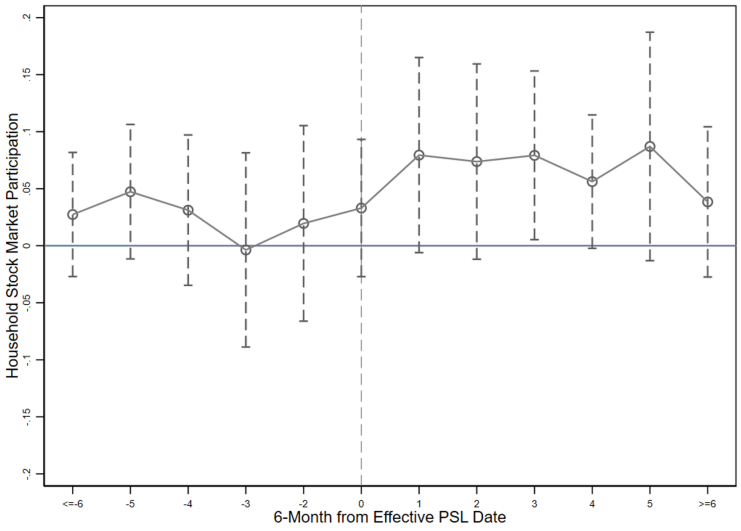

Table 1 Summary Statistics
This table reports the descriptive statistics of the variables in the paper. Appendix 2 provides descriptions of the variables.

Variable name	Observations	Mean	Std. Dev	Median	P5	P95
Household stock market participation	21,855	0.185	0.388	0.000	0.000	1.000
PSL	21,855	0.118	0.322	0.000	0.000	1.000
Age	21,855	48.522	13.331	49.000	27.000	70.000
College	21,855	0.673	0.469	1.000	0.000	1.000
Married	21,855	0.578	0.494	1.000	0.000	1.000
Log (Total household wealth)	21,855	14.770	0.283	14.691	14.644	15.175
Log (Total household income)	21,855	12.779	0.214	12.736	12.558	13.138
Wealth including home equity (in 10 thousand dollars)	21,855	38.888	142.782	8.017	-3.082	157.500
Total household income (in 10 thousand dollars)	21,855	9.628	11.776	7.202	1.640	23.990
House ownership	21,855	0.663	0.473	1.000	0.000	1.000
Poor health	21,855	0.021	0.142	0.000	0.000	0.000
Family size	21,855	2.340	1.353	2.000	1.000	5.000
PFL	21,855	0.154	0.361	0.000	0.000	1.000
ACA	21,855	0.343	0.475	0.000	0.000	1.000
UI benefits	21,855	8.814	1.044	9.030	7.987	9.579

Table 2: Baseline Regressions

This table reports regressions that estimate the effect of the enactment of PSL mandates on household stock market participation. The dependent variable is *Household stock market participation*, which is a dummy variable that equals one if the household holds stocks, stock mutual funds, or investment trusts, and zero otherwise. The independent variable of interest is *PSL*, which is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. Variables are defined in Appendix 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Dependent variable:	*Household stock market participation*		
	(1)	(2)	(3)
PSL	0.0555***	0.0356***	0.0352***
	(0.0147)	(0.0125)	(0.0132)
Age		-0.0085***	0.0041
		(0.0029)	(0.0105)
Age²		0.0097***	-0.0047
		(0.0033)	(0.0041)
College		0.1032***	0.0355
		(0.0109)	(0.0434)
Married		0.0306**	0.0300
		(0.0148)	(0.0331)
Log (Total household wealth)		0.2458*	0.0511
		(0.1343)	(0.0579)
Log (Total household income)		0.3685***	0.0773*
		(0.0946)	(0.0395)
House ownership		0.0579***	0.0249*
		(0.0116)	(0.0131)
Poor health		-0.0355*	-0.0116
		(0.0197)	(0.0231)
Family size		-0.0235***	-0.0028
		(0.0041)	(0.0090)
PFL			-0.0433
			(0.0375)
ACA			-0.0232*
			(0.0121)
UI benefits			0.0044*
			(0.0026)
Survey year FE	Yes	Yes	Yes
Household FE	No	No	Yes
County FE	No	No	Yes
N	21,855	21,855	21,855
R2	0.007	0.181	0.695

Table 3: Exogeneity of PSL Mandates

This table performs various tests to evaluate the exogeneity of the passage of PSL mandates. Panel A reports regressions that estimate the effect of prior state-level economic and political factors on the adoption of PSL laws. The dependent variable in Panel A is *PSL*, which is a dummy variable that equals one if the state has an effective PSL law in year t. The independent variables in Panel A are *GDP growth*, *Income growth*, *Log (Social insurance)*, *Log (Employment)*, *Unemployment rate*, and a dummy variable indicating whether the state has a *Democrat governor*. All independent variables in Panel A are measured in year t-1. Standard errors are clustered at the state-level and are reported in parentheses. Panel B re-estimates the baseline regressions in Column (3) of Table 2 but additionally control for time-varying state-level economic and political factors. The dependent variable in Panel B is *Household stock market participation*, which is a dummy variable that equals one if the household holds stocks, stock mutual funds, or investment trusts. The independent variable of interest in Panel B is *PSL*, which is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. Variables are defined in Appendix 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Panel A: Determinants of the passage of PSL laws

Dependent variable:	*PSL*						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
GDP growth	0.4366						0.0972
	(0.4331)						(0.5219)
Income growth		0.7352					-0.0400
		(0.6013)					(0.6362)
Log (Social insurance)			1.0741				0.4762
			(0.7019)				(1.2953)
Log (Employment)				1.5351			0.5545
				(0.9887)			(2.0209)
Unemployment rate					-3.7727		-2.5156
					(2.3034)		(2.6237)
Democrat governor						0.0359	0.0286
						(0.0579)	(0.0604)
Survey year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	510	510	510	510	510	510	510
R2	0.489	0.489	0.500	0.503	0.499	0.489	0.508

Panel B: Controlling for state-level economic and political variables

Dependent variable:	*Household stock market participation*						
	(1)	(2)	(4)	(4)	(5)	(6)	(7)
PSL	0.0356***	0.0352***	0.0387***	0.0376***	0.0353***	0.0370***	0.0404***
	(0.0132)	(0.0132)	(0.0132)	(0.0133)	(0.0133)	(0.0133)	(0.0136)
GDP growth	-0.1475						-0.2863
	(0.1674)						(0.2296)
Income growth		-0.0115					0.3403
		(0.2102)					(0.2880)
Log (Social insurance)			-0.1398				-0.2125
			(0.1190)				(0.2416)
Log (Employment)				-0.1180			0.0794
				(0.1398)			(0.3038)
Unemployment rate					0.0250		-0.1578
					(0.4217)		(0.4952)
Democrat governor						-0.0109	-0.0103
						(0.0085)	(0.0087)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	21,855	21,855	21,855	21,855	21,855	21,855	21,855
R2	0.695	0.695	0.695	0.695	0.695	0.695	0.695

Table 4: Alternative DiD estimations and placebo tests

This table reports results of robustness checks. The dependent variable is *Household stock market participation*, which is a dummy variable that equals one if the household holds stocks, stock mutual funds, or investment trusts. Panel A reports regressions using alternative difference-in-differences estimators. Columns (1) to (3) use methods proposed by Callaway and Sant'Anna (2021), De Chaisemartin and d'Haultfoeuille (2020), Borusyak et al. (2021), respectively. Panel B reports results of placebo tests. Columns (1) to (4) present results where the placebo effective dates are set three months, six months, nine months, and one year before the true treatment, respectively, and the treatment effects persist until the true date of the PSL law. In Column (5), we focus on placebo households that are located in non-treated counties but share similar characteristics with the treated counties, and the regressions drop all the actual treated households. In Column (6), we exploit the unsuccessful attempt to adopt a PSL mandate in Orange County, Florida; where *PSL placebo* equals one for households in Orange County, Florida and zero for households in other counties in Florida. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Variables are defined in Appendix 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Panel A: Alternative difference-in-differences estimators

Dependent variable:	*Household stock market participation*		
	(1)	(2)	(3)
PSL	0.0327**	0.0340*	0.0226*
	(0.0149)	(0.0204)	(0.0130)

Panel B: Placebo tests

Dependent variable:	*Household stock market participation*					
Placebo types:	Placebo treatment timing				Placebo treatment location	Orange county, FL
	(1)	(2)	(3)	(4)	(5)	(6)
PSL placebo	-0.0043	-0.0090	-0.0194	-0.0175	0.0035	0.0140
	(0.0208)	(0.0187)	(0.0167)	(0.0151)	(0.0110)	(0.1054)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes
N	21,855	21,855	21,855	21,855	19,391	865
R2	0.695	0.695	0.695	0.695	0.709	0.704

Table 5: Mandate Intensity

This table reports regressions that estimate the effect of PSL mandates intensity on household stock market participation. The dependent variable is *Household stock market participation*, which is a dummy variable that equals one if the household holds stocks, stock mutual funds, or investment trusts, and zero otherwise. *PSL* is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. *Accrual rate* is the rate at which paid sick leave is earned per hour worked. *Annual cap* is the maximum hours of paid sick leave that an employee is allowed to accrue each year. *Low-PSL access industries* is a dummy variable that equals one if the household head is working in a low-PSL access industries (leisure and hospitality, construction, retail, and other services industries), and zero otherwise. *High-PSL access industries* is a dummy variable that equals one if the household head is working in a high-PSL access industries (information, financial activities, wholesale, and education and health services industries), and zero otherwise. Variables are defined in Appendix 2. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Panel A: PSL generosity across locations

Dependent variable:	*Household stock market participation*	
	(1)	(2)
*PSL*Accrual rate*	1.0463**	
	(0.4142)	
*PSL*Annual cap*		0.0008**
		(0.0004)
Control variables	Yes	Yes
Survey year FE	Yes	Yes
Household FE	Yes	Yes
County FE	Yes	Yes
N	21,855	21,855
R2	0.695	0.695

Panel B: PSL intensity access industries

Dependent variable:	*Household stock market participation*	
Sample:	Low-PSL access industries	High-PSL access industries
	(1)	(2)
PSL	0.0517**	0.0036
	(0.0246)	(0.0275)
Control variables	Yes	Yes
Survey year FE	Yes	Yes
Household FE	Yes	Yes
County FE	Yes	Yes
N	5,779	5,729
R2	0.701	0.712

Table 6: Household Portfolio Composition

This table reports regressions that estimate the effect of the enactment of PSL mandates on the composition of household portfolios. The dependent variable is *Risky asset ratio*, which is the natural logarithm of the value of risky assets divided by the value of safe assets. The independent variable of interest is *PSL*, which is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. Variables are defined in Appendix 2. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Dependent variable:	*Risky asset ratio*
	(1)
PSL	0.0666**
	(0.0292)
Control variables	Yes
Survey year FE	Yes
Household FE	Yes
County FE	Yes
N	20,433
R2	0.625

Table 7: Marginal Households

This table reports regressions that estimate the effect of the enactment of PSL mandates on household stock market participation. The dependent variable is *Household stock market participation*, which is a dummy variable that equals one if the household holds stocks, stock mutual funds, or investment trusts, and zero otherwise. *Poor health* is a dummy variable that equals one if the self-rated health of the household head is fair or poor, and zero if it is excellent, very good, or good. *Declining health* is a dummy that equals one if self-rated health of the household head is worse compared to two years ago, and zero if it is about the same or better compared to two years ago. *Re-enter workforce* is a dummy variable that equals one if the household head is unemployed in the previous survey wave but is employed in the current survey wave. *Mass Layoffs/Employment* is a county-level ratio of workers who experience mass layoffs to total county employment. Variables are defined in Appendix 2. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Panel A: Variation in health

Dependent variables:	*Household stock market participation*	
	(1)	(2)
PSL	0.0342***	0.0336**
	(0.0131)	(0.0131)
*PSL*Poor health*	0.0339*	
	(0.0202)	
Poor health	-0.0029	
	(0.0081)	
*PSL*Declining health*		0.0600*
		(0.0353)
Declining health		-0.0137
		(0.0103)
Control variables	Yes	Yes
Survey year FE	Yes	Yes
Household FE	Yes	Yes
County FE	Yes	Yes
N	21,855	21,848
R2	0.695	0.695

Panel B: Variation in employment stability

Dependent variable:	*Household stock market participation*	
	(1)	(2)
PSL	0.0182	0.0303**
	(0.0116)	(0.0131)
*PSL*Re-enter workforce*	0.0697**	
	(0.0340)	
Re-enter workforce	-0.0043	
	(0.0099)	
PSL(Mass layoff/employment)*		0.0982*
		(0.0585)
Mass layoff/employment		0.2060
		(0.1720)
Control variables	Yes	Yes
Survey year FE	Yes	Yes
Household FE	Yes	Yes
County FE	Yes	Yes
N	31,704	21,695
R2	0.697	0.696

Table 8: Subjective Expectations

This table reports regressions that estimate the effect of the enactment of PSL mandates on subjective expectations. In Columns (1) and (2), the dependent variable is *Plan to work for longer*, which is a dummy variable that equals one if the household head's planned retirement age in the current survey wave is higher than in the previous survey wave. In Columns (3) and (4), the dependent variable is *Positive change in life satisfaction*, which is a dummy variable that equals one if the household head's self-reported life satisfaction in the current survey wave is better than in the previous survey wave. *Poor health* is a dummy variable that equals one if the self-rated health of the household head is fair or poor, and zero if it is excellent, very good, or good. *Declining health* is a dummy that equals one if self-rated health of the household head is worse compared to two years ago, and zero if it is about the same or better compared to two years ago. Variables are defined in Appendix 2. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Dependent variable:	*Plan to work for longer*		*Positive change in life satisfaction*	
	(1)	(2)	(3)	(4)
PSL	-0.0058	-0.0073	-0.0000	-0.0030
	(0.0467)	(0.0463)	(0.0223)	(0.0223)
PSL Poor health*	0.1707**		0.0618*	
	(0.0838)		(0.0357)	
Poor health	-0.0471		-0.0797***	
	(0.0401)		(0.0174)	
*PSL*Declining health*		0.4355***		0.1028*
		(0.1059)		(0.0549)
Declining health		-0.0194		-0.1203***
		(0.0606)		(0.0253)
Control variables	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes
N	3,365	3,365	13,457	13,451
R2	0.344	0.347	0.307	0.309

Table 9: Wealth Accumulation

This table reports regressions that estimate the effect of the enactment of PSL mandates on subjective expectations. In Panel A, the dependent variables are *Ln*(*Total income)* (Column (1)), *Ln(Non-housing wealth)* (Column (2)), and *Ln(Housing wealth)* (Column (3)). The independent variable of interest is *PSL*, which is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. In Panel B, the dependent variable is *Household stock market participation*, which is a dummy variable that equals one if the household holds stocks, stock mutual funds, or investment trusts, and zero otherwise. *Growth of wealth (income)* is defined as the logarithm of wealth (income) in current survey wave minus the logarithm of wealth (income) in the prior survey year. Variables are defined in Appendix 2. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Panel A: Impact of PSL mandates on household income and wealth

Dependent variables:	*Ln(Total income)*	*Ln(Non-housing wealth)*	*Ln(Housing wealth)*
	(1)	(2)	(3)
PSL	0.0104**	0.0113*	0.0238
	(0.0048)	(0.0061)	(0.0214)
Control variables	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes
Household FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
N	21,855	21,855	21,511
R2	0.844	0.578	0.998

Panel B: Income and wealth growth and stock market participation

Dependent variable:	*Household stock market participation*		
	(1)	(2)	(3)
PSL	0.0400**	0.0379**	0.0390**
	(0.0159)	(0.0160)	(0.0162)
*PSL*Growth of total income*	-0.1126		
	(0.0917)		
Growth of total income	-0.0354		
	(0.0515)		
*PSL*Growth of non-housing wealth*		0.2333**	
		(0.1057)	
Growth of non-housing wealth		0.0223	
		(0.0435)	
*PSL*Growth of housing wealth*			-0.0049
			(0.0036)
Growth of housing wealth			0.0006
			(0.0014)
Control variables	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes
Household FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
N	13,591	13,591	13,336
R2	0.719	0.719	0.719

Table 10: The impact of PSL mandates on household consumption and borrowing

This table reports regressions that estimate the effect of PSL on household consumption and borrowing decisions. The independent variable of interest is *PSL*, which is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. In Panel A, the dependent variables are *Log (Total expenditure)* (Column (1)), *Ln(Discretionary expenditure)* (Column (2)), *Ln(Necessary expenditure)* (Column (3)), *Ln(Expenditure on health care)* (Column (4)), and *Ln(Expenditure on health insurance premiums)* (Column (5)). In Panel B, the dependent variables are *Mortgage dummy* (Column (1)), *Log (Remaining value of mortgage)* (Column (2)), *Credit card debt dummy* (Column (3)), *Log (Credit card debt)* (Column (4)), *Other loan dummy* (Column (5)), and *Log (Other loan value)* (Column (6)). Variables are defined in Appendix 2. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Panel A: Household consumption

Dependent variables:	*Log (Total expenditure)*	*Ln(Discretionary expenditure)*	*Ln(Necessary expenditure)*	*Log (Expenditure on health care)*	*Log (Expenditure on health insurance premiums)*
	(1)	(2)	(3)	(4)	(5)
PSL	-0.0036	-0.0166	0.0063	0.0389	0.0481
	(0.0157)	(0.0775)	(0.0183)	(0.0314)	(0.0335)
Control variables	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes
N	21,855	218,55	21,855	21,855	21,855
R2	0.876	0.739	0.828	0.735	0.675

Panel B: Household borrowing

Dependent variables:	*Mortgage dummy*	*Log (Remaining value of mortgage)*	*Credit card debt dummy*	*Log (Credit card debt)*	*Other loan dummy*	*Log (Other loan value)*
	(1)	(2)	(3)	(4)	(5)	(6)
PSL	0.0043	0.0435	0.0211	0.1939	0.0103	0.1065
	(0.0102)	(0.1161)	(0.0180)	(0.1492)	(0.0179)	(0.1618)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes
N	21,825	21,292	17,868	17,799	17,887	17,887
R2	0.903	0.914	0.699	0.729	0.704	0.745

Appendix 1: Paid Sick Leave Mandates

This table reports summary of the state and local PSL mandates.

Panel A: State paid sick leave mandates

State	Enactment Date	Effective Date	Accrual Rate	Annual Cap
Connecticut	2011-07-01	2012-01-01	>=50 employees:1 hour for every 40 hours worked	>=50 employees: 40 hours per year
California	2014-09-19	2015-07-01	1 hour for every 30 hours worked	24 hours per year
Massachusetts	2014-11-04	2015-07-01	>10 employees: 1 hour for every 30 hours worked <=10 employees: 1 hour of unpaid sick leave for every 30 hours worked	40 hours per year
Oregon	2015-06-12	2016-01-01	>=10 employees: 1 hour for every 30 hours worked <10 employees: 1 hour of unpaid sick leave for every 30 hours worked	40 hours per year
Vermont	2016-03-09	2017-01-01	1 hour for every 52 hours worked	24 hours (40 hours from 2019) per year
Arizona	2016-11-08	2017-07-01	1 hour for every 30 hours worked	>=15 employees: 40 hours per year <15 employees: 24 hours per year
Washington	2016-11-09	2018-01-01	1 hour for every 40 hours worked	No cap (no more than 40 hours carry over)
Maryland	2017-04-05	2018-02-11	>=15 employees: 1 hour for every 30 hours worked <15 employees: 1 hour of unpaid sick leave for every 30 hours worked	40 hours per year
Rhode Island	2017-09-19	2018-07-01	>=18 employees: 1 hour for every 35 hours worked <18 employees: 1 hour of unpaid sick leave for every 35 hours worked	24 hours (32 hours in 2019 and 40 hours thereafter) per year
New Jersey	2018-05-02	2018-10-29	1 hour for every 30 hours worked	40 hours per year
Michigan	2018-12-14	2019-03-29	>=50 employees: 1 hour for every 35 hours worked	>=50 employees: 40 hours per year

Panel B: Local paid sick leave mandates

City	County	Enactment Date	Effective Date	Accrual Rate	Annual Cap
San Francisco, CA	San Francisco	2006-11-07	2007-02-05	1 hour for every 30 hours worked	<10 employees: 40 hours per year >=10 employees: 72 hours per year
Washington, DC	D.C.	2008-05-13	2008-11-13	<=24 employees: 1 hour for every 87 hours worked 25-99 employees: 1 hour for every 43 hours worked >=100 employees: 1 hour for every 37 hours worked	<=24 employees: 24 hours per year 25-99 employees: 40 hours per year >=100 employees: 56 hours per year
Seattle, WA	King	2011-09-12	2012-09-01	<250 employees: 1 hour for every 40 hours worked >=250 employees: 1 hour for every 30 hours worked	40 hours per year
Portland, OR	Multnomah	2013-03-13	2014-01-01	>5 employees: 1 hour for every 30 hours worked <=5 employees: 1 hour of unpaid sick leave for every 30 hours worked	40 hours per year
Jersey City, NJ	Hudson	2013-03-13	2014-01-01	1 hour for every 30 hours worked	>=10 employees: 40 hours per year <10 employees: 24 hours per year
New York, NY	New York, Kings, Bronx, Richmond, Queens	2013-06-26	2014-04-01	>=5 employees: 1 hour for every 30 hours worked <5 employees: 1 hour of unpaid sick leave for every 30 hours worked	40 hours per year
Newark, NJ	Essex	2014-01-29	2014-06-21	1 hour for every 30 hours worked	>=10 employees: 40 hours per year <10 employees: 24 hours per year

Paterson, NJ	Passaic	2014-09-02	2015-01-01	1 hour for every 30 hours worked	>=10 employees: 40 hours per year <10 employees: 24 hours per year
Oakland, CA	Alameda	2014-11-04	2015-03-02	1 hour for every 30 hours worked	>=10 employees: 72 hours per year <10 employees: 40 hours per year
Trenton, NJ	Mercer	2014-11-04	2015-03-04	1 hour for every 30 hours worked	>=10 employees: 40 hours per year <10 employees: 24 hours per year
Philadelphia, PA	Philadelphia	2015-02-12	2015-05-13	>=10 employees: 1 hour for every 40 hours worked <10 employees: 1 hour of unpaid sick leave for every 40 hours worked	40 hours per year
New Brunswick, NJ	Middlesex	2015-12-17	2016-01-06	1 hour for every 35 hours worked	>=10 employees: 40 hours per year 5-9 employees: 24 hours per year
Tacoma, WA	Pierce	2015-01-27	2016-02-01	1 hour for every 40 hours worked	40 hours per year
Elizabeth, NJ	Union	2015-11-03	2016-03-02	1 hour for every 30 hours worked	>=10 employees: 40 hours per year <10 employees: 24 hours per year
Los Angeles, CA	Los Angeles	2016-06-01	2016-07-01	1 hour for every 30 hours worked	48 hours per year
San Diego, CA	San Diego	2016-06-07	2016-07-11	1 hour for every 30 hours worked	80 hours per year
Montgomery, MD	Montgomery	2015-06-24	2016-10-01	1 hour for every 30 hours worked	>=5 employees: 56 hours per year <5 employees: 32 hours per year
Spokane, WA	Spokane	2016-01-26	2017-01-01	1 hour for every 30 hours worked	40 hours per year
Morristown, NJ	Morris	2016-09-13	2017-01-11	1 hour for every 30 hours worked	>=10 employees: 40 hours per year <10 employees: 24 hours per year
Minneapolis, MN	Hennepin	2016-05-27	2017-07-01	>5 employees: 1 hour for every 30 hours worked <=5 employees: 1 hour of unpaid sick leave for every 30 hours worked	48 hours per year
Chicago, IL	Cook	2016-06-22	2017-07-01	1 hour for every 40 hours worked	40 hours per year
St. Paul, MN	Ramsey	2016-09-07	2018-01-01	1 hour for every 30 hours worked	48 hours per year

Note: Similar mandates have been enacted in other cities within the county, including Bloomfield, East Orange, Irvington, and Montclair in Essex County; Passaic and Paterson in Passaic County; Berkeley and Emeryville in Alameda County; Plainfield in Union County; and Santa Monica in Los Angeles County

Appendix 2: Variable Definitions
This table reports the variable definitions.

Variable name	*Definition*
Household characteristics	
Household stock market participation	=1 if the household holds stocks, stock mutual funds, or investment trusts
Log (Wealth including home equity)	The natural logarithm of the household wealth including home equity
Log (total income)	The natural logarithm of the household total income
Wealth including home equity (in 10 thousand dollars)	Household wealth that includes the value of home equity
Total income (in 10 thousand dollars)	Household total income
House ownership	=1 if the home is owned by any household member
Family size	The number of persons in the household
Log (Total expenditure)	The natural logarithm of the household total expenditure
Log (Expenditure on health care)	The natural logarithm of the household health care expenditure
Log (Expenditure on health insurance premiums)	The natural logarithm of the household health insurance premiums
Log (Necessary expenditure)	The natural logarithm of the sum of household food, clothing, utility, communication, transportation, education, childcare, and health care expenditures
Log (Discretionary expenditure)	The natural logarithm of the sum of household vacations and entertainment expenditures
Loan dummy	=1 if the household owns any form of student loans, medical bills, legal bills, loans from relatives, or other debts
Log (Loan value)	The natural logarithm of the value of student loans, medical bills, legal bills, loans from relatives, and other debts
Credit card debt dummy	=1 if the household owns credit card debt
Log (Credit card debt)	The natural logarithm of the value of credit card debt
Mortgage dummy	=1 if the household owns a mortgage
Log (remaining value of mortgage)	The natural logarithm of the remaining value of the mortgage
Household head characteristics	
Age	The age of the household head
College	=1 if the household head attended college
Married	=1 if the household head is married or permanently cohabiting
Poor health	=1 if the household head's self-reported health is poor
State or county characteristics	
PSL	=1 if the household's county has an effective paid sick leave mandate on the survey date
PFL	=1 if the household's state has an effective paid family leave mandate on the survey date
ACA	=1 if the household's state provides the Affordable Care Act on the survey date
UI benefits	The generosity of unemployment insurance benefits, measured as the natural logarithm of the maximum number of weeks times the maximum weekly benefit amount
GDP growth	The growth of the annual current GDP in a state. Source: BEA
Income growth	The growth of the annual personal income in a state. Source: BEA
Log (Social insurance)	The natural logarithm of the annual contributions for government social insurance in a state. Source: BEA
Log (Employment)	The natural logarithm of the annual total employment in a state. Source: BEA
Unemployment rate	Unemployment rate in a state. Source: BLS
Democrat governor	=1 if the household's state has a democrat governor

Appendix 3: Do workers take extra days off following the enactment of PSL mandates?

This table reports regressions that estimate the effect of the enactment of PSL mandates on the number of days off that workers take each year. The dependent variables are *Days missed work due to self-illness* (Column (1)), *Days missed work due to other family members* (Column (2)), and *Days missed work due to vacation* (Column (3)). All dependent variables are based on the number of days that the household's head misses work. The independent variable of interest is *PSL*, which is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. Variables are defined in Appendix 2. Control variables are collapsed for brevity and identical to those in Column (3) of Table 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Dependent variable:	(1)	(2)	(3)
	Days missed work due to self-illness	*Days missed work due to other family members*	*Days missed work due to vacation*
PSL	1.8633*	0.1830	0.3207
	(1.0683)	(0.2257)	(1.7376)
Control variables	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes
Household FE	Yes	Yes	Yes
County FE	Yes	Yes	Yes
N	21,832	21,845	11,840
R2	0.347	0.404	0.552

Appendix 4: Other robustness tests

This table reports robustness tests on our baseline estimation results. The dependent variable is *Household stock market participation*, which is a dummy variable that equals one if the household holds stocks, stock mutual funds, or investment trusts, and zero otherwise. The independent variable of interest is *PSL*, which is a dummy variable that equals one if the county where the household resides has an effective local or state paid sick leave mandate on the survey date, and zero otherwise. Column (1) excludes households that move to other states during the sample period. Column (2) excludes households in locations that already have an effective paid sick leave mandate before 2009. Columns (3) to (6) exclude the households in the large treated states of California, Washington, Oregon, and all three states, respectively. Column (7) uses only the state-level PSL mandates. Column (8) uses unweighted variables from the PSID. Column (9) considers the size of the firm that employs the household head when defining the *PSL* dummy. Column (10) uses a propensity score matched sample of households in treated counties to those in untreated counties. Column (11) uses a propensity score matched sample of households in treated counties to those in untreated counties and further requires the control observations to be located in coastal counties only. Variables are defined in Appendix 2. Standard errors are clustered at the household-level and are reported in parentheses. *p <.1; **p <.05; ***p <.01.

Dependent variable:	*Household stock market participation*					
	(1)	(2)	(3)	(4)	(5)	(6)
PSL	0.0378***	0.0348***	0.0487***	0.0303**	0.0361***	0.0477***
	(0.0138)	(0.0132)	(0.0164)	(0.0136)	(0.0136)	(0.0185)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes	Yes
N	20,149	21,686	19,798	21,414	21,460	18,980
R2	0.696	0.695	0.695	0.698	0.696	0.698

Dependent variable:	*Household stock market participation*				
	(7)	(8)	(9)	(10)	(11)
PSL	0.0375***	0.0233**	0.0382***	0.0943*	0.0866**
	(0.0144)	(0.0105)	(0.0141)	(0.0505)	(0.0408)
Control variables	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes
County FE	Yes	Yes	Yes	Yes	Yes
N	21,855	21,855	21,855	2,027	2,129
R2	0.695	0.687	0.695	0.771	0.762