

“The Rent Eats First:” Did Ending the National Eviction Moratorium Increase Food Insufficiency Among Renters in the United States?

Abstract

As the housing crisis deepens, a growing share of U.S. residents forgoes groceries to make the rent. Sweeping eviction moratoria reduced housing insecurity during the pandemic, yet research examining their effect on food insufficiency remains scarce. This study leverages the Supreme Court’s cessation of the federal eviction moratorium in August 2021 as a natural experiment, using the Household Pulse Survey (N = 460,474). Difference-in-differences analyses identify a 1.06 (95% CI: 0.59 – 1.54) percentage point increase in the prevalence of food insufficiency among renters after the moratorium’s end, with larger effects for groups most at risk of eviction (i.e. renters who are Black, female, low-income, living with children, and living in states with less generous social safety nets). A particularly strong effect is observed for renters with children, representing a 3.17 percentage point (95% CI: 2.2 – 4.2) increase in the prevalence of food insufficiency; significant effects are observed far before the cessation of advanced Child Tax Credit payments in December 2021. These results suggest that policies reducing the population risk of eviction may ameliorate food insufficiency. As eviction rates rise, policymakers should thus look to pandemic-era legal protections and social safety net provisions to reduce post-pandemic housing and food insecurity.

Keywords: eviction moratorium, food insufficiency, pandemic, causal inference, social safety net

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Introduction

Housing insecurity and hunger are fundamentally intertwined in the United States. Frequent residential mobility, doubled-up status, and eviction are associated with increased food insecurity (Leifheit et al., 2020; Bowen et al., 2021). The consequences are dire; both conditions are linked to higher incidence of depressive symptoms and worsened physical health (Cutts et al., 2011; Gundersen & Ziliak, 2015; Seligman & Berkowitz, 2019; Roberts et al., 2025). Despite public health concerns, these crises have worsened in tandem (Jackson et al., 2025). By the middle of the COVID-19 pandemic, the proportion of renters reporting rent arrears (18%) and food insufficiency¹ (11%) had doubled pre-pandemic estimates, increasing further in its wake (Llobrera et al., 2020; Merchant & Troland, 2023; Joint Center for Housing Studies, 2024). In other words, a growing portion of American renters must choose between spending limited resources on either shelter or sustenance (Airgood-Obrycki et al., 2023). For many, particularly those threatened by eviction, “the rent eats first” (Desmond 2016, p. 302).

The COVID-19 pandemic opened a window of innovation in public policy, including state and federal legal protections against evicting tenants from their homes. Mounting evidence illustrates that such eviction moratoria reduced COVID-related infections, mortality, and depressive symptoms among renters (Leifheit et al., 2021a; Leifheit et al., 2021b). Other policies intended to cushion pandemic-related economic shocks — such as advanced payments of the Child Tax Credit (CTC) and Emergency Rental Assistance (ERA) — effectively reduced housing insecurity and food

¹ Food insufficiency — lacking enough food to eat in a given week — is distinct from but related to the more in-depth measure of “food insecurity,” which requires that more stringent criteria assessing households’ ability to access food be met (U.S. Department of Agriculture Economic Research Service, 2023).

insufficiency among eligible households by bolstering their incomes (Bouchelle et al., 2022; Bovell-Ammon et al., 2022). Yet research assessing the effect of eviction moratoria on food insufficiency remains scarce.

An eviction moratorium operates by reducing the population risk of eviction to close to zero, thereby increasing housing security. In this paper, we assess the effect of a federal eviction moratorium on food insufficiency among renters and important subgroups, illustrating the welfare gains that can be achieved by reducing the risk of eviction. Although such a federal moratorium outside crisis situations is unlikely, other policies that decrease eviction risk and increase housing security are highly feasible. Our research can be used to reflect on what increased legal protections for renters in the U.S. could contribute to housing security, food security and, by extension, wider public policy goals.

Literature Review

The Eviction Crisis and its Consequences

Renters in the United States face an escalating eviction crisis. As demand for affordable housing outstrips supply, a majority of poor renters (and a record quarter of all renters) are severely cost-burdened, owing more than half of their income in rent (Desmond & Kimbro, 2015; National Low-Income Housing Center, 2024; JCHS, 2024). Unprotected by stagnant wages and a fraying social safety net, renters are increasingly at risk of eviction (Desmond, 2018; Myers & Park, 2019; Benfer et al., 2021; Gromis et al., 2022). Indeed, an average of more than 2.7 million households were threatened with eviction each year between 2000 and 2018, and filings have increased in the wake of the pandemic (Graetz et al., 2023; Hepburn et al., 2024). Moreover, informal evictions executed outside the legal system occur at higher rates than formal evictions, rendering these estimates conservative (Gromis and Desmond, 2021).

To be sure, the risk of eviction is not equally distributed. Black renters account for 51% of eviction filings in the U.S., and one in five Black renters is threatened with eviction annually (Graetz et al., 2023). Likewise, women and low-income renters disproportionately experience eviction (Desmond & Gershenson, 2017; Hepburn et al., 2020); Moreover, households with children disproportionately face eviction; an average of 2.9 million children were threatened with eviction each year from 2007-2016, and the mean eviction displaces one child (Graetz et al., 2023). Consequently, the ramifications of being threatened with eviction too are stratified according to extant societal inequities.

Prior studies have identified myriad collateral consequences of eviction (Desmond & Kimbro, 2015). Evicted households are subjected to prolonged periods of housing instability, lower quality subsequent housing, and a higher risk of homelessness (Swope & Hernández, 2019; Evans, 2021; Treglia et al., 2023). Eviction also decreases earnings in the short term and limits access to credit in the long term (Collinson et al., 2024). Furthermore, renters threatened with or experiencing eviction report not only higher blood pressure and worse physical health, but also higher rates of depression, anxiety, and mortality by suicide (Vásquez-Vera et al., 2017; Ramphal et al., 2023; Hanson, 2025). Moreover, evicted children experience food insecurity at twice the rate of stably housed children (Leifheit et al., 2020). Despite this, few studies explore how shifts in housing policy might shield renters from food insufficiency.

Housing Insecurity and Food Insufficiency

Renters often forego necessities in order to make the rent each month (Angst et al., 2025). For instance, severely cost-burdened households are estimated to spend 39% less on food than renters with affordable housing (Airgood-Obrycki et al., 2023). Beyond these anticipatory effects, evicted households must focus limited financial resources on the economic fallout of displacement,

including securing new housing and remedying shocks such as job loss and medical emergencies (Desmond & Gershenson, 2017). In other words, striving to avoid rent arrears and consequent eviction can leave renters with insufficient funds to acquire adequate food. As rents rise, climbing food insufficiency may be partially explained by proliferating housing instability, which renders renters 40% more likely to experience food insecurity (Llobrera et al., 2020; Lee et al., 2021; Colburn et al., 2024).

Pandemic-Era Social Policies and Eviction Moratoria

Many pandemic-era social policy interventions effectively reduced food insufficiency among those affected. Prior research demonstrates that the expanded CTC — which included more low-income households and was partially disbursed in monthly installments from July 15, 2021 to December 15, 2021 — reduced food insufficiency (by about 26%), as did expanded unemployment benefits authorized from March 2020 to March 2021 (Raifman et al., 2021; Shafer et al., 2022; McCann et al., 2024). Meanwhile, Economic Impact Payments (EIP) — disbursed to eligible households in April 2020, December 2020, and March 2021 — shielded Black and Hispanic households from deeper food insecurity (Jacobs et al., 2023). Similarly, gray literature (Airgood-Obrycki 2022; Chen et al., 2024) demonstrates that ERA — allocated in December 2020 and March 2021 and distributed over the next year — reduced renters' food insufficiency, mirroring previous rent supplements (Denary et al., 2023).

However, comparatively less attention has been paid to the effect of pandemic-era eviction moratoria on food insufficiency. To prevent material hardship and stall COVID-19 infections, eviction protections were embedded in the CARES Act, passed in March 2020. Moreover, 43 states and the District of Columbia enacted eviction moratoria of varying strengths (e.g. preventing filings, court hearings, or judgements, etc.) in the following months (Benfer et al., 2023). Building on these

protections, the U.S. Centers for Disease Control (CDC) implemented a national eviction moratorium on September 4, 2020 (NLIHC, 2020). Renters meeting any of several criteria – including a low income, sudden job loss, or risk of homelessness — were protected from eviction under the federal order. While implementation of the policy varied by state, 1.55 million fewer evictions than typical were filed while the moratorium was in effect (Haas, 2021; Benfer et al., 2023). These protections provided respite to the growing proportion of renters behind on rent; some reported delaying rent payments while the moratorium was in place, freeing scarce funds for other necessities (Tsai et al., 2022). After several extensions and failed Congressional action, the Supreme Court struck down the national eviction moratorium effective August 27, 2021 (Tsai et al., 2022). While nine states had moratoria that remained in place, millions of renters were abruptly exposed to the threat of eviction (Skinner et al., 2022).

To date, just one study has assessed how pandemic-era eviction moratoria moderated food insufficiency among U.S. households. An, Gabriel, and Tzur-Ilan (2022) identified a modest reduction in reported food insufficiency among only Black households when a state-level moratorium was in place. However, the effect of the national eviction moratorium’s cessation on food insufficiency has not been evaluated, and prior analyses have not limited treatment exposure to renters; rather, they have approximated exposure dosage by area-level renter share.

Interventions Beyond the Pandemic

Pandemic-era housing interventions drew on a wellspring of political will that has not endured. Yet research evaluating the effect of eviction moratoria rarely considers interventions that might be feasible beyond the pandemic. States wield considerable autonomy in determining eviction protections, which represent one well-documented avenue for post-pandemic intervention (Gromis et al., 2022). Moreover, the decentralization of social programs over the past several decades has lent

states more control over the disbursement of government benefits, another possible intervention short of sweeping federal orders (Tach and Edin 2017; Bruch et al., 2018; Montez et al., 2020). Divergent policy contexts result in drastically varying mortality rates and birth outcomes between states, and differences in state policy contexts are linked to variation in food insufficiency (Bartfeld and Men, 2017; Markowitz et al., 2017; Montez et al., 2020). The generosity of state-level social programs varies: an average single-parent family might receive over \$7,500 in Minnesota, compared to under \$5,000 in Mississippi (Goodman and Watson 2023): Increased state-level benefits — i.e. the total cash and food assistance disbursed to eligible households — reduce the prevalence of food insufficiency among recipients; one study found that for every \$1,000 increase in such benefits, food insecurity decreases by four percentage points among low-income, single-parent families (Schmidt et al., 2016). Yet it remains unclear whether this protection withstands exposure to eviction, illuminating a possible opportunity for post-pandemic policy intervention.

The Current Study

This study exploits the Supreme Court’s sudden cessation of the national eviction moratorium to construct a natural experiment identifying its effect on the prevalence of food insufficiency among renters. We hypothesize that: 1) the national eviction moratorium’s cessation increased the prevalence of food insufficiency among renters when compared to homeowners; 2) the effect of the moratorium’s cessation on food insufficiency was particularly strong for renters at a higher risk of eviction, including those who are Black, women, low-income, and living with children; and 3) this effect was mitigated for renters living in states with more generous social safety nets.

Data

Data Sources

The principal data source is the U.S. Census Bureau (2025a) Household Pulse Survey (HPS), a recurring cross-sectional survey. Rapidly deployed to measure the effects of the COVID-19 pandemic and related social policies on households in the United States, this 20-minute online survey drew responses from new, nationally representative samples in 72 survey waves fielded between April 23, 2020, and September 16, 2024. During the period of this study, survey waves were in the field for two-week data collection periods. Initially, survey waves were conducted consecutively; beginning with Wave 39, a two-week buffer was included between collection periods. Survey waves garnered relatively low response rates (ranging from 5.4% to 7.9%) and yielded samples ranging from 50,849 to 84,158 respondents (CDC 2024).

State social safety net data were obtained from the Brookings Institution State Safety Net Interactive Dataset (SSNID; Schmidt et al., 2024). This dataset compiles the average dollar value of cash and food benefits available annually via federally directed and state-directed programs to an average low-income, single-parent family.

Eviction-related data were obtained from the Eviction Tracking System (ETS; Eviction Lab, 2025). This data is not nationally representative; rather, the tracking system compiles eviction filing data from county court systems where available (in 10 states and 34 individual cities). The lack of data infrastructure for tracking evictions across other state and local governments in the United States prevents the inclusion of other jurisdictions.

Variables

The dependent variable is a binary indicator of household *food insufficiency*. Respondents were asked “In the last 7 days, which of these statements best describes the food eaten in your household?” If they responded, “sometimes not enough to eat” or “often not enough to eat,” they were coded as food insufficient (U.S. Census Bureau, 2025a). A secondary dependent variable, *limitations in seeing* —

used as a placebo outcome in a falsification test — is a binary indicator for respondents who reported any difficulty with their eyesight.

The main independent variable is *tenure*, which determines exposure to the eviction moratorium. Respondents whose housing is “owned free and clear” or “owned with a mortgage or loan,” are considered homeowners, while respondents whose housing is “rented” are considered renters. Respondents who occupied a unit without payment of rent or who did not answer this question were omitted from the sample. A measure of state-level *social safety net generosity* is drawn from the SSNID as an independent variable used in a secondary analysis (Schmidt et al., 2024). It indicates whether each state provided above or below median cash and food benefits to a low-income, single-parent family in 2021, adjusted for state-level cost of living (“more generous” or “less generous”).

Covariates included in the main analyses include: *gender* (limited by the HPS to “female” or “male”); *race* (“White,” “Black,” “Asian,” or “Other or Multiple”); *ethnicity* (“not Hispanic” or “Hispanic”); and *age* (“18 to 24”, “25 to 34”, then 10 year age bands up to “85 and More”). In addition, *educational attainment* captures the highest level of education (“less than high school,” “some high school,” “high school graduate,” “some college,” “associate’s degree,” “bachelor’s degree,” or “graduate degree”); *employment status* refers to whether the respondent undertook paid work in the preceding seven days (“yes” or “no”); and *income* is the total pre-tax household income in 2020 (banded into “less than \$25k,” “\$25k to \$34,999,” “\$35k to \$49,999,” “\$50k to \$74,999,” “\$75k to \$99,999,” “\$100k to \$149,999,” “\$150k to \$199,999” and “\$200k or more”). *Marital status* (“married,” “widowed,” “divorced”, “separated”, or “never married”); number of *people in household*; and *presence of children* in household (defined as people under 18 years; “yes” or “no”) are also included. Two variables indicate whether the household was in receipt of government benefits. The variable *CTC received in the last four weeks* indicates whether any household member received a child tax credit payment (advance or lumpsum) in the preceding four weeks (“yes” or “no”). *SNAP benefits*

received indicates whether any household member currently receives Supplemental Nutrition Assistance Program benefits (“yes” or “no”).

Moreover, for a descriptive analysis of the policy implementation, the *monthly eviction filing rate* from the ETS is used. This is the number of eviction filings per 100,000 renter homes per month in the jurisdictions for which data can be collected.

Analytical sample

Respondents from the nine states maintaining a moratorium after the cessation of the national moratorium (CA, DC, IL, MA, MN, NU, NM, NY, and WA) were omitted, as they remained unexposed to the treatment.

We employ unweighted data in our analyses. Because the models include all variables used to construct the Household Pulse Survey person weights (U.S. Census Bureau, 2025b), unweighted analyses are likely more precise and less biased, per Winship and Radbill (1994). We conducted a sensitivity analysis in which weighted data are used (see Table 5, Model 3 in Appendix C).

Following similar research using the HPS (Bouchelle et al., 2022; Batra, Jackson, and Hamad, 2023), a complete case analysis was conducted; respondents with missing values for any of the dependent variable, independent variables, and main covariates were omitted, yielding the final sample (N = 460,474).

Methods

Descriptive Statistics

For the end of the moratorium to affect food insufficiency as theorized, eviction filings must have been suppressed throughout its duration and risen after its cessation. Monthly eviction filings tracked before, during, and after the moratorium are plotted over time to assess whether this policy

change plausibly affected respondents (Figure 1). Additionally, to assess compositional balance between time periods, descriptive statistics for the pre- and post-treatment periods are assessed for any substantive differences (Table 1).

Difference-in-Differences Analysis

To assess the effect of the end of the national eviction moratorium on food insufficiency among renters, difference-in-differences models are estimated. This quasi-experimental method leverages differential exposure to an exogenous policy change over time and between groups to separate the treatment effect from secular trends. In its simplest form, the change in outcomes between the pre- and post-treatment periods (i.e. the first set of differences) is calculated for a treatment group, which is exposed to a policy change, and a control group, which is unexposed to the policy change but experiences the same temporal effects. Any difference in the change over time between the two groups (i.e. the difference in the differences) is attributed to the effect of the policy change (Dimick and Ryan, 2014).

In this study, pre- and post-treatment periods are defined by the Supreme Court decision on August 27, 2021. Wave 37 (beginning on September 1, 2021) is the first post-decision survey wave (Tsai, 2021). However, because important analytical variables refer to respondents' experiences in the prior week or month (e.g. food insufficiency and CTC receipt), respondents in this wave reference periods when the moratorium was still in effect. Thus, Wave 38 (beginning on September 15, 2021), the first survey wave in which responses do not overlap with an eviction moratorium, comprises the first post-treatment survey wave. Waves 34 to 37 (spanning July 21, 2021 – September 1, 2021) constitute the “pre-treatment period,” and Waves 38 to 45 (spanning September 15, 2021 – May 9, 2022) constitute the “post-treatment period.”

The treatment and control groups are determined by housing tenure. Homeowners were definitionally unexposed to the end of the national eviction moratorium, as the intervention applied only to renters, and thus constitute the control group. However, not all renters, who comprise the treatment group, were eligible for protection — due to higher incomes, extant familial wealth, rapport with landlords, and other possible unobserved variation (NLIHC, 2020). Therefore, this study is an intention-to-treat (ITT) analysis, which likely renders our policy effect estimates conservative.

To conduct the main difference-in-differences analysis, a linear probability model is estimated, per the following equation:

$$Insufficiency_{it} = a + \beta_1.Renter_i + \beta_2.Post-Treatment_t + \beta_3 (Renter_i*Post-Treatment_t) + \beta_4 X_{it} + \epsilon_{it}$$

where i denotes individual households and t denotes the time period of data collection (pre- or post-treatment). $Insufficiency_{it}$ is a binary indicator of food insufficiency and $Renter_i$ is a binary indicator of renting. $Post-Treatment$ is a binary indicator of Wave 38 or later. $Renter*Post-Treatment$ is an interaction term that is 1 for renters in the post-treatment period. X_i is a vector of the covariates described above. Standard errors are conservatively clustered at the state-level, and models include state and time period fixed effects (Bertrand, Duflo, and Mullainathan, 2004). β_3 , the difference-in-differences estimate, captures whether renters experienced a larger ($\beta_3 > 0$) or smaller ($\beta_3 < 0$) change in the probability of experiencing food insufficiency in the post-treatment period compared to homeowners.

In addition to the main difference-in-differences model, an event study specification is used to explore how the effect of the national eviction moratorium's cessation changed over time. This follows the same equation, replacing the pre- and post-treatment time periods with leads and lags representing the number of survey waves to treatment implementation; models include state and

survey wave fixed effects. This event study specification also allows us to test the “parallel trends assumption” in the pre-treatment period — i.e. the assumption, central to difference-in-differences analyses, that, in the absence of the policy change, homeowners and renters would have experienced the same change over time in food insufficiency. If trends in the outcome are parallel in the period of no policy change, this lends more credence to our use of homeowners to establish the counterfactual trend of renters.

One threat to our identification of a causal effect of the eviction moratorium removal is if some other intervention exerted differential effects on the food insufficiency of homeowners and renters (Callaway and Sant’Anna, 2021). Two potential such interventions include the disbursement of the third round of EIP (stimulus checks authorized on March 21, 2021) and the cessation of advanced CTC payments (disbursed monthly from July 15, 2021 to December 15, 2021), which disproportionately affected renters (Bovell-Ammon et al., 2022; Jacobs et al., 2023; Manville et al., 2023). However, because 92% of EIP checks were disbursed by the end of April 2021 (with the rest distributed slowly over the following months), commencing the study in Wave 34 (collected between July 21 and August 2, 2021) effectively excludes the effect of EIP receipt (Parker, et al., 2022). Furthermore, the HPS includes a variable indicating advanced CTC receipt from Waves 34 – 42 and lumpsum CTC receipt from Waves 43 – 45, allowing analyses to control for the effect of receiving either form on food insufficiency for this period. Restricting the study period to these survey waves comports with prior literature (Parolin, et al. 2021) and allows us to isolate the effect of the eviction moratorium cessation.

Robustness checks

We conduct a seasonality test to assess the effect of potential cyclical changes in food insufficiency (e.g. related to the absence of school meals in the summer) (Kuhn, 2018). Following similar studies,

a separate difference-in-differences estimate is conducted using Waves 47-57, which correspond to roughly the same dates as the main study period one year later (June 29, 2022 – May 8, 2023), where Wave 49 marks the “post-treatment” period (Parolin et al., 2021). If the interaction between housing tenure and period is statistically significant in a timeline with no policy change, the timing of the study period may be responsible for the observed effect.

In accordance with prior research, a placebo dependent variable (“limitations in seeing;” 1 = yes) is substituted to test whether results are spuriously correlated with unobserved trends plausibly unrelated to treatment exposure (Reeves et al., 2022). Because eyesight should be minimally affected, if at all, by eviction policy, the difference-in-differences coefficient should be statistically insignificant.

Some early state-level eviction moratoria included provisions prohibiting home foreclosures for mortgage non-payment (Boen et al., 2023). Homeowners in such states may have assumed that the national eviction moratorium similarly protected them from foreclosure and altered their consumption accordingly. To ensure there are no spillover effects between the treatment and control groups, we conduct a sensitivity analysis after restricting the control group to homeowners without a mortgage (Skinner et al., 2022).

An additional concern about our analysis is that the differences in outcomes may be driven by underlying differences in the composition of renters compared to homeowners. If these differences are fixed, and their effect on the outcome is fixed over time, the difference-in-differences analysis will address this. Nonetheless, as an additional check, we use coarsened exact matching (CEM) to improve balance on covariates between the treatment and control groups and conduct a sensitivity analysis using the resulting sample (Ho et al., 2011; Reeves et al., 2022). Per Blackwell and colleagues (2009: 527), CEM relaxes exact matching by collapsing the values of each covariate into groups (e.g. quantiles for numeric variables and re-specified bins for categorical variables) and

“retain[ing] only the original (uncoarsened) values of the matched data.” Matching is conducted by race, ethnicity, age, education, income, employment status, total number of people in the household, and survey wave (see Appendix E). If the resulting coefficient remains consistent, concerns that underlying dissimilarities by housing tenure are responsible for differential outcomes will be mitigated.

Finally, we also conduct a sensitivity analysis which adjusts for state-level disbursement of Emergency Rental Assistance (ERA) in the month prior to data collection (see Appendix C, Table 5, Model 4).

Secondary Analyses

To explore heterogeneous treatment effects among subgroups, the sample is split by each relevant covariate, and separate difference-in-differences estimates are obtained for each subgroup. This is repeated for each race (white; Black; Asian; other and multiple), gender (male; female), income level (to avoid loss of statistical power, the variable is recategorized according to prior research into three bands: households with 2020 incomes “under \$75,000, between \$75,000 – \$150,000, and \$150,000 or more); and for presence of children (yes; no) (Leifheit, 2021b). Likewise, to explore how state-level benefits attenuate the treatment effect, the sample is stratified by state-level social safety net generosity (below; equal to or above median cash and food assistance), and separate difference-in-differences estimates are obtained for more and less generous states. Event study specifications are provided for all secondary analyses to assess treatment effect variation over time across subgroups.

Results

Pre-analysis checks

[Figure 1]

Figure 1 depicts the monthly eviction filing rate over time. It shows that the rate of eviction filings drops rapidly starting in March 2020, following the implementation of the CARES Act, and a subsequent steady increase is halted when CDC's national eviction moratorium is implemented in September 2020 (Versey, 2021). Eviction filing rates rise immediately after its cessation. The policy change clearly affected eviction, which we would theoretically expect to impact other aspects of social welfare, including food insufficiency.

[Table 1]

Table 1 lists descriptive statistics for the pre- and post-treatment periods across tenure, the 11 main covariates, and social safety net generosity. The observed differences are small in practical terms (e.g. all education, employment, and income levels vary by one percentage point or less; a slightly more substantial difference is noted for CTC receipt, but this is limited to two-percentage points. There is limited evidence that a change in sample composition would affect the results; nonetheless, we include the above variables as regression covariates to adjust for any small differences.

[Figure 2]

Figure 2 displays the percentage of households experiencing food insufficiency over time, categorized by housing tenure. Renters experienced higher rates of food insufficiency at baseline than homeowners, but approximately parallel trends appear to hold prior to treatment despite a slight disruption in Wave 35. There is prima facie evidence for a differential post-moratorium trend between the two groups, which we now subject to formal testing.

Main difference-in-differences results

[Table 2]

Table 2 displays the results for the main difference-in-differences analysis, both unadjusted and adjusted for covariates (Models 1 and 2, respectively); models include state and time period fixed effects. After adjusting for covariates, there is a 4.02 (95% CI: 3.5 – 4.6) percentage point difference in the prevalence of food insufficiency between renters and homeowners at baseline. The prevalence of food insufficiency among homeowners increases by 0.65 (95% CI: 0.50 – 0.80) percentage points over time. Over and above this increase, the model identifies a 1.06 (95% CI: 0.59 – 1.54) percentage point increase in the prevalence of food insufficiency among renters after the national eviction moratorium is lifted.

[Figure 3]

Figure 3 presents the event study specification for the main analysis, in which the difference-in-differences estimates — including all covariates, as well as state and survey wave fixed effects — are plotted over time, representing the difference in household food insufficiency by tenure relative to the last pre-treatment wave (Wave 37), which serves as the reference; error bars represent 95% confidence intervals. Relative to the reference wave, pre-treatment estimates are not statistically different from zero and remain stable, providing support for pre-treatment parallel trends claims. Estimates increase in magnitude over time but are not statistically significant until Wave 4 post-treatment. These results suggest that the full effect of the moratorium removal on food insecurity emerged slowly over time; statistically significant results are not obtained until four months after the Supreme Court decision was enacted. This aligns with the gradual increase in evictions that is observed after the lifting of the moratorium (Figure 1). Full results for the event study specification are available in Appendix C, Table 6.

Robustness checks

Conducting the difference-in-differences analysis in a similar study period one year later (Waves 47-57) yields an insignificant result, defending against concerns that seasonal patterns drive the difference in outcomes between renters and homeowners. The difference-in-differences estimate using the placebo outcome (“limitations in seeing”) likewise produces an insignificant result, indicating that the main analysis does not reflect spurious associations plausibly unrelated to the eviction moratorium.

When homeowners with mortgages are removed from the sample, the effect estimate is 1.11 percentage points (95% CI: 0.61 – 1.61), similar in magnitude to the main analysis. Thus, potential spill-over effects due to confusion about eviction moratorium protection coverage appear to be negligible.

Using a (coarsened exact) matched sample, the effect estimate is 1.01 percentage points (95% CI: 0.51 – 1.52), again similar in magnitude to the main analysis. This assuages concerns that underlying differences in the observed characteristics of renters and homeowners may be responsible for differences in the evolution of outcomes.

Furthermore, the effect estimate after adjusting for state-level ERA disbursement is 0.99 percentage points (95% CI: .40 – 1.58), similar in magnitude to the main analysis. Full results for each of these robustness checks are available in Appendices C – E.

Secondary analyses

Secondary analyses were conducted to explore whether there were heterogeneous treatment effects by race, gender, income, state social security generosity and presence of children. Consistent with prior research, the estimate for Black household heads — 1.77 percentage points (95% CI: 0.47 –

3.07) — is larger than that of other racial groups (An, et al., 2022). The estimate for female respondents — 1.31 percentage points (95% CI: 0.69 – 1.92) — is larger than for males. There is a clear gradient of effect estimates by income. Only the estimates for renters who made less than \$75,000, representing a 1.04 percentage point (95% CI: 0.37 – 1.71) increase in the prevalence of food insufficiency, or between \$75,000–149,000, representing a 0.68 percentage point increase (95% CI: 0.8 – 1.3), are statistically significant; respondents with incomes above \$150,000 report no detectable change. Estimates by state-level social security generosity are generally similar in magnitude, but the effect estimate for states with less generous safety nets (1.18 percentage point increase; 95% CI: 0.65 – 1.71) is higher than for states with more generous safety nets (0.99 percentage point increase; 95% CI: 0.05 – 1.93). Full results for all secondary analyses are available in Appendix F (Tables 14 – 22; Figures 12 – 19).

[Table 3]

We found particularly interesting results regarding renters with children. Table 3 presents the results for the secondary analysis by the presence of children in the household, in which separate difference-in-differences estimates are obtained for respondents living with and without children. When all covariates are included, only the estimate for renters living with children — representing a 3.17 percentage point (95% CI: 2.2 – 4.2) increase in the prevalence of food insufficiency among renters living with children after the moratorium is lifted — is statistically significant, and it is substantially larger than the estimate for renters living without children. Figure 4 displays the difference-in-differences estimates by presence of children.

[Figure 4]

[Figure 5]

Figure 5 presents the event study specification by the presence of children. This shows an immediate effect of the moratorium removal on households with children that appears to grow over time. This suggests that there was a much stronger and earlier effect on these households than on households without children. It also reduces any concern that the effect is driven by the cessation of CTC disbursements in December 2021, as we observe an effect amongst households with children as early as September 2021. The event study suggests that there was also an effect of the moratorium removal on households without children, albeit it emerged with a longer lag and at approximately one fifth of the magnitude of the estimate for households with children.

Discussion

Summary of findings and limitations

This natural experiment assessed the effect of the sudden revocation of the national eviction moratorium on food insufficiency among renters. Relative to the pre-treatment mean among renters in each of these subgroups the difference-in-differences analysis estimates a statistically significant increase in the prevalence of food insufficiency of approximately: 8.1% for all renters (pre-treatment mean: 0.131); 9.0% for Black renters (pre-treatment mean: 0.197); 9.1% for female renters (pre-treatment mean: 0.144); 6.4% for renters with incomes below \$75,000 (pre-treatment mean: 0.163); 20.2% for renters living with children (pre-treatment mean: 0.157); and 9.3% for renters living in states with less generous social safety nets (pre-treatment mean: 0.127).

Thus, support is found for *Hypothesis 1*: the cessation of the moratorium increased the prevalence of food insufficiency among renters. Support is also found for *Hypothesis 2*: estimates across race, gender, income, and the presence of children vary as expected. The effect estimate is substantially stronger for Black renters than renters of other racial identities (and white renters in

particular). This inequity reflects the starkly disproportionate likelihood of eviction faced by Black Americans (Graetz et al. 2023). The observed treatment effect is also strongest among female renters, comports with prior literature asserting that women disproportionately experience the threat and collateral consequences of eviction (Hepburn et al., 2020). Consistent with prior literature illustrating the disproportionate threat of eviction and subsequent food insecurity among lower income strata, the cessation of the eviction moratorium had a statistically significant effect on food insufficiency only for low-income renters (Leifheit et al., 2020). Most strikingly, households with children experienced a sharp increase in food insufficiency soon after the revocation of the eviction moratorium, consistent with prior research demonstrating that renters with children disproportionately experience the threat of eviction (Desmond et al., 2013). Finally, sufficient support is found for *Hypothesis 3*: the moratorium's cessation similarly affected food insufficiency among renters living in states with different social safety net disbursements to single-parent, non-immigrant, non-disabled families — but states with less generous social safety nets suffered a slightly stronger effect of the eviction moratorium cessation on the prevalence of food insufficiency.

The identified main treatment effect survives a series of robustness checks, but other limitations remain. Informal evictions may have increased as landlords sidestepped moratoria, limiting the measured effect to that of formal evictions; however, this renders our estimates conservative (Fowle and Fyall, 2024). Furthermore, some sampled homeowners may themselves be landlords, meaning that the expiration of the eviction moratorium may increase their incomes and reduce food insufficiency among this group; this may introduce a small upward bias to our results. Given that homeowners and renters likely remain fundamentally different despite matching methods, future studies might also leverage variation in the timing of state-level moratoria to compare renters when the policies are in effect to renters when they are not (following Leifheit, 2021a). Future work might also improve construct validity by using stringent measures of food

insecurity that more accurately reflect consumption. Finally, future research should further explore the potentially buffering effect of state-level social safety net generosity — and other forms of direct financial assistance — on food insufficiency caused by the removal of eviction moratoria.

Post-pandemic policy implications

The national eviction moratorium was a significant intervention in both the U.S. housing market and the welfare of U.S. residents. This emergency measure was designed to provide renters with more secure shelter — essential to the success of public health measures urging isolation — in a period when many had endured sudden reductions in labor incomes. It was a successful policy of its time, reducing evictions in order to help contain a pandemic.

Beyond the pandemic, the natural experiment created by the federal moratorium's cessation illuminates how the population risk of eviction — which is modifiable by social policy — can affect other important social outcomes, in this case food sufficiency. This is particularly salient in the context of the ongoing eviction crisis in the U.S. As eviction rates surge in the wake of the pandemic, our findings suggest that many more families may have to prioritize rent at the expense of acquiring sufficient food (Hepburn et al., 2024).

Mounting research suggests that restricting eviction risks can improve important social welfare outcomes. While a widespread eviction ban is unlikely to be implemented outside times of crisis, several state-level policies short of moratoria effectively curtail evictions, including the right to counsel for renters facing eviction (Ellen et al., 2021) and increased filing fees (Gomory et al., 2023). Moreover, several states have introduced just cause eviction measures, which protect tenants from displacement when not in violation of laws or lease stipulations (NLIHC 2025). Our evidence suggests that states should look to enact similar policies to constrain eviction and related food insufficiency.

While our findings about whether the social safety net moderates the effect of eviction moratoria on food insufficiency are coarse, policymakers should further explore how direct assistance to renters (e.g. targeted rental assistance) disbursed at the state-level might buttress eviction protections and therefore bolster food security (Desmond 2018; Aiken et al., 2022). Given anticipated cuts to federal assistance programs, such devolutionary solutions are increasingly vital to preventing housing insecurity and hunger in the wake of the pandemic (Bergh et al., 2025). Absent intervention, the rent will continue to eat first, particularly in households with children.

References

- Aiken, C., Ellen, I. G., Harner, I., Hauptert, T., Reina, V., & Yae, R. (2022). Can emergency rental assistance be designed to prevent homelessness? Learning from emergency rental assistance programs. *Housing Policy Debate*, 32(6), 896-914.
- Airgood-Obrycki, W., 2022. *The short-term benefits of emergency rental assistance*. Joint Center for Housing Studies of Harvard University.
https://www.jchs.harvard.edu/sites/default/files/research/files/harvard_jchs_short_term_era_benefits_airgood-obrycki_2022.pdf
- Airgood-Obrycki, W., Hermann, A., & Wedeen, S. (2023). “The rent eats first”: Rental housing unaffordability in the United States. *Housing Policy Debate*, 33(6), 1272-1292.
- An, X., Gabriel, S. A., & Tzur-Ilan, N. (2022). More than shelter: the effect of rental eviction moratoria on household well-being. *AEA Papers and Proceedings*, 112, 308-312.
- Angst, S., Rosen, J., De Gregorio, S., & Painter, G. (2025). How do renters survive unaffordability? Household-level impacts of rent burden in Los Angeles. *Journal of Urban Affairs*, 47(5), 1639-1662.
- Bartfeld, J., & Men, F. (2017). Food insecurity among households with children: The role of the state economic and policy context. *Social Service Review*, 91(4), 691–732.
- Batra, A., Jackson, K., & Hamad, R. (2023). Effects of the 2021 expanded child tax credit on adults’ mental health: A quasi-experimental study. *Health Affairs*, 42(1), 74-82.

Benfer, E. A., Vlahov, D., Long, M. Y., Walker-Wells, E., Pottenger, J. L., Gonsalves, G., & Keene, D. E. (2021). Eviction, health inequity, and the spread of COVID-19: housing policy as a primary pandemic mitigation strategy. *Journal of Urban Health*, 98, 1-12.

Benfer, E.A., Koehler, R., Mark, A., Nazzaro, V., Alexander, A.K., Hepburn, P., Keene, D.E. and Desmond, M. (2023). COVID-19 housing policy: State and federal eviction moratoria and supportive measures in the United States during the pandemic. *Housing Policy Debate*, 33(6), 1390-1414.

Bertrand, M., Duflo, E., & Mullainathan, S. (2004). How much should we trust differences-in-differences estimates?. *The Quarterly Journal of Economics*, 119(1), 249-275.

Bergh, K., Rosenbaum, D. & Tharpe, (2025). *House reconciliation bill proposes deepest SNAP cut in history, would take food assistance away from millions of low-income families*. Center on Budget and Policy Priorities. <https://www.cbpp.org/research/food-assistance/house-reconciliation-bill-proposes-deepest-snap-cut-in-history-would-take>

Blackwell, et al. (2009). CEM: Coarsened exact matching in Stata. *The Stata Journal*, 9(4), 524-546.

Boen, C. E., Keister, L. A., Gibson-Davis, C. M., & Luck, A. (2023). The buffering effect of state eviction and foreclosure policies for mental health during the COVID-19 pandemic in the United States. *Journal of Health and Social Behavior*, 00221465231175939.

Bouchelle, Z., Vasan, A., Candon, M., & Kenyon, C.C. (2022). Food insufficiency following discontinuation of monthly child tax credit payments among lower-income US households. *JAMA Health Forum* 3(11), e224039-e224039.

Bowen, S., Elliott, S., & Hardison-Moody, A. (2021). The structural roots of food insecurity: How racism is a fundamental cause of food insecurity. *Sociology Compass*, 15(7), e12846.

Bovell-Ammon, A., McCann, N. C., Mulugeta, M., de Cuba, S. E., Raifman, J., & Shafer, P. (2022). Association of the expiration of child tax credit advance payments with food insufficiency in US households. *JAMA Network Open*, 5(10), e2234438-e2234438.

Bruch, S. K., Meyers, M.K., & Gornick, J.C. 2018. The consequences of decentralization: Inequality in safety net provision in the post-welfare reform era." *Social Service Review* 92(1), 3-35.

Callaway, B., & Sant'Anna, P. H. (2021). Difference-in-differences with multiple time periods. *Journal of Econometrics*, 225(2), 200-230

Centers for Disease Control and Prevention. (2024). *Mental health – Household Pulse Survey – COVID-19*. U.S. Department of Health and Human Services. <https://www.cdc.gov/nchs/covid19/pulse/mental-health.htm>

Chen, Y., Piña, G., Perrin, E. M., Villegas, E., & Leifheit, K. (2024). *How emergency rental assistance might protect households with children from food Insecurity*. Child Trends: https://cms.childtrends.org/wpcontent/uploads/1980/11/RWJFfoodhardship_ChildTrends_November2024.pdf

Colburn, G., Hess, C., Allen, R., & Crowder, K. (2024). The dynamics of housing cost burden among renters in the United States. *Journal of Urban Affairs*, 1–20. <https://doi.org/10.1080/07352166.2023.2288587>

Collinson, R., Humphries, J. E., Mader, N., Reed, D., Tannenbaum, D., & Van Dijk, W. (2024). Eviction and poverty in American cities. *The Quarterly Journal of Economics*, 139(1), 57-120.

Cutts, D. B., Meyers, A. F., Black, M. M., Casey, P. H., Chilton, M., Cook, J. T., ... & Frank, D. A. (2011). US housing insecurity and the health of very young children. *American Journal of Public Health*, 101(8), 1508-1514.

Denary, W., Fenelon, A., Whittaker, S., Esserman, D., Lipska, K. J., & Keene, D. E. (2023). Rental assistance improves food security and nutrition: an analysis of national survey data. *Preventive Medicine*, 169, 107453..

Desmond, M., An, W., Winkler, R., & Ferriss, T. (2013). Evicting children. *Social Forces*, 92(1), 303-327.

Desmond, M., & Kimbro, R. T. (2015). Eviction's fallout: housing, hardship, and health. *Social forces*, 94(1), 295-324.

Desmond, M. (2016). *Evicted*. Crown.

Desmond, M., & Gershenson, C. (2017). Who gets evicted? Assessing individual, neighborhood, and network factors. *Social Science Research*, 62, 362-377.

Desmond, M. (2018). Heavy is the house: Rent burden among the American urban poor. *International Journal of Urban and Regional Research*, 42(1), 160-170

Dimick, J. B., & Ryan, A. M. (2014). Methods for evaluating changes in health care policy: the difference-in-differences approach. *JAMA*, 312(22), 2401-2402.

Ellen, I. G., O'Regan, K., House, S., & Brenner, R. (2021). Do lawyers matter? Early evidence on eviction patterns after the rollout of universal access to counsel in New York City. *Housing Policy Debate*, 31(3-5), 540-561.

Evans, M. (2021). The unequal housing and neighborhood outcomes of displaced movers. *Journal of Urban Affairs*, 43(9), 1214-1234.

Eviction Lab. (2025). *Eviction Tracking System*. Princeton University. <https://evictionlab.org/eviction-tracking/>

Fowle, M., & Fyall, R. (2024). Evading the eviction moratorium: Changing patterns in formal and informal evictions and eviction tactics during the COVID-19 pandemic. *Journal of Urban Affairs*, 1-19.

Gomory, H., Massey, D. S., Hendrickson, J. R., & Desmond, M. (2023). The racially disparate influence of filing fees on eviction rates. *Housing Policy Debate*, 33(6), 1463-1483.

Goodman, G., & Watson, T. (2023). *How generous are each state's safety net programs?* Brookings Institution. <https://www.brookings.edu/articles/how-generous-are-each-states-safety-net-programs/>

Graetz, N., Gershenson, C., Hepburn, P., Porter, S. R., Sandler, D. H., & Desmond, M. (2023). A comprehensive demographic profile of the US evicted population. *Proceedings of the National Academy of Sciences*, 120(41), e2305860120.

Gromis, A., and Desmond, M. (2021). Estimating the prevalence of eviction in the United States. *Cityscape*, 23(2), 279-290.

Gromis, A., Fellows, I., Hendrickson, J. R., Edmonds, L., Leung, L., Porton, A., & Desmond, M. (2022). Estimating eviction prevalence across the United States. *Proceedings of the National Academy of Sciences*, 119(21), e2116169119.

Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Affairs*, 34(11), 1830-1839.

Haas, J. (2021). *Preliminary analysis: Eviction filing trends after the CDC moratorium expiration*. Eviction Lab. <https://evictionlab.org/updates/research/eviction-filing-trends-after-cdc%20moratorium/#:~:text=On%20August%2026%2C%202021%2C%20the,fewer%20eviction%20filings%20than%20normal>

Hanson, J. L. (2025). Stress about eviction or loss of housing and child mental health. *JAMA Network Open*, 8(2), e2458984-e2458984.

Hepburn, P., Louis, R., & Desmond, M. (2020). Racial and gender disparities among evicted Americans. *Sociological Science*, 7, 649-662.

Hepburn, P., Grubbs-Donovan, D., & Hartley, G. (2024). *Preliminary analysis: Eviction filing patterns in 2023*. Eviction Lab. <https://evictionlab.org/ets-report-2023/#:~:text=Across%20the%20jurisdictions%20we%20track,of%20the%20cities%20we%20track>

Ho, D. Imai, K., Stuart, E.A. (2011). MatchIt: Nonparametric preprocessing for parametric causal inference.” *Journal of Statistical Software*, 42(8), 1–28.

Jackson, C. L., Hart, C. A., Uribe-Lacy, C. J., Yang, P., & Tsai, J. (2025). A meta-analysis of the prevalence of food insecurity among people experiencing housing insecurity and homelessness in the United States. *Public Health Reports*, 1-15.

Jacobs, M., McDade, T. R., Chaparro, M. V., & Corea, M. (2023). Sick, hungry, and vulnerable: federal stimulus and food security on marginalized populations during the COVID-19 pandemic. *Journal of Racial and Ethnic Health Disparities*, 10(6), 2685-2703.

Joint Center for Housing Studies (2024). *America’s rental housing 2024*. Joint Center for Housing Studies at Harvard University.
https://www.jchs.harvard.edu/sites/default/files/reports/files/Harvard_JCHS_Americas_Rental_Housing_2024.pdf

Kuhn, M. A. (2018). Who feels the calorie crunch and when? The impact of school meals on cyclical food insecurity. *Journal of Public Economics*, 166, 27-38.

Lee, C. Y., Zhao, X., Reesor-Oyer, L., Cepni, A. B., & Hernandez, D. C. (2021). Bidirectional relationship between food insecurity and housing instability. *Journal of the Academy of Nutrition and Dietetics*, 121(1), 84-91.

Llobrera, J., Mazzara, A., Nchako, C., Sherman, A., & Zippel, C. (2020). *New data: Millions struggling to eat and pay rent. Joblessness continues to affect tens of millions*. Center on Budget and Policy Priorities.
<https://www.cbpp.org/sites/default/files/atoms/files/9-23-20pov.pdf>

Leifheit, K. M., Schwartz, G. L., Pollack, C. E., Black, M. M., Edin, K. J., Althoff, K. N., & Jennings, J. M. (2020). Eviction in early childhood and neighborhood poverty, food security, and obesity in later childhood and adolescence: Evidence from a longitudinal birth cohort. *SSM-Population Health*, 11, 100575.

Leifheit, K. M., Linton, S. L., Raifman, J., Schwartz, G. L., Benfer, E. A., Zimmerman, F. J., & Pollack, C. E. (2021a). Expiring eviction moratoriums and COVID-19 incidence and mortality. *American Journal of Epidemiology*, 190(2), 2563–2570.

Leifheit, K. M., Pollack, C. E., Raifman, J., Schwartz, G. L., Koehler, R. D., Bronico, J. V. R., ... & Linton, S. L. (2021b). Variation in state-level eviction moratorium protections and mental health among US adults during the COVID-19 pandemic. *JAMA Network Open*, 4(12), e2139585-e2139585.

Manville, et al. (2023). Renter nonpayment and landlord response: Evidence from COVID-19. *Housing Policy Debate*, 33(6), 1333-1367.

Markowitz, S., Komro, K. A., Livingston, M. D., Lenhart, O., & Wagenaar, A. C. (2017). Effects of state-level Earned Income Tax Credit laws in the US on maternal health behaviors and infant health outcomes. *Social Science & Medicine*, 194, 67-75.

McCann, N. C., Dean, L. T., Bovell-Ammon, A., Ettinger de Cuba, S., Green, T., Shafer, P. R., & Raifman, J. (2024). Association between Child Tax Credit advance payments and food insufficiency in households experiencing economic shocks. *Health Affairs Scholar*, 2(2), 1-9.

Merchant, Z., & Troland, E. (2023). *Did the pandemic change who became behind on rent? Characteristics of renters behind on rent before and after the pandemic onset*. Federal Reserve FEDS Notes: <https://www.federalreserve.gov/econres/notes/feds-notes/did-the-pandemic-change-who-became-behind-on-rent-20230418.html>

Montez, J. K., Beckfield, J., Cooney, J. K., Grumbach, J. M., Hayward, M. D., Koytak, H. Z., ... & Zajacova, A. (2020). US state policies, politics, and life expectancy. *The Milbank Quarterly*, 98(3), 668-699.

Myers, D., & Park, J. (2019). A constant quartile mismatch indicator of changing rental affordability in US metropolitan areas, 2000 to 2016. *Cityscape*, 21(1), 163-200.

National Low-Income Housing Coalition. (2020). *CDC eviction moratorium fact sheet*. National Low-Income Housing Coalition. https://nlihc.org/sites/default/files/CDC-Eng_2-2.pdf

National Low Income Housing Coalition. (2024). *The gap: A shortage of affordable homes*. National Low Income Housing Coalition. <https://nlihc.org/gap>

National Low Income Housing Coalition. (2025). *Several States, Including Maryland, Introduce Just Cause Eviction Protections This Legislative Session*. <https://nlihc.org/resource/several-states-including-maryland-introduce-just-cause-eviction-protections-legislative>

Parker, J. A., Schild, J., Erhard, L., & Johnson, D. S. (2022). Economic impact payments and household spending during the pandemic. *Brookings Papers on Economic Activity*, 2022(2), 81-156.

Parolin, Z., Ananat, E., Collyer, S. M., Curran, M., & Wimer, C. (2021). *The initial effects of the expanded child tax credit on material hardship* (No. w29285). National Bureau of Economic Research.

Raifman, J., Bor, J., & Venkataramani, A. (2021). Association between receipt of unemployment insurance and food insecurity among people who lost employment during the COVID-19 pandemic in the United States. *JAMA Network Open*, 4(1), e2035884-e2035884.

Ramphal, B., Keen, R., Okuzuno, S. S., Ojogho, D., & Slopen, N. (2023). Evictions and infant and child health outcomes: a systematic review. *JAMA Network Open*, 6(4), e237612-e237612.

- Reeves, A., Fransham, M., Stewart, K., & Patrick, R. (2022). Does capping social security harm health? A natural experiment in the UK. *Social Policy & Administration*, 56(3), 345-359.
- Roberts, M. K., Bhat, A. C., & Fenelon, A. (2025). The long-term effects of housing insecurity in young adulthood on subsequent material hardship, physiological and mental health. *Social Science & Medicine*, 117761
- Schmidt, L., Shore-Sheppard, L., & Watson, T. (2016). The effect of safety-net programs on food insecurity. *Journal of Human Resources*, 51(3), 589-614.
- Schmidt, L., Shore-Sheppard, L., & Watson, T. (2024) State Safety Net Interactive Database. Brookings Institution. <https://www.brookings.edu/articles/state-safety-net-interactive/>
- Seligman, H. K., & Berkowitz, S. A. (2019). Aligning programs and policies to support food security and public health goals in the United States. *Annual Review of Public Health*, 40(1), 319-337.
- Shafer, P. R., Gutiérrez, K. M., De Cuba, S. E., Bovell-Ammon, A., & Raifman, J. (2022). Association of the implementation of child tax credit advance payments with food insufficiency in US households. *JAMA Network Open*, 5(1), e2143296-e2143296.
- Skinner, A., Flannery, K., Nocka, K., Bor, J., Dean, L.T., Jay, J., Lipson, S.K., Cole, M.B., Benfer, E.A., Scheckman, R. and Raderman, W. (2022). A database of US state policies to mitigate COVID-19 and its economic consequences. *BMC Public Health*, 22(1), 1124.
- Swope, C. B., & Hernández, D. (2019). Housing as a determinant of health equity: A conceptual model. *Social Science & Medicine*, 243, 112571.
- Tach, L., & Edin, K. (2017). The social safety net after welfare reform: Recent developments and consequences for household dynamics. *Annual Review of Sociology*, 43(1), 541-561.
- Treglia, D., Byrne, T., & Tamla Rai, V. (2023). Quantifying the impact of evictions and eviction filings on homelessness rates in the United States. *Housing Policy Debate*, 1-12.
- Tsai, J. (2021). Expected and possible unexpected consequences of ending the eviction moratorium. *The Lancet Regional Health—Americas*, Dec., 4.
- Tsai, J., Huang, M., Blossnich, J. R., & Elbogen, E. B. (2022). Evictions and tenant-landlord relationships during the 2020–2021 eviction moratorium in the US. *American Journal of Community Psychology*, 70(1-2), 117-126.
- U.S. Census Bureau. (2025a). *Household Pulse Survey*. U.S. Department of Commerce. <https://www.census.gov/data/experimental-data-products/household-pulse-survey.html>

U.S. Census Bureau. (2025b). *Source of the Data and Accuracy of the Estimates for the 2020 Household Pulse Survey*. U.S. Department of Commerce. <https://www2.census.gov/programs-surveys/demo/technical-documentation/hhp/Source-and-Accuracy-Statement-May-28-June2.pdf>

U.S. Department of Agriculture Economic Research Service. (2023). *Food security in the U.S. – measurement*. U.S. Department of Agriculture Economic Research Service. [https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement#:~:text=In%202023%2C%2013.5%20percent%20of,experienced%20very%20low%20food%20security.&text=Annual%20food%20security%20statistics%20come,\(CPS%2DFSS\)%20data](https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement#:~:text=In%202023%2C%2013.5%20percent%20of,experienced%20very%20low%20food%20security.&text=Annual%20food%20security%20statistics%20come,(CPS%2DFSS)%20data).

Vásquez-Vera, H., Palència, L., Magna, I., Mena, C., Neira, J., & Borrell, C. (2017). The threat of home eviction and its effects on health through the equity lens: a systematic review. *Social Science & Medicine*, 175, 199-208.

Versey, H. S. (2021). The impending eviction cliff: housing insecurity during COVID-19. *American Journal of Public Health*, 111(8), 1423-1427.

Winship, C., & Radbill, L. (1994). Sampling Weights and Regression Analysis. *Sociological Methods & Research*, 23(2), 230-257.

Figures

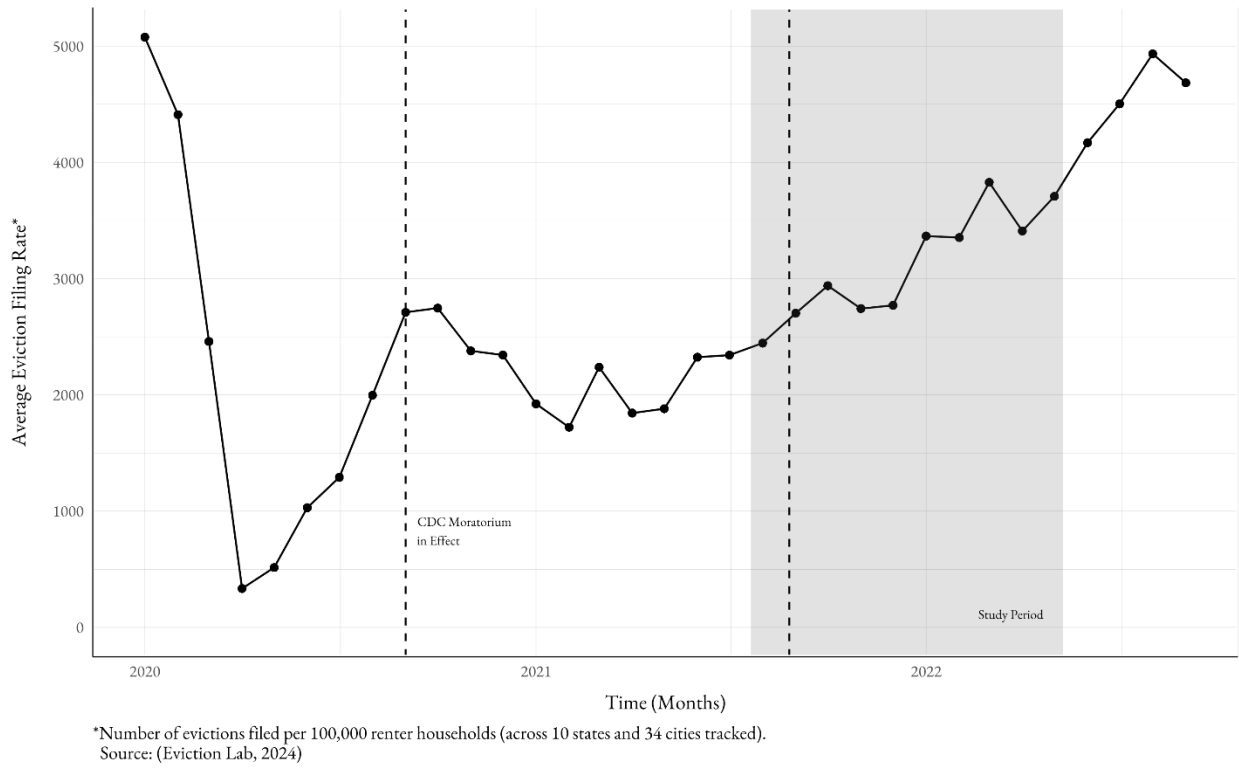
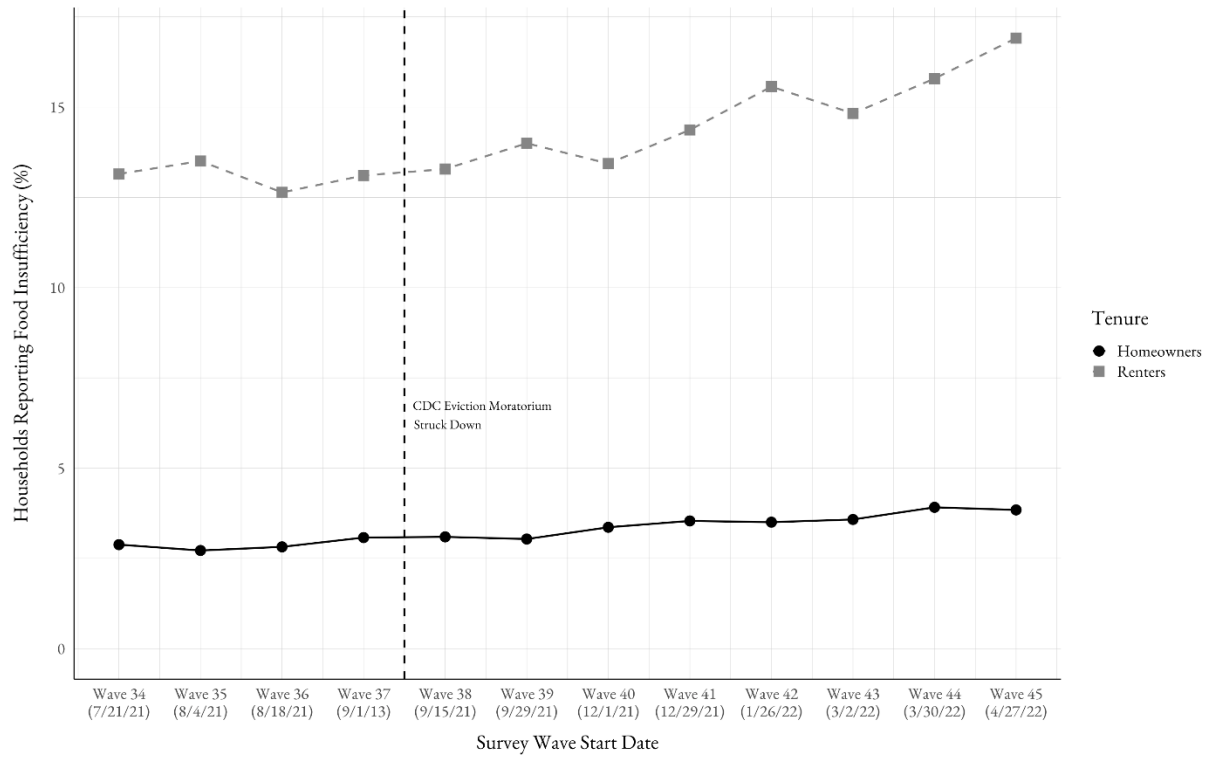


Figure 1: Average Monthly Eviction Filing Rates (Jan. 2020 to July 2022)



Source: Household Pulse Survey

Figure 2: Percentage of Households Experiencing Food Insufficiency by Tenure by Survey Wave

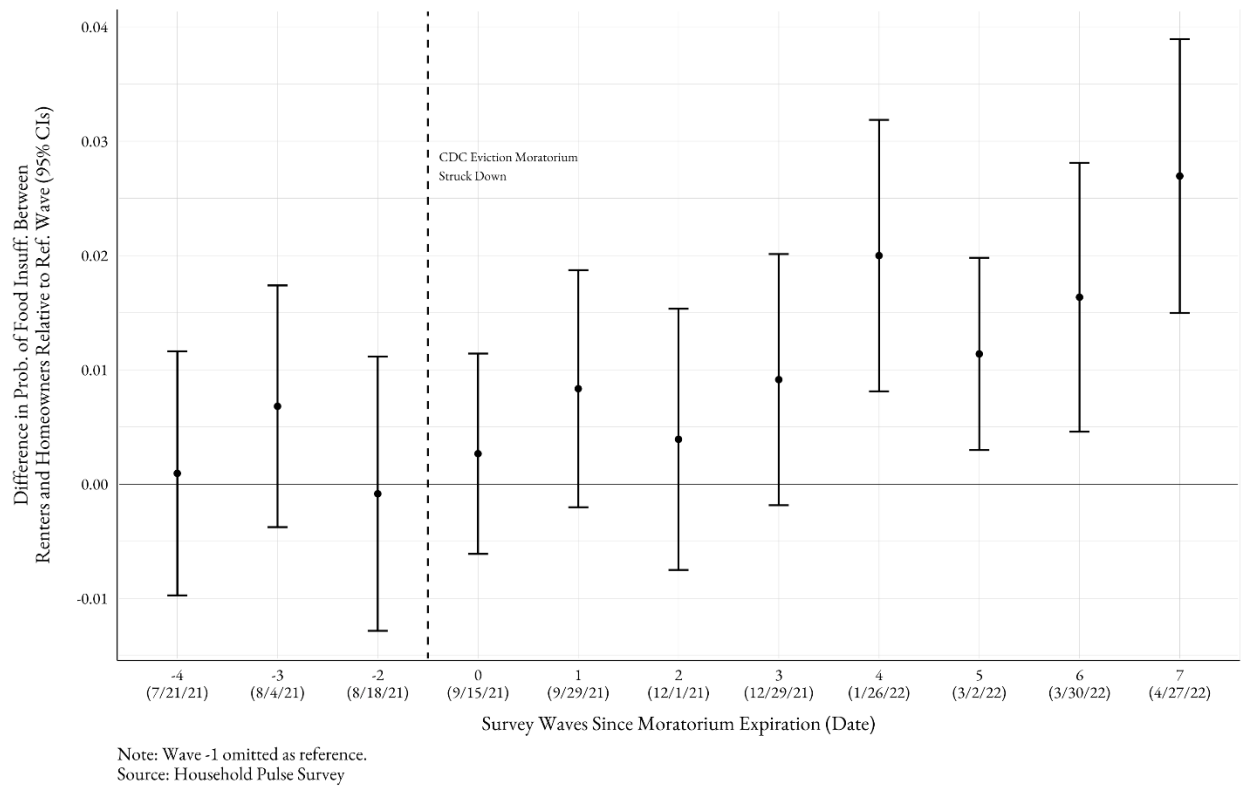
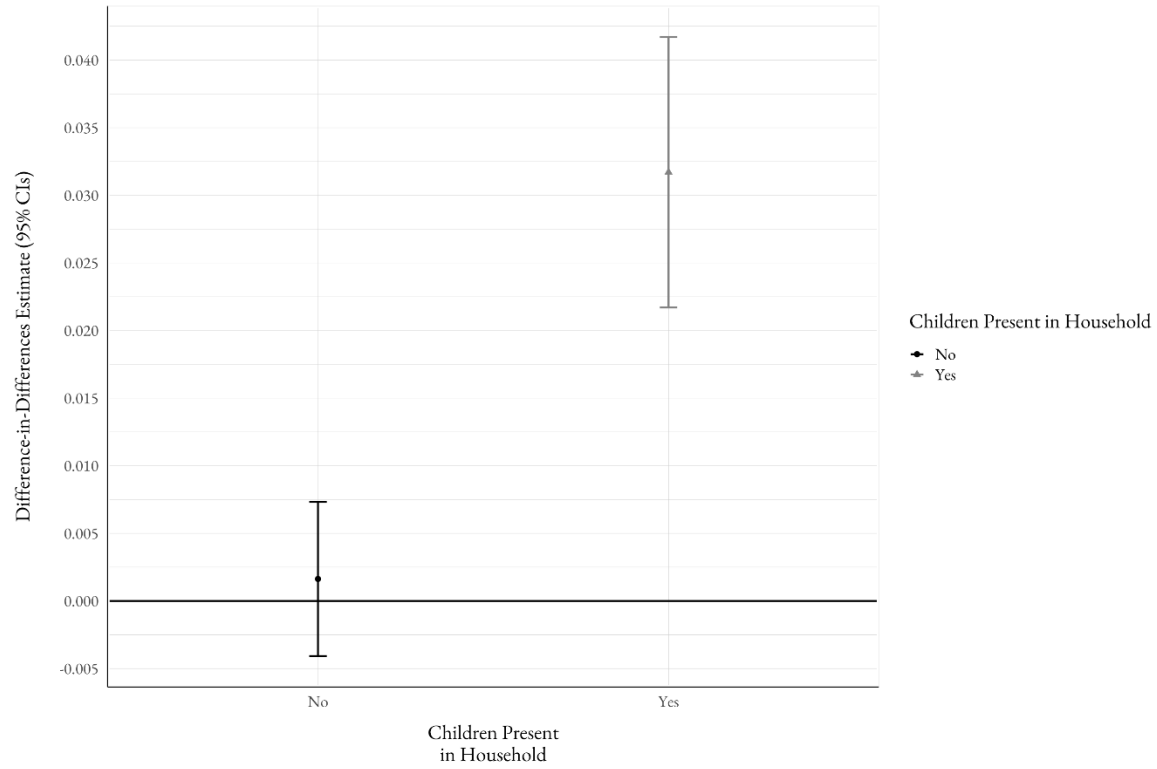


Figure 3: Difference-in-Differences Estimates of the Association Between Eviction Moratorium End and Food Insufficiency by Tenure (Event Study)



Note: Figure based on Table 9 estimates, including all covariates listed.
 Source: Household Pulse Survey

Figure 4: Difference-in-Differences Estimates of the Association Between Eviction Moratorium End and Food Insufficiency by Children Present

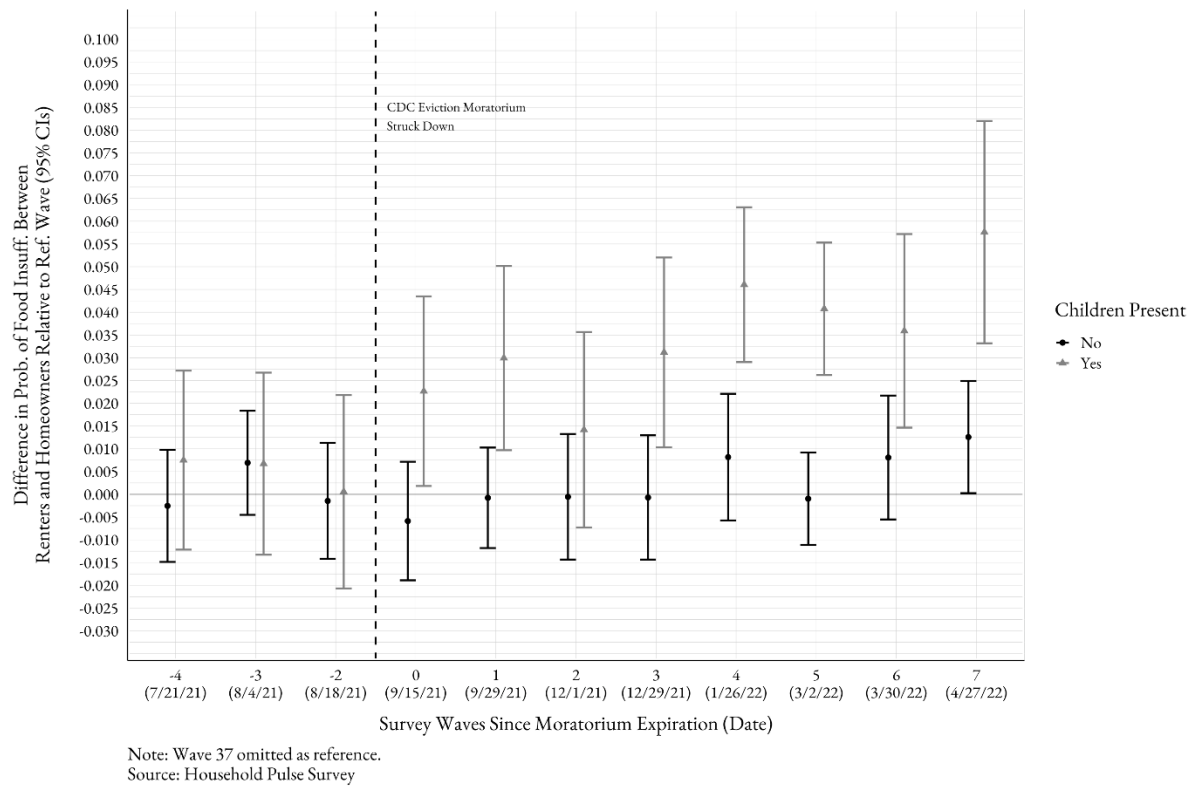


Figure 5: Difference-in-Differences Estimates of the Association Between Eviction Moratorium End and Food Insufficiency by Tenure and Children Present (Event Study)