

DISCUSSION PAPER SERIES

IZA DP No. 17248

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on the Use of Alternative Financial
Services Loans**

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ABSTRACT

The Effects of Utility Shutoff and Eviction Moratoria during the COVID-19 Pandemic on the Use of Alternative Financial Services Loans*

To protect financially distressed families during the COVID-19 pandemic, states implemented emergency measures such as moratoria on evictions and utility shutoffs. These policies prevented utility companies from disconnecting families' energy and water and landlords from obtaining court-ordered evictions for non-payment. Without these protections, consumers might have turned more often to high-cost alternative financial service (AFS) loans – such as payday loans - to pay their utility bills and rent. Using a random sample of 5 million consumers, we investigate whether moratoria on evictions and utility shutoffs impacted consumers' AFS use. Adults in states with an eviction or utility shutoff moratorium were less likely to borrow from high-cost non-banking institutions. Residents of high-poverty and Hispanic neighborhoods benefited the most from these protections. These results suggest that with such protections, families did not have to turn as often to high-cost loans to ensure access to housing and energy during financial distress.

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I. Introduction

The use of alternative financial services (AFS) loans, such as payday loans, is of major concern to advocates and of high interest to policymakers. Advocates fight "predatory lending" and find that payday lenders "put consumers in a debt trap with balloon payment loans of 300% APR or more" (NCLC, 2024). Senators recently introduced the Predatory Lending Elimination Act (S.3549, 2024). Regulators, such as the Federal Trade Commission (FTC) and Consumer Financial Protection Bureau (CFPB), warn consumers of the very high annual percentage rate (APR) and have filed multiple enforcement actions (FTC, 2024) and issued a rule to protect consumers from AFS loans (CFPB, 2017). But the reality is that millions of Americans use AFS loans. As of 2018, as many as 29% of US adults had used at least one form of alternative borrowing in the past five years (FINRA, 2019), with the percentage far higher for Black (50%) and Hispanic adults (38%).

Consumers, especially those without access to any or enough traditional credit (e.g., credit cards) or emergency savings, typically turn to AFS loans in times of financial distress to offset lost income or meet unexpected expenses. The COVID-19 pandemic brought the threat of lost income due to job loss, reduced work hours, and increased medical expenses. Black non-Hispanic and Hispanic adults experienced the most COVID-19 illness risk during the pandemic (Robertson et al., 2022).

US federal and state governments stepped in with policies to support financial well-being, given concern that the economic pressures associated with the pandemic could increase the number of people in financial distress. Many households potentially found themselves unable to pay energy, water, and telecommunications bills and rent (Karpman and Zuckerman, 2021). The federal government stepped in with the CARES Act. State governments also stepped in with policies designed to stabilize households' tenure and access to essential services. These policies included state-wide utility shutoff moratoria, where utility companies were prevented from disconnecting families' energy and water services due to bill non-payment or late payment. To provide housing relief for renters, many states implemented a state eviction moratorium where landlords could not move forward with court-ordered evictions for rent non-payment or

late payment.¹ Even before the pandemic, many Americans faced the threat of eviction and utility disconnection. About 7.8 eviction filings occurred per 100 renting households nationwide in 2018 (GAO, 2024). Additionally, approximately 15% of U.S. households received a utility disconnection notice, with 3% experiencing actual service disconnections in 2015 (Hernández & Laird, 2022).

We investigate the impacts of state moratoria on evictions and utility shutoffs on the use of alternative financial services loans during the COVID-19 pandemic.² AFS products are loans obtained from a non-traditional banking institution. Examples of AFS loans include short-term small-dollar loans (such as payday loans), loans where personal property is used as collateral (such as pawn shop and auto title loans), and transactions under which property is leased in exchange for a weekly or monthly payment with the option to purchase (rent-to-own). Often, consumers use AFS loans when faced with economic hardship, despite the fact that they have higher borrowing costs than mainstream financial services (Sawyer and Temkin, 2004; Bhutta, Skiba, and Tobacman, 2015).³ Consumers report using AFS loans to cover emergency expenses and pay bills when they have no other credit options (Lee and Kim, 2018).

We hypothesize that utility shutoff and eviction moratoria will reduce AFS use. We anticipate that these protection policies provide relief for people experiencing adverse economic shocks. Without these protections, consumers who experienced a financial emergency (e.g., job loss, reduced work hours, increased medical expenses) during the pandemic might have turned to high-cost alternative financial products – such as pawn shop loans- to pay their utility bills and rent and ensure their basic living conditions and needs.

Nonetheless, indirect effects could conceptually increase consumer AFS use. Landlords and utility companies might be reluctant to serve perceived risky consumers if they cannot evict or disconnect their services due to non-payment. If so, utility shutoff and eviction moratoria could lead to consumer difficulty

¹ State protection policies were widely implemented across the political spectrum. In 2020, 12 of the 32 states that implemented a utility shutoff moratorium had Republican governors. Similarly, 18 of the 42 states with an eviction moratorium had Republican governors.

² We do not investigate the effects of federal policies, such as the Emergency Broadband Benefit or foreclosure moratorium, because we focus on state policies. However, federal-level policies are controlled for in our analysis through month-year fixed effects. Also, consumers who use AFS are less likely to be homeowners (e.g., only 17% of AFS users in our data had a mortgage).

³ The average Annual Percentage Rate (APR) of a \$300 payday loan can be as high as 600% in states without APR caps (Center for Responsible Lending 2021).

accessing housing and basic living services and increased AFS use to offset resulting financial changes. For example, decreased access to housing could lead to increased temporary living expenses, job loss, and other financial challenges associated with homelessness.

Using bimonthly data from a random sample of 5 million consumers from February 2020 to February 2021, we compare AFS use rates of treated and comparison states before and after the implementation of a state-level utility shutoff or eviction moratorium. Our estimation approach accounts for a rich set of confounding factors, such as the county-level number of COVID-19 cases and deaths per capita, state-level COVID-19 vaccination data, state business restrictions (e.g., restaurant closure orders), state-level unemployment rates, and other state-level consumer protection policies during the pandemic (e.g., vehicle repossessions and garnishment suspensions).

We find that residents of states with an eviction or utility shutoff moratorium were less likely to use AFS loans. In our preferred specification, we find that the implementation of a utility shutoff moratorium reduced the state-wide AFS use rate by 0.9% (0.04 percentage points), and the eviction moratoria reduced the state-wide AFS use rate by 1.2% (0.05 percentage points). The effects were concentrated on consumers living in disadvantaged communities, who may be more likely to use the economic relief. Residents of high-poverty and majority Hispanic zip codes experienced a larger decline in AFS after a utility shutoff or eviction moratorium. While these intent-to-treat effects are small in magnitude, we interpret this finding as evidence that in states with such protections, families did not have to turn as often to high-cost loans to ensure basic living conditions during economic hardship.

To test the validity of these findings, we provide a couple of robustness checks. First, we restrict the sample to consumers who could not benefit from the forbearance of federally insured mortgages and student loans mandated by the CARES Act. Second, we focus the analysis on consumers living in states without any restrictions on payday and other high-cost installment loans. Third, we restrict the sample to consumers in bordering counties within states that implemented each protection policy and their neighboring counties within states that did not implement that policy. These bordering counties are more likely to experience similar economic shocks during the pandemic but differ in their ability to take advantage

of these protection policies. The results of these robustness checks are generally consistent with our preferred specification.

We also examine the lasting impacts of these protection policies on the use of alternative financial services (AFS). Our analysis reveals persistent effects of moratoria on utility shutoff and eviction over time. Notably, in states where these policies remained active for more than four months, we observe a sustained decrease in AFS use even 10 to 11 months following their implementation. Moreover, the effects of state-level eviction moratoria appear to intensify over the course of our one-year timeframe.

This paper contributes to the growing literature on the effects of the COVID-19 pandemic on families' financial well-being (Yannelis and Amato, 2023). Despite increased unemployment in the wake of the pandemic, key credit health measures improved during the period (Martinchek et al., 2022; Federal Reserve Board, 2022; Karpman et al., 2022). Evidence shows that financial improvements can be explained in part due to the active government response to the crisis.⁴ Cherry et al. (2021) show that debt forbearance can account for a substantial portion of prevented defaults during the pandemic. Ganong et al. (2022) found that increases in the amount of unemployment insurance had large effects on household spending. Research also shows that state eviction moratoria reduced household food insecurity and mental stress (Leifheit et al., 2021; An, Gabriel, and Tzur-Ilan, 2022; Ali and Wehby, 2022). In a companion paper, we find that moratoria on utility shutoffs was associated with declines in the delinquency of mainstream credit products, such as auto loans and credit cards (Andre et al., 2024).

This paper also contributes to the literature on the reasons consumers borrow from alternative financial institutions. Evidence shows that individuals apply for payday loans when they have limited access to mainstream credit (Bhutta, Skiba, and Tobacman, 2015; CFPB, 2017) and do not have health insurance to cover medical bills (Allen et al., 2017; Fitzpatrick and Fitzpatrick, 2021). Covering emergency expenses and paying bills is often cited by AFS borrowers as the main reason for using these high-cost loans (Lee and Kim, 2018). Past research has shown that price caps and prohibitions on AFS products are associated with reduced product use (McKernan, Ratcliffe, and Kuehn, 2013). Evidence also shows instances where

⁴ During the period, household cash balances, investment accounts, luxury consumption, and house valuations soared in part due to expansive fiscal and monetary policies.

interest-free credit can be more efficient than high-cost alternative financial products (Salleh, Jaafar, and Ebrahim, 2014). In addition, consumers in states that tighten restrictions on debt collection experience a reduction in access to mainstream credit and an increase in payday borrowing (Fonseca, 2023). This paper contributes to this literature by showing that many families could turn to AFS loans to avoid an eviction or utility shutoff during economic hardship.

II. State Consumer Protection Actions

a. Utility Shutoff Moratoria

To ensure consumers' access to basic services during the pandemic, states adopted various orders requiring electric and water service providers to abstain from disconnecting service even when customers were unable to pay their bills. The state actors who issued these prohibitions included governors, courts, and legislatures.⁵ Between March and June 2020, 31 states and the District of Columbia (DC) implemented some form of utility shutoff moratoria (Figure 1, Panel A).⁶ While virtually all the policies were implemented in the first months of the pandemic, states varied in how long these policies were in place. For example, Montana's utility shutoff moratorium started in March 2020 and ended in May 2020, lasting a little over two months, while California's utility shutoff moratorium lasted from March 2020 to October 2021. Evidence shows that states that implemented a moratorium on utility disconnections reduced COVID-19 infections and mortality rates (Jowers et al., 2021) and decreased mainstream credit delinquencies (Andre et al., 2024).

b. Eviction Moratoria

State eviction moratoria provided housing relief for renters because landlords were unable to move forward with court-ordered evictions for rent non-payment or late payment. Relief may include suspending notice of eviction to tenants, suspending filing of eviction claims, suspending hearings on eviction, suspending the entry of judgment or issuance of writs of eviction, or suspending enforcement of eviction orders or writs.

Between March and April of 2020, 43 states and DC implemented some form of eviction moratorium

⁵ A few counties and cities also implemented a utility shutoff moratorium during the pandemic, but this study focuses on state-level moratoria.

⁶ A few states started a second utility shutoff moratoria policy during the period of analysis, which we account for. For example, Vermont had its first moratorium between March and October of 2020 and the second between December 2020 and May 2021.

(Figure 1, Panel B). These actions can be classified as either executive declarations, state legislative actions, or court orders designed to provide housing relief by suspending evictions during the pandemic. For example, the governor of Alabama issued a state of emergency declaration in April 2020 directing state, county, and local law enforcement officials to cease enforcement of any order that would evict an individual from a residence for nonpayment of rent or mortgage payments. The declaration in Alabama expired in June 2020. Similarly, the governor of Minnesota issued an emergency executive order in March 2020, stopping new and pending evictions, which lasted until June 2021. Evidence shows policies that limited evictions reduced COVID-19 infections and deaths (Jowers et al., 2021; Leifheit et al., 2021b), reduced eviction filings (An, Gabriel, and Tzur-Ilan, 2022), and reduced household food insecurity and mental stress (Leifheit et al., 2021; An, Gabriel, and Tzur-Ilan, 2022; Ali and Wehby, 2022), with stronger effects often among Black households.

The Centers for Disease Control (CDC) also issued a federal eviction moratorium in effect from September 4, 2020, to July 31, 2021, which overlapped with the timing of some of the state eviction moratoria. The federal moratorium banned evictions resulting from a lack of rent payment if the renters demonstrated financial difficulty due to COVID-19 (Ali and Wehby, 2022). Because landlords could challenge tenant declarations and initiate eviction proceedings at any time, the federal eviction moratorium was much narrower in scope than the state moratoria.

III. Data

The primary data source for this study is Urban Institute longitudinal credit bureau data merged with unique data on the use of alternative financial products. The Urban Institute longitudinal credit bureau data consists of a pull of a random 2% sample of deidentified consumers from a major credit bureau (about 5 million adults with a credit record).⁷ This study uses bimonthly data from February 2020 to February 2021. The consumer panel is refreshed at each data pull to keep the sample representative at the national level and contains an array of information on consumer credit profiles, including the amount of debt and

⁷ Per our purchase agreement with the credit bureau, we cannot name the data provider in our research products. The sampling procedure was created with our data provider and is standardly used by researchers purchasing credit bureau data. We selected the sample of consumers based on the last digits of their randomly created IDs.

delinquencies.⁸ The data include geographic identifiers at the zip code-level and ages for all adults with a credit file but no additional demographic details. All records were stripped of personally identifiable information.

We merge these credit bureau data with unique alternative financial product use data. For each consumer in our panel, we add information on alternative financial service loans from a Fair Credit Reporting Act (FCRA) regulated agency focused on data reporting for underbanked, near-prime, and subprime consumer segments. This unique data source is derived from various financial service providers, including online small-dollar lenders, online installment lenders, storefront small-dollar lenders, and lenders providing single payment, line of credit, auto title, and rent-to-own products. Using these data, we can identify whether each consumer in our panel has an active loan from a nonbank institution that uses the underwriting services of the FCRA-regulated agency. The loans include short-term loans (installment loans, nonprime credit cards, auto title loans, rent-to-own) and single-pay credit (pawn shops and payday loans). These data cover over 70% of non-prime consumers across the United States (Miller and Soo 2021) and are only available bimonthly from February 2020 to February 2021.⁹ Past work using similar AFS data from an FCRA-regulated agency specialized in AFS products includes Miller and Soo (2021), Brown, Collins, and Moulton (2022), and Fonseca (2023). To further validate data, we benchmarked national statistics on alternative financial service loan use from our data to analogous statistics reported in a nationally representative survey of consumers.¹⁰

The credit bureau and AFS data have a few limitations. First, these data exclude information on roughly 11% of US adults with no credit file (Brevoort et al., 2015).¹¹ Second, they do not contain consumer demographic and socioeconomic characteristics like race, ethnicity, or income. We enrich the data using the 2015-2019 American Community Survey (ACS) 5-year estimates to address this limitation. Specifically, we

⁸ Consumers only leave the panel if they no longer have a credit record (e.g., due to being identified as deceased), but a nationally representative sample of consumers with new credit records is added to the panel at each new data pull.

⁹ Our data provider no longer shares its AFS data after February 2021.

¹⁰ According to our data, 4.4% of consumers had used any form of alternative financial services credit in February 2020. This is comparable with the 5% of adults who reported using any alternative financial sector borrowing service (payday loan, paycheck advance, pawn shop, auto title loan, tax refund advance) over the past 12 months in the Federal Reserve Board's 2019 Survey of Household Economics and Decision Making (Canilang et al., 2020).

¹¹ Black, Hispanic, and younger consumers are more likely to be credit invisible in addition to those living in low-income neighborhoods (Brevoort et al., 2015).

incorporate zip code–level information on demographic and socioeconomic characteristics of locations where individuals live to assess heterogeneous policy effects across key groups. For example, from the ACS, we can obtain the share of residents in a ZIP Code Tabulation Area (ZCTA) below the poverty level and the share of residents who identify as non-Hispanic Black or Hispanic. Using the zip code of residence from the credit bureau data in February 2020, we classify adults with a credit record as living in communities with high poverty levels (where more than 30% of individuals earn incomes below the federal poverty level) and in majority-Black and majority-Hispanic communities (where at least 50% of the population identifies as non-Hispanic Black or Hispanic, respectively).

Our analysis restricts the sample to the 5,167,777 consumers observed in the data in February 2020 – our baseline period.¹² Among these consumers, 4,904,709 are observed in the February 2021 data pull. We classify consumers based on their credit score and zip code of residence in February 2020. Subprime consumers have a Vantage Score below 600 in our baseline period, representing 24.9% of all consumers in our sample (Table 1). We also identify that 4.7% of our sample lives in high-poverty communities, 5.5% are residents of majority Black, and 9.7% are residents of majority Hispanic communities in February 2020.

The primary outcome of our analysis is an indicator of whether a consumer has an alternative financial sector (AFS) loan in our February 2020 to February 2021 time period. Alternative financial services loans include short-term loans (installment loans, nonprime credit cards, auto title loans, rent-to-own) and single-pay credit (pawn shops, payday loans) from non-banking institutions. We cannot distinguish AFS short-term and single-payment loans in the data. About 4.4% of all consumers in our sample had a reported AFS loan in February 2020 (Figure 2). The AFS use rate is much higher for subprime consumers (11.9%) and those living in majority Black zip codes (8%) borrowing from a non-banking institution in February 2020. All groups of consumers experienced an increase in AFS use during the first year of the pandemic, with the AFS loan rate increasing from 6.4% in February 2020 to 7.6% in February 2021 for residents of high-poverty zip codes.

¹² We make this restriction because we classify consumers as residents of treated states based on their residence in February 2020. Second, in the subgroup analysis, we classify consumers based on their baseline characteristics – therefore – they must be observed in the data in our baseline periods.

Data on moratoria on eviction and utility shutoffs come from the COVID-19 Eviction Moratoria and Housing Policy dataset (Benfer and Koehler, 2022). The data include information on the first effective date as well as the expiration for each state action. By the end of April 2020, 57% of states had a utility shutoff moratorium, and 84% had an eviction moratorium (Table 2). However, many states let those protections expire throughout the pandemic, such that only 24% of states had an active utility shutoff moratorium in February 2021, and 33% had an active eviction moratorium.

We use data from many different sources to control for time-varying policies and factors that vary across states. We use county data on COVID-19 cases and deaths from the *New York Times* (adjusted to per capita metrics using 2019 American Community Survey population estimates) and state-level vaccination data from the Centers for Disease Control and Prevention (CDC). We obtain data on state business closures and extended unemployment insurance (UI) benefits programs from the COVID-19 US State Policies Database (Raifman et al., 2020). For business closures, we create indicators for whether states had an active closure imposed for each of the following businesses: restaurants, bars, movie theatres, gyms, and childcare centers (Raifman et al., 2020). Data on state suspensions on vehicle repossessions and garnishments come primarily from the State/Local Coronavirus Consumer Debt Collection Responses collected by the National Consumer Law Center (NCLC, 2021). Finally, we obtain data on the state unemployment rate from the Bureau of Labor Statistics (2022) and the share of unemployment insurance (UI) payments made within three weeks from the US Department of Labor (2022). The control variables are available for all the periods in the analysis; we report descriptive statistics for April 2020, October 2020, and February 2021 in Table 2.

IV. Research Design and Methods

We rely on a difference-in-difference research design to identify the effects of state utility shutoff and eviction moratoria on AFS use. Using a difference-in-difference model, we compare AFS use rates of the treated and comparison states before and after the implementation of each protection policy. The underlying assumption is that those affected by the policy and the comparison group would have parallel outcome trends in the absence of state protection actions. Because the majority of states implemented their protection policies between March and April 2020, we only have one pre-treatment data observation (February 2020) and cannot directly test this hypothesis. Nonetheless, we further validate our approach by

examining whether states that implemented utility shutoffs and eviction moratoria exhibit similar trends in financial and economic metrics related to the use of alternative financial services.

We use the following model:

$$Y_{icst} = \gamma_t + \delta_c + \beta Policy_{st} + \beta X_{icst} + \epsilon_{icst}$$

where Y_{icst} is an indicator for AFS use for consumer i residing in county c in state s , in period t . Throughout the analysis, we characterize individual state and county of residence based on the consumer's home address in February 2020 to account for the potential endogeneity of migration decisions as a response to the policy implementation; γ_t includes year-month fixed effects; and δ_c includes county fixed-effects - while in some specifications, we use individual-fixed effects.¹³ $Policy_{st}$ are indicators for whether the states had a utility shutoff moratorium and eviction shutoff moratoria active in time-period t .¹⁴ X_{icst} is a large set of individual, state, and county-level controls. At the individual level, this vector of controls includes age and age squared. At the county level, we include the number of COVID-19 cases per capita and the number of COVID-19 deaths per capita. At the state level, we include the COVID-19 vaccination rate (population 18+), unemployment rate, an indicator for whether the state had an active extended UI benefits program, the share of UI payments out within three weeks, indicators for whether states had closure orders for restaurants, bars, movie theatres, gyms, and childcare centers, indicators for whether states had active suspensions on vehicle repossessions and garnishments. Standard errors are clustered at the state level.

Robustness Checks

In our first robustness check, we restrict the sample to consumers who could not benefit from the forbearance of federally insured mortgages and student loans mandated by the CARES Act.

For this purpose, we estimate a difference-in-difference model restricting the sample to consumers without a mortgage and/or student loan in February 2020.

¹³ By using individual fixed-effects, we control our regression for a consumer's credit history, improving our estimates' precision.

¹⁴ Nearly every state enacted utility shutoff and eviction moratoria during the initial months of the pandemic. Among the 44 states that implemented an eviction moratorium, 39 did so in March 2020, with the remaining 5 implementing theirs in April 2020. Similarly, of the 32 states that enacted a utility shutoff moratorium, 27 did so in March 2020, while 2 did in April, 1 in May, and 2 in June.

Another concern with the analysis is that even before the pandemic, many states had restrictions on payday and other high-cost installment loans, including caps on interest rates and direct product prohibition. While many AFS products included in the analysis are typically not subject to such restrictions, such as rent-to-own products, we provide robustness checks by focusing our analysis on twenty states without strong restrictions on any type of high-cost, short-term loans (Martinchek and Johnson, 2023).

Our third robustness check focuses on consumers living in bordering counties. One potential threat to the validity of our difference-in-difference estimation is that states experienced different policy and economic shocks during the pandemic, which could confound the effect of the utility shutoff and eviction moratoria. In our preferred difference-in-difference specification, we try to address this threat by using a rich set of controls in our regressions, but some bias might remain.

To further validate our results, we explore policy discontinuities at state borders to identify the causal effects of state consumer protection policies on the financial well-being of consumers (Dube, Lester, and Reich, 2010; Schmidt, Shore-Sheppard, and Watson, 2020). We restrict the sample to consumers in bordering counties within states that implemented the protection policy and their neighboring counties within states that never implemented that policy. These bordering counties are more likely to share similar labor markets and experience similar economic shocks. We determine which counties are bordering using the 1991 Census Bureau Contiguous County File, which lists all adjacent counties.¹⁵

To estimate the effects of the utility shutoff moratoria, we identify 726 bordering counties in states that implemented a utility shutoff moratorium during the period of analysis and 260 counties in neighboring states that never implemented this protection. For the eviction moratoria, we have 709 bordering counties in states that implemented that protection and 382 counties in neighboring states that never did.

Within those two samples, we separately estimate our bordering county difference-in-difference model:

$$Y_{icst} = \gamma_t + \delta_c + \beta Policy_{st} + \beta X_{icst} + \epsilon_{icst}$$

In this model, Y_{icst} is an indicator for AFS use for consumer i residing in bordering county c , in state s , in period t ; γ_t includes year-month fixed effects; and δ_c includes county fixed-effects. $Policy_{st}$ is an

¹⁵We adjust the county pair list to keep only counties that share a common land border or are separated by a body of water but connected by a bridge or boat.

indicator for whether the state s had the protection policy active in time-period t . X_{ist} is a large set of individual, state, and county-level controls described in the previous section. We also control for whether the state had an active eviction moratorium for the utility shutoff analysis and control for whether the state had an active utility shutoff moratorium in the eviction analysis. Standard errors are clustered at the state level.

Dynamic Effects

To better characterize the dynamic effects of the protection policies, we estimate models that disaggregate treatment effects into three groups: (1) treatment remains active for at least ten months, (2) treatment remains active between 4 to 9 months but becomes inactive afterward, and (3) treatment is active between 0 to 3 months and becomes inactive afterward. All treatment groups are compared to states that never implemented the respective policy during the same period. The goal is to characterize whether these policies have any residual effects after treatment is lifted.

Seven states had the utility shutoff moratoria remaining active for at least ten months (treatment group 1). Thirteen states had the policy remaining active between 4 to 9 months but became inactive afterward (treatment group 2). Additionally, 12 states had this policy active between 0 and 3 months (treatment group 3). Furthermore, 19 states never implemented this policy during the same period (comparison group).

Similarly, 13 states had an active eviction policy for at least ten months. Eight states had the policy active between 4 and 9 months, and 23 states had the policy active between 0 and 3 months. Additionally, seven states never implemented the policy during the same period.

Within these treatment and control group comparisons, we estimate the following models:

$$Y_{icst} = \gamma_t + \delta_c + \sum_{\tau=April\ 2020}^{February\ 2021} \pi_{g\tau} Treatment_{gs}(EY = \tau) + \beta X_{icst} + \epsilon_{icst}$$

In this model, Y_{icst} is an indicator for AFS use for consumer i residing in county c , in state s , in period t ; γ_t includes year-month fixed-effects and δ_c includes county fixed-effects. $Treatment_{gs}$ is an indicator of

whether state s is part of one of the three treatment groups listed above. $(EY = \tau)$ are indicators for periods since the policy was first implemented. X_{ist} is a large set of individual, state, and county-level controls described above. The coefficient $\pi_{g\tau}$ represents the effect of the protection policy implemented by treatment group g on AFS use in a month τ after the implementation. Standard errors are clustered at the state level.

V. Results

We find that adults living in states that implemented a utility shutoff moratorium and an eviction moratorium were less likely to borrow from an alternative financial service institution. In our preferred difference-in-difference specification with county fixed effects and controls (Table 3, model 2), we estimate that in states with a utility shutoff moratorium, consumers were 0.04 percentage points less likely to hold an AFS loan compared to consumers in states without such protection. Because 4.4% of consumers had an AFS loan in the baseline period (February 2020), this coefficient represents a 0.9% relative decline in AFS use rates after the implementation of a utility shutoff freeze. In the same model, we estimate that implementing an eviction moratorium was associated with a 0.05 percentage point (1.2%) decline in AFS use. These findings are consistent in models with individual-fixed effects and without controls.¹⁶ While small in magnitude, these intent-to-treat effects suggest that some consumers protected by these policies did not have to turn as often to alternative financial services loans to pay for their rent and utilities during economic hardship.

The estimations reveal the intent to treat effects (ITT) of protection policies on the utilization rate of alternative financial services among all consumers. Given that only a small fraction of consumers in the dataset are expected to benefit from these policies, we employ a back-of-the-envelope estimation to derive treated-on-the-treated (TOT) effects. Prior to the pandemic, approximately 3% of U.S. households encountered a utility disconnection, while 2.5% experienced eviction within a year.¹⁷ Assuming a similar proportion of consumers would potentially benefit from the respective protection policies, we calculate a

¹⁶ The effects of the state eviction moratorium might be attenuated by the implementation of the national eviction moratorium in September 2020. While narrower than state-level policies, some consumers might have taken advantage of it in comparison states, leading to an underestimation of the effects of this protection policy.

¹⁷ The percentage of households experiencing eviction is based on the estimation that 7.8% of renting households experience an eviction (GAO, 2024) and that 36% of American households are renters (Desilver, 2021).

1.3 percentage point decrease in AFS utilization among consumers shielded from utility disconnections and a 2.1 percentage point decrease among those protected from eviction moratoria.

Because these policies may not affect all consumers equally, we repeat our preferred specification of the difference-in-difference analysis for select subgroups of consumers (Figure 3 Panel A and B). Specifically, we look at the effects for consumers with a subprime credit score and those living in high-poverty, majority-Black, or majority-Hispanic communities in the baseline period. These consumers are more likely to be disadvantaged (e.g., due to discrimination). They are also more likely to benefit from the moratoria because they are more likely to be evicted and have their utilities shut off (Hepburn, Louis, Desmond, 2020; Cicala, 2021). Consumers living in these communities are also more likely to use AFS loans because of the supply of small-dollar short-term loans near them. They have more AFS providers in their communities and decreased access to other forms of small-dollar short-term loans (Goodstein and Rhine, 2017). People in these communities might also be more likely to need emergency credit because their incomes and expenses are more volatile.

While estimated with less precision, we find that utility shutoff moratoria were associated with declines in AFS use for all subgroups. The estimated effects were strongest for consumers living in high-poverty and majority-Hispanic zip codes (Figure 3 Panel A); as consumers living in high-poverty communities experienced a 0.09 percentage point decline, and consumers living in majority-Hispanic communities had a 0.18 percentage point decline in AFS use in states that implemented a utility shutoff moratorium (Table A1).

Similarly, we find that an eviction moratorium was associated with declines in AFS use for all subgroups, with the strongest effects for residents of high-poverty and majority Hispanic zip codes (Figure 3 Panel B). We estimate that in states with an eviction moratorium, consumers in high-poverty communities were 0.10 percentage points less likely to use an AFS loan than those in states without such protections (Table A1). Consumers in majority Hispanic communities were 0.14 percentage points less likely to use an AFS loan in the same states. Overall, we find larger effects of utility shutoff and eviction moratoria among consumers most likely to benefit from the relief, reassuring the validity of our estimation method.

We also investigate whether the introduction of these protection policies caused changes in the use of mainstream credit products. On the one hand, residents in states with such policies may experience improved financial stability, potentially increasing their access to mainstream credit. Conversely, in states with these policies, individuals may have reduced reliance on mainstream credit products to cover utility bills and rent during economic downturns.

Employing the same sample and difference-in-difference methods used in the primary analysis, we find scant evidence suggesting that residents in states with utility shutoff moratoria exhibit an increased likelihood of accessing mainstream credit subsequent to the implementation of these policies (Table A2). Our analysis indicates negligible and statistically insignificant impacts of utility shutoff and eviction moratoria on consumers' credit card limits post-implementation. If anything, individuals residing in states with utility shutoff moratoria were marginally less inclined to acquire new credit cards following the enactment of such policy.

Robustness Checks

We provide several robustness checks to our findings. We first investigate whether our results hold when restricting the sample to consumers who could not benefit from the forbearance of federally insured mortgages and student loans mandated by the CARES Act. Consistent with the paper's main findings, we estimate that an eviction or utility shutoff moratorium is associated with a decline in AFS use for consumers less likely to benefit from federally mandated forbearance programs (Table 4, Panel A). Further, we find stronger effects of the state-level eviction moratoria for consumers without a mortgage, which is expected as consumers without a mortgage are likely to be renters and may benefit from a state eviction moratorium.

Second, we focus our analysis on consumers in the 20 states without strong restrictions on high-cost installment loans who are more likely to benefit from these protection policies (Martinchek and Johnson, 2023). About 5 percent of adults in those states had an AFS loan in February 2020. We find negative effects of both utility shutoff and eviction on AFS use on the residents of those states (Table 4, Panel B). If anything, the effects of eviction moratoria are greater on AFS use among residents of states without restrictions on high-cost loans.

Finally, we also restrict the sample to consumers living in bordering counties of states that implemented a protection policy and their neighboring counties within states that did not implement those policies. The utility shutoff moratoria analysis found that consumers in bordering counties were 0.05 percentage points less likely to use AFS loans than consumers in states without such protections (Table 5, Panel A, model 2). This coefficient represents a 1.1% relative decline in AFS rates during the pandemic – similar to what we estimated in our preferred difference-in-difference model (which is presented in Table 3, model 2). Looking at consumers living in bordering counties of states that implemented a state-level eviction moratorium and their neighboring counties, we estimate a 0.06 percentage point (1.4%) relative decline in AFS use rates (Table 5, Panel B, model 2). While estimated with less precision due to smaller sample sizes, these effects are very similar to the ones we estimated in our preferred specification (Table 3, model 2).

Validity of Findings

While we are unable to conduct tests for parallel trends on the primary outcome analyzed in this study, we further validate our empirical approach by examining whether states that implemented utility shutoffs and eviction moratoria exhibit similar trends in financial metrics related to the use of alternative financial services. Specifically, we used credit bureau data from August 2018, August 2019, and February 2020 to assess whether the trajectories of collections rates and credit card utilization rates are comparable for residents of states with and without these protection policies.¹⁸ In our sample, 72% of AFS users have debt in collection on their credit file, compared to 27% of non-AFS users, and the credit card utilization rate is 64% for AFS users, compared to 28% among non-AFS users.

Our analysis reveals little evidence suggesting that consumers in states with utility shutoff moratoria and eviction moratoria experienced different pre-treatment trajectories regarding these financial outcomes compared to those in states without such policies (see Table A3, Panel A). The coefficients of the two protection policies during negative event years are small and statistically insignificant at a 5% level in all specifications.

¹⁸ Debt in collections encompasses past-due credit lines that have been closed and charged off on the creditor's books, as well as unpaid bills reported to credit bureaus that the creditor is attempting to collect. For instance, credit card accounts enter collections status once they are 180 days past due. Credit card utilization is the ratio between total credit card debt and total credit card limit among consumers with a credit card.

We also examine whether states experiencing deteriorating financial conditions before the pandemic were more likely to implement moratoria on evictions and utility shutoffs. Using state-level data from 2017, 2018, and 2019 (UKCPR, 2024), we investigate whether the trajectory of key indicators such as the unemployment rate, poverty rate, and food insecurity rate was parallel across states that implemented these two protection policies and comparison states (Table A3, Panel B). Our analysis indicates that the coefficients of eviction moratoria during negative event years are small and statistically insignificant at the 5% level. Similarly, the coefficient of utility shutoff moratoria during negative event years is generally insignificant, except for a slight increase in the gap in poverty rates between treated and comparison states observed between 2018 and 2019.

Finally, an important consideration for the validity of the bordering counties analysis is the possibility of residents from counties without protections relocating to neighboring states with such protections. While our treatment definition is anchored in the state of residence as of February 2020 (baseline period), we also investigate whether residents of bordering counties exhibit higher rates of interstate migration following the implementation of protection policies.

To explore this aspect, we created an indicator for each consumer in the bordering county analysis: it takes the value zero if the consumer remains in the same state as their baseline observation (February 2020), and one if they relocate to a different state. For the utility shutoff bordering county analysis, approximately 2.0% of consumers moved across states after February 2020, while 2.1% of consumers in the eviction bordering county analysis did the same. We then estimate the impact of utility shutoffs and eviction protections on the likelihood of interstate relocation after the enactment of each protection policy (Table A4). Our findings suggest limited evidence supporting the notion that residents from states lacking any protections are more inclined to move to states with such protections post-policy implementation. This aligns with existing evidence indicating that households with greater vulnerability were less prone to relocation during the pandemic than those with moderate to high incomes (Freddie Mac, 2023).

Dynamic Effects

In this section, we investigate the persistence of the effects of state utility shutoffs and eviction moratoria on consumers' use of alternative financial products. As described earlier, for this analysis, we compare the

outcomes of three treatment groups—differing in the duration of each protection policy—to the control group of residents of states that never implemented each policy during the period.

We find that the utility shutoff moratorium had a small short-term effect on AFS use when implemented briefly. Consumers in states with the protection policy active for zero to 3 months experienced a 0.11 percentage point decline in AFS use in the first three months after implementation. Still, they did not experience persistent effects after the policy was lifted (Figure 4, Panel A). However, persistent effects on AFS use were observed when the utility shutoff moratorium was active for more than four months. We observe a sustained decline in AFS use in states with the policy active for 4 to 9 months (Figure 4, Panel B) and for at least ten months (Figure 4, Panel C). Residents of states with a utility shutoff moratorium active for at least ten months experienced a 0.22 percentage point decline in AFS use throughout most of the analysis period.

We also find persistent effects of state-level eviction moratoria on consumers' use of AFS loans. In states with the protection policy active for zero to 3 months, consumers experienced a persistent 0.07 percentage point decline in AFS use in the first year after policy implementation (Figure 5, Panel A). A stronger decline in AFS use was observed in states with the policy active for 4 to 9 months (Figure 5, Panel B) and for at least ten months (Figure 5, Panel C). Residents of states with a utility shutoff moratorium active for 4 to 9 months experienced a 0.13 percentage point decline in AFS use throughout most of the analysis period. Residents of states with an eviction moratorium active for at least ten months were 0.12 percentage points less likely to use AFS loans in the first two months after implementing the policy, with effects that grew over time. We hypothesize that it might take time for some consumers to learn that they will not be evicted due to non-payment of rent. Therefore, they might still rely on alternative financial products for a couple of months after the policy is enacted.

Our finding that the effects are persistent and potentially larger over time is also consistent with concerns that using AFS loans can lead families into an endless cycle of debt (Powell, 2023). Residents in states with the protective policy who were less likely to use AFS loans in the first two months may have been even less inclined to rely on such loans 10 to 11 months later, potentially indicating a reduced need for future AFS loans to pay off previous debts.

VI. Conclusion

This study used a random sample of 5 million consumers to investigate whether state-level utility shutoffs and eviction moratoria impacted the use of high-cost alternative financial service products during the COVID-19 pandemic. We find that residents of states who implemented utility shutoffs or eviction moratoria were 0.9% and 1.2% less likely to borrow from an alternative financial service provider, such as a payday lender. The effect of these protection policies tends to be stronger for consumers living in disadvantaged communities who could benefit most from the economic relief, especially residents of high-poverty and majority-Hispanic communities. When states kept these policies for many months, the effects of eviction and utility shutoff moratoria persisted over time.

While small in magnitude (about a 1% decrease), our intent-to-treat effects speak to the importance of state protection policies during economic hardship. Given our findings, families likely turned to high-cost AFS loans in states without such protections to ensure their basic living conditions. This result is consistent with evidence that consumers use AFS loans to cover emergency expenses and pay their bills on time and suggests that if such use is prolonged, it could undermine consumers' financial well-being (Lee and Kim, 2018; Skiba and Tobacman 2019, CFPB, 2017). Our findings are also consistent with evidence that state eviction moratoria reduced household food insecurity and mental stress during the Pandemic (Leifheit et al., 2021; An, Gabriel, and Tzur-Ilan, 2022; Ali and Wehby, 2022) and that utility shutoff moratoria were associated with declines in the delinquency of mainstream credit products, such as auto loans and credit cards (Andre et al., 2024).

These findings highlight the effectiveness of relief programs in alleviating financial pressure on distressed families and closing inequalities. Despite the negative economic impacts of the pandemic, credit health and other financial well-being metrics improved for all groups, including consumers living in disadvantaged communities (Federal Reserve Board, 2022; Martinchek et al., 2022). While many potential explanations for these financial improvements exist, including federal policies and stay-at-home orders (Yannelis & Amato, 2023), we find that state consumer protection measures played a role in improving consumers' credit health.

Nevertheless, the moratorium on eviction and utility disconnection could adversely affect disadvantaged consumers in the long run. Landlords might be reluctant to rent to perceived risky tenants if they cannot evict them due to non-rental payment. Utility companies might increase their scrutiny over consumers' past credit history before serving a new household. We hope future research can measure and quantify consumer protection policies' longer-term benefits and consequences—such as state utility shutoff and eviction moratoria—on access to housing and basic services for the most disadvantaged households.

Finally, our findings speak to the importance of wealth-related policies that can better prepare consumers for future economic crises. Evidence shows that families with even a small amount of emergency (nonretirement) savings are less likely to be evicted or miss a utility payment (McKernan et al., 2016) and that consumers with a bank account had less difficulty receiving timely US federal government COVID-19 pandemic stimulus payments (GAO, 2022). Policies that remove savings penalties and thus barriers to wealth building—such as lifting or removing asset limits in means-tested programs—are associated with increased emergency savings (at least \$500 in a bank account) and increased likelihood of having a bank account (Ratcliffe et al. 2016a, b). Policies encouraging wealth building, such as matched savings accounts, could make consumers less dependent on eviction and utility shutoff relief to ensure their basic living conditions during economic hardship (Mills et al., 2019).

References

- Allen, Heidi, Ashley Swanson, Jialan Wang, and Tal Gross. 2017. "Early Medicaid Expansion Associated with Reduced Payday Borrowing in California." *Health Affairs* 36, no. 10: 1769-1776.
- Ali, Abdinasir K., and George L. Wehby. 2022. "State Eviction Moratoriums During The COVID-19 Pandemic Were Associated With Improved Mental Health Among People Who Rent." *Health Affairs (Project Hope)* 41 (11): 1583–89. <https://doi.org/10.1377/hlthaff.2022.00750>.
- An, Xudong, Stuart A. Gabriel, and Nitzan Tzur-Ilan. 2022. "More than Shelter: The Effect of Rental Eviction Moratoria on Household Well-Being." *AEA Papers and Proceedings* 112 (May): 308–12. <https://doi.org/10.1257/pandp.20221108>.
- Andre, Jennifer, Breno Braga, Cassandra Martinchek, and Signe-Mary McKernan. 2024. "The Effects of the State Utility Shutoff Moratoria on Credit Delinquencies during the Covid-19 Pandemic" *Journal of Economics and Business*, Volume 129, March–April, 106170
- Bakshi T, Rose J. 2021. "What Happened to Subprime Auto Loans during the COVID-19 pandemic?" Chicago Fed. Insights Work. Pap. 2020-15, Fed. Reserve Bank Chicago
- Benfer, Emily, and Koehler, Robert. 2022. "Eviction Moratoria & Housing Policy: Federal, State, Commonwealth, and Territory." Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2022-05-22. <https://doi.org/10.3886/E157201V1>
- Brevoort, Kenneth P., Philipp Grimm, and Michelle Kambara. 2015. "Data Point: Credit Invisibles." Washington, DC: Consumer Financial Protection Bureau Office of Research.
- Brown, Meta, J. Michael Collins, and Stephanie Moulton. 2022. "Economic impacts of the COVID-19 crisis: evidence from credit and debt of older adults." *Journal of Pension Economics & Finance*: 1-19.
- Bureau of Labor Statistics, U.S. Department of Labor. 2020. The Economics Daily, "Unemployment rate rises to record high 14.7 percent in April 2020" at <https://www.bls.gov/opub/ted/2020/unemployment-rate-rises-to-record-high-14-point-7-percent-in-april-2020.htm> (visited July 12, 2023).
- Bureau of Labor Statistics, U.S. Department of Labor. 2022. "State unemployment rates, seasonally adjusted" <https://www.bls.gov/charts/state-employment-and-unemployment/state-unemployment-rates-map.htm>

Bhutta, Neil, Paige Marta Skiba, and Jeremy Tobacman. 2015. "Payday Loan Choices and Consequences."
Journal of Money, Credit and Banking 47, no. 2-3: 223-260.

Canilang, Sara, Cassandra Duchan, Kimberly Kreiss, Jeff Larrimore, Ellen A. Merry, Erin Troland, and Mike Zabek. 2020. "Report on the Economic Well-Being of U.S. Households in 2019, Featuring Supplemental Data from April 2020." <https://ideas.repec.org//p/fip/g00002/4724.html>.

Center for Responsible Lending. 2021, March 23. "Map of U.S. Payday Interest Rates."
<https://www.responsiblelending.org/research-publication/map-us-payday-interest-rates>.

Cicala, Steve. 2021. "The incidence of extreme economic stress: Evidence from utility disconnections."
Journal of Public Economics: 104461.

Charron-Chénier, R. 2020. "Predatory Inclusion in Consumer Credit: Explaining Black and White Disparities in Payday Loan Use." In *Sociological Forum* (Vol. 35, No. 2, pp. 370-392).

Cherry, Susan F., Erica Xuewei Jiang, Gregor Matvos, Tomasz Piskorski, and Amit Seru. 2021. "Government and Private Household Debt Relief during COVID-19." *Brookings Papers on Economic Activity*, Fall, pp. 141-221

Consumer Financial Protection Bureau (CFPB). 2017.12 CFR 1041, Docket No. CFPB-2016-0025, "Payday, Vehicle Title, and Certain High-Cost Installment Loans," 82 Fed. Reg. 221 (Nov. 17), <https://www.govinfo.gov/content/pkg/FR-2017-11-17/pdf/2017-21808.pdf>. Specifically, see pp. 54,817-18.

Desilver, Drew. 2021 "As national eviction ban expires, a look at who rents and who owns in the US." Pew Research Center Blogpost (2021).

Dube, Arindrajit, T. William Lester, and Michael Reich. 2010. "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." *The Review of Economics and Statistics* 92 (4): 945-64.

Federal Reserve Board. 2022. "Economic Well-Being of U.S. Households in 2021" Federal Reserve Board Division of Consumer and Community Affairs.
<https://www.federalreserve.gov/publications/files/2021-report-economic-well-being-us-households-202205.pdf>

Federal Trade Commission (FTC). 2024. "Payday Lending." <https://www.ftc.gov/news-events/topics/consumer-finance/payday-lending>.

FINRA Foundation. 2019. *The State of US Financial Capability: The 2018 National Financial Capability Study*. Washington, DC: FINRA Investor Education Foundation.

Fitzpatrick, Anne, and Katie Fitzpatrick. 2021. "Health Insurance Transitions and Use of Fringe Banks: Evidence from the Affordable Care Act." *Contemporary Economic Policy* 39, no. 3: 557-572.

Fonseca, Julia. 2023. "Less mainstream credit, more payday borrowing? evidence from debt collection restrictions." *The Journal of Finance* 78, no. 1: 63-103.

Freddie Mac. 2023 "Low-Income Homebuyers Are Less Likely to Migrate to Cities." Insight. Accessed May 2024. <https://www.freddiemac.com/research/insight/low-income-homebuyers-are-less-likely-migrate-cities>.

Ganong, Peter, Fiona E. Greig, Pascal J. Noel, Daniel M. Sullivan, and Joseph S. Vavra. 2022. "Spending and Job-Finding Impacts of Expanded Unemployment Benefits: Evidence from Administrative Micro Data." No. w30315. National Bureau of Economic Research.

Goodstein, Ryan M., and Sherrie LW Rhine. 2017. "The effects of bank and nonbank provider locations on household use of financial transaction services." *Journal of Banking & Finance* 78: 91-107.

Gromis, Ashley, Ian Fellows, James R. Hendrickson, Lavar Edmonds, Lillian Leung, Adam Porton, and Matthew Desmond. 2022. "Estimating Eviction Prevalence Across the United States." *PNAS* Vol 119 no. 21: 1-8.

Hepburn, Peter, Renee Louis, and Matthew Desmond. 2020. "Racial and gender disparities among evicted Americans." *Sociological Science* 7: 649-662.

Hernández, Diana, and Jennifer Laird. 2022. "Surviving a Shut-off: US Households at Greatest Risk of Utility Disconnections and How They Cope." *American Behavioral Scientist* 66, no. 7: 856-880.

Jowers, Kay, Christopher Timmins, Nrupen Bhavsar, Qihui Hu, and Julia Marshall. 2021. "Housing Precarity & the COVID-19 Pandemic: Impacts of Utility Disconnection and Eviction Moratoria on Infections and Deaths Across US Counties." Working Paper. Working Paper Series. National Bureau of Economic Research. .

Karpman, Michael, Kassandra Martinchek, and Breno Braga. 2022. "Medical Debt Fell during the Pandemic. How Can the Decline Be Sustained?." Washington, DC: Urban Institute.

Karpman, Michael, and Stephen Zuckerman. 2021. "Average Decline in Material Hardship During the Pandemic Conceals Unequal Circumstances." Washington, DC: Urban Institute.

Kim, Olivia S., Jonathan A. Parker, and Antoinette Schoar. 2020. "Revenue Collapses and the Consumption of Small Business Owners in the Early Stages of the COVID-19 Pandemic". No. w28151. National Bureau of Economic Research

Lee, Jonghee, and Kyoung Tae Kim. 2018. "The Increase in Payday Loans and Damaged Credit after the Great Recession." *Journal of Family and Economic Issues* 39: 360-369.

Leifheit, Kathryn M., Craig E. Pollack, Julia Raifman, Gabriel L. Schwartz, Robert D. Koehler, Jackie V. Rodriguez Bronico, Emily A. Benfer, Frederick J. Zimmerman, and Sabriya L. Linton. 2021. "Variation in State-Level Eviction Moratorium Protections and Mental Health Among US Adults During the COVID-19 Pandemic." *JAMA Network Open* 4 (12): e2139585.
<https://doi.org/10.1001/jamanetworkopen.2021.39585>.

Leifheit, Kathryn M., Sabriya L. Linton, Julia Raifman, Gabriel L. Schwartz, Emily A. Benfer, Frederick J. Zimmerman, and Craig Evan Pollack. 2021b "Expiring Eviction Moratoriums and COVID-19 Incidence and Mortality." *American Journal of Epidemiology* 190, no. 12 (2021): 2503.

Martinchek, Kassandra, Alex Carther, Braga, Breno, Caleb Quakenbush, and Signe-Mary McKernan. 2022. "Credit Health during the Covid-19 Pandemic: Washington, DC: Urban Institute.
<https://apps.urban.org/features/credit-health-during-pandemic/>

Martinchek, Kassandra and Noah Johnson. 2023. "How Do State-Level Policies on Alternative Financial Service Loan APRs Shape Consumer Credit Health?" Urban Institute.

McKernan, Signe-Mary, Caroline Ratcliffe, and Daniel Kuehn. 2013. "Prohibitions, Price Caps, and Disclosures: A Look at State Policies and Alternative Financial Product Use." *Journal of Economic Behavior & Organization* 95: 207-223.

McKernan, Signe-Mary, Caroline Ratcliffe, Breno Braga, and Emma Kalish. 2016. "Thriving Residents, Thriving Cities." Urban Institute, Washington, DC.

Miller, Sarah, and Cindy K. Soo. 2021. "Do Neighborhoods Affect the Credit Market Decisions Of Low-Income Borrowers? Evidence From the Moving To Opportunity Experiment." *The Review of Financial Studies* 34, no. 2: 827-863.

Mills, Gregory, Signe-Mary McKernan, Caroline Ratcliffe, Sara Edelstein, Michael Pergamit, and Breno Braga. 2019. "First-year Impacts on Savings and Economic Well-being from the Assets for Independence Program Randomized Evaluation." *Journal of Consumer Affairs* 53, no. 3: 848-868.

National Consumer Law Center (NCLC), 2021. "State/Local Coronavirus Consumer Debt Collection Responses" <https://docs.google.com/spreadsheets/d/1fGU1H2HPd4miayKBil-NeXnta4sB95gUoxPjjAThERY/edit#gid=0>.

———. 2024. "Payday and Installment Loans." <https://www.nclc.org/topic/payday-and-installment-loans/>

Powell, Sharon. 2023. "Alternative financial services and avoiding the debt trap." University of Minnesota Extension. <https://extension.umn.edu/credit-and-debt/alternative-financial-services-and-avoiding-debt-trap#sources-478060>.

Predatory Lending Elimination Act. 2024. S.3549, 118th Cong. <https://www.congress.gov/bill/118th-congress/senate-bill/3549>.

Raifman, J., K. Nocka, D. Jones, J. Bor, S. Lipson, J. Jay, and P. Chan. 2020. "COVID-19 US state policy database." www.tinyurl.com/statepolicies. Accessed on March 2022.

Ratcliffe, Caroline, Signe-Mary McKernan, Laura Wheaton, and Emma Kalish. 2016a. "The Unintended Consequences of SNAP Asset Limits." Washington, DC: Urban Institute. <https://www.urban.org/research/publication/unintended-consequences-snap-asset-limits>

Ratcliffe, Caroline Signe-Mary McKernan, Laura Wheaton, Emma Kalish, Catherine Ruggles, Sara Armstrong, Christina Oberlin. 2016b. *Asset Limits, SNAP Participation, and Financial Stability*. Washington, DC: Urban Institute. <https://www.urban.org/research/publication/asset-limits-snap-participation-and-financial-stability>

Robertson, M. M., Shamsunder, M. G., Brazier, E., Mantravadi, M., Zimba, R., Rane, M. S....Nash, D. 2022. *Racial/Ethnic Disparities in Exposure, Disease Susceptibility, and Clinical Outcomes during COVID-19*

- Pandemic in National Cohort of Adults, United States. *Emerging Infectious Diseases*, 28(11), 2171-2180. <https://doi.org/10.3201/eid2811.220072>.
- Salleh, Murizah Osman, Aziz Jaafar, and M. Shahid Ebrahim. 2014. "Can an interest-free credit facility be more efficient than a usurious payday loan?." *Journal of Economic Behavior & Organization* 103: S74-S92.
- Schmidt, Lucie, Lara D. Shore-Sheppard, and Tara Watson. 2020. "The impact of the ACA Medicaid expansion on disability program applications." *American Journal of Health Economics* 6, no. 4: 444-476.
- Skiba, Paige Marta, and Jeremy Tobacman. 2019. "Do Payday Loans Cause Bankruptcy?." *The Journal of Law and Economics* 62, no. 3: 485-519.
- Sawyer, Noah and Kenneth Tempkin. 2004. "Analysis of Alternative Financial Service Providers." Urban Institute, Washington, DC.
- Yannelis, Constantine, and Livia Amato. 2023. "Household Behavior (Consumption, Credit, and Investments) During the COVID-19 Pandemic." *Annual Review of Financial Economics*.
- UKCPR. University of Kentucky Center for Poverty Research. 2024. "UKCPR National Welfare Data, 1980-2022". Lexington, KY. Available at <http://ukcpr.org/resources/national-welfare-data>
- US Department of Labor. 2022. "Benefits: Timeliness and Quality Reports"
<https://oui.doleta.gov/unemploy/btq/btqrpt.asp>
- US Government Accountability Office (GAO). 2022. "Stimulus Checks: Direct Payments to Individuals during the COVID-19 Pandemic." GAO-22-106044. June.
- . 2024. "Evictions: National Data Are Limited and Challenging to Collect" GAO-24-106637
- Wang, Jialan and Yang, Jeyul and Iverson, Benjamin Charles and Kluender, Raymond, Bankruptcy and the COVID-19 Crisis. 2020. Available at SSRN: <https://ssrn.com/abstract=3690398>

Tables

Table 1: Consumer Characteristics

	Feb-20	Feb-21
Share Subprime	24.9%	24.3%
Share in High Poverty Community	4.7%	4.6%
Share in Majority Black Community	5.5%	5.4%
Share in Majority Hispanic Community	9.7%	9.5%
# Consumers	5,167,777	4,904,709

Source: Urban Institute longitudinal credit bureau data merged with 2015-2019 American Community Survey 5-year estimates.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. Subprime consumers have a Vantage Score below 600 in February 2020. High-poverty communities are Zip Code Tabulation Areas (ZCTAs) where more than 30% of the population earns incomes below the federal poverty level. Majority Black and Majority Hispanic Communities are ZCTAs where at least 50% of the population identifies as non-Hispanic Black or Hispanic, respectively.

Table 2: Policy and Control Variables - State-Level Statistics

	Apr-20	Oct-20	Feb-21
State Protection Policy			
% State Utility Shutoff Moratoria	57%	29%	24%
% State Eviction Moratoria	84%	33%	33%
Controls			
% Daycare Closures	29%	0%	0%
% Restaurant Closures	92%	2%	6%
% Bar Closures	98%	22%	27%
% Gym Closures	96%	4%	4%
% Movie Closures	96%	12%	8%
% State Repossessions Suspensions	14%	6%	6%
% State Garnishment Suspensions	25%	31%	29%
Average COVID-19 Cases (per 100k)	237	766	654
Average COVID-19 Deaths (per 100k)	13	8	18
Average COVID-19 Vaccination Rate (18+)	0%	0%	0%
Unemployment Rate	14%	6%	6%
% UI payments out within three weeks	91%	60%	67%
Extended UI Benefits Program Active	6%	82%	31%
# States	51		

Source: COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: This table shows the share or number of states (out of 51) that meet each condition in the specified time period.

Table 3: Difference-in-Difference Estimations on AFS useDependent Variable: Indicator for whether a consumer has an Alternative Financial Service (AFS) Loan

	(1)	(2)	(3)	(4)
Utility Shutoff Moratoria	-0.05017 (0.00980)***	-0.03946 (0.01083)***	-0.03269 (0.00937)***	-0.02763 (0.01121)**
Eviction Moratoria	-0.06904 (0.01114)***	-0.05360 (0.01507)***	-0.05546 (0.01061)***	-0.04488 (0.01615)***
Fixed Effects	County and Time		Individual and Time	
Controls	No	Yes	No	Yes
Observations	35,058,123	35,058,123	35,058,123	35,058,123
Mean of Dependent Variable (Feb 2020)	4.41	4.41	4.41	4.41

Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. Time-fixed effects are month-year fixed effects. At the individual level, controls include age and age squared. At the county level, controls include the number of COVID-19 cases per capita and the number of COVID-19 deaths per capita. At the state level, controls include the COVID-19 vaccination rate, unemployment rate, indicator for whether the state had an active extended UI benefits program, the share of UI payments made within three weeks, indicators for whether states had closure orders for restaurants, bars, movie theatres, gyms, and childcare centers, and indicators for whether the state had an active garnishment suspension and vehicle repossession suspension. Standard errors are clustered at the state level. *** p<0.01, ** p<0.05, * p<0.1

Table 4: Difference-in-Difference Estimations on AFS Use - Robustness Checks

Panel A: Consumers without Student Loans or Mortgages

Dependent Variable: Indicator for whether a consumer has an Alternative Financial Service Loan

Sample	Consumers without...		
	Mortgage	Student Loans	Mortgage & Student Loans
	(1)	(2)	(3)
Utility Shutoff Moratoria	-0.05197 (0.01290)***	-0.03265 (0.00970)***	-0.04252 (0.01143)***
Eviction Moratoria	-0.06372 (0.01722)***	-0.04703 (0.01318)***	-0.05465 (0.01480)***
Fixed Effects	County and Time		
Controls	Yes		
Observations	25,805,896	29,307,055	21,536,899
Mean of Dep.Variable (Feb 2020)	4.947	3.714	4.143

Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. Time-fixed effects are month-year fixed effects. At the individual level, controls include age and age squared. At the county level, controls include the number of COVID-19 cases per capita and the number of COVID-19 deaths per capita. At the state level, controls include the COVID-19 vaccination rate, unemployment rate, indicator for whether the state had an active extended UI benefits program, the share of UI payments made within three weeks, indicators for whether states had closure orders for restaurants, bars, movie theatres, gyms, and childcare centers, and indicators for whether the state had an active garnishment suspension and vehicle repossession suspension. Standard errors are clustered at the state level. *** p<0.01, ** p<0.05, * p<0.1

Panel B: Consumers in States without Restrictions on High-Cost Installment Loans

Dependent Variable: Indicator for whether a consumer has an Alternative Financial Service Loan

	(1)	(2)	(3)	(4)
Utility Shutoff Moratoria	-0.04094 (0.01085)***	-0.03706 (0.01562)**	-0.02485 (0.01037)**	-0.03110 (0.01657)*
Eviction Moratoria	-0.07738 (0.01475)***	-0.06656 (0.02060)***	-0.06778 (0.01456)***	-0.06049 (0.02309)***
Fixed Effects	County and Time		Individual and Time	
Controls	No	Yes	No	Yes
Observations	23,091,264	23,091,264	23,091,264	23,091,264
Mean of Dependent Variable (Feb 2020)	5.016	5.016	5.016	5.016

Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020 and residents of 20 states without restrictions on high-cost installment loans (Martinchek and Johnson, 2023). Time-fixed effects are month-year fixed effects. At the individual level, controls include age and age squared. At the county level, controls include the number of COVID-19 cases per capita and the number of COVID-19 deaths per capita. At the state level, controls include the COVID-19 vaccination rate, unemployment rate, indicator for whether the state had an active extended UI benefits program, the share of UI payments made within three weeks, indicators for whether states had closure orders for restaurants, bars, movie theatres, gyms, and childcare centers, and indicators for whether the state had an active garnishment suspension and vehicle repossession suspension. Standard errors are clustered at the state level. *** p<0.01, ** p<0.05, * p<0.1

Table 5: Difference-in-Difference Estimations on AFS Use for Consumers Living in Bordering Counties**Panel A - Utility Shutoff Moratorium**

<u>Dependent Variable: Indicator for whether a consumer has an Alternative Financial Service Loan</u>				
	(1)	(2)	(3)	(4)
Utility Shutoff Moratoria	-0.06519 (0.01876)***	-0.04544 (0.01775)**	-0.04729 (0.01757)***	-0.03326 (0.01844)*
Fixed Effects	County and Time		Individual and Time	
Controls	No	Yes	No	Yes
Observations	10,665,529	10,665,529	10,665,529	10,665,529
Mean of Dependent Variable (Feb 2020)	4.274	4.274	4.274	4.274

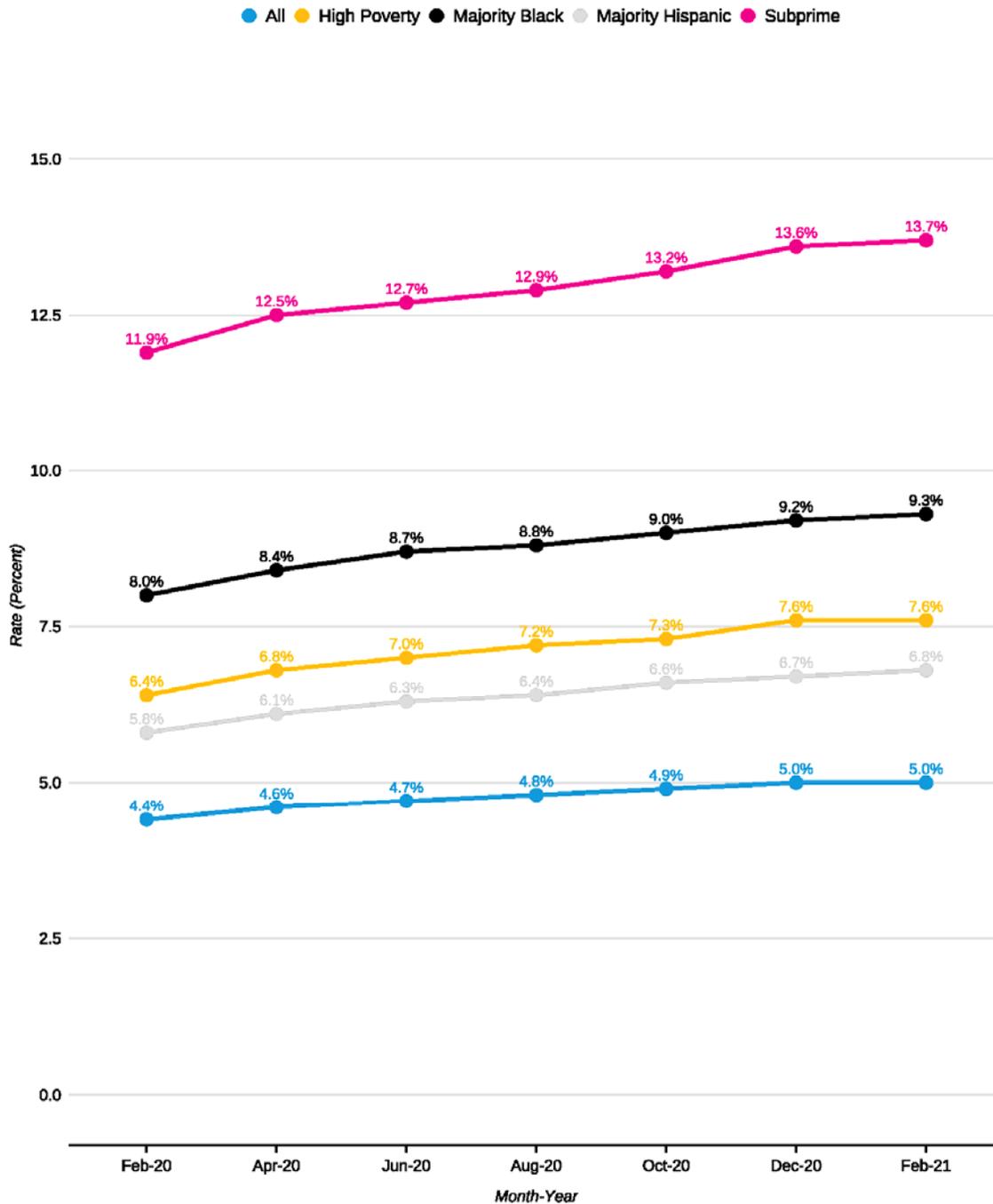
Panel B - Eviction Moratorium

<u>Dependent Variable: Indicator for whether a consumer has an Alternative Financial Service Loan</u>				
	(1)	(2)	(3)	(4)
Eviction Moratoria	-0.06198 (0.02174)***	-0.06180 (0.02434)**	-0.04913 (0.01973)**	-0.05633 (0.02503)**
Fixed Effects	County and Time		Individual and Time	
Controls	No	Yes	No	Yes
Observations	11,164,249	11,164,249	11,164,249	11,164,249
Mean of Dependent Variable (Feb 2020)	4.374	4.374	4.374	4.374

Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. We further restrict the sample to consumers in bordering counties within states that implemented each protection policy and neighboring counties within states that never implemented that policy. Time-fixed effects are month-year fixed effects. At the individual level, controls include age and age squared. At the county level, controls include the number of COVID-19 cases per capita and the number of COVID-19 deaths per capita. At the state level, controls include the COVID-19 vaccination rate, unemployment rate, indicator for whether the state had an active extended UI benefits program, the share of UI payments made within three weeks, indicators for whether states had closure orders for restaurants, bars, movie theatres, gyms, and childcare centers, garnishment suspension, and vehicle repossession suspension. Panel A also controls for whether the state had an active eviction moratorium. Panel b also controls for whether the state had an active utility shutoff moratorium. Standard errors are clustered at the state level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Figure 2 –Alternative Financial Service Use Rate Over Time

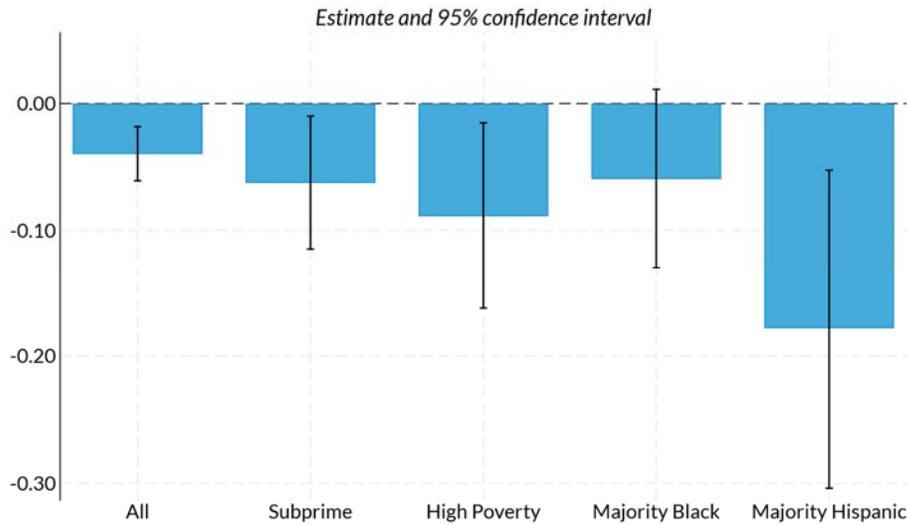


Source: Urban Institute longitudinal credit bureau data merged with alternative financial service data and 2015-2019 American Community Survey 5-year estimates.

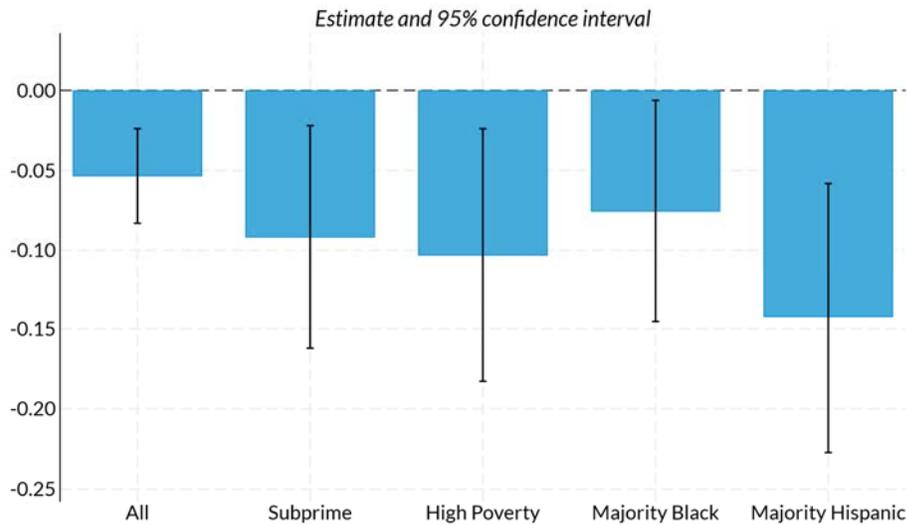
Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. Subprime consumers have a Vantage Score below 600 in February 2020. High-poverty communities are ZCTAs where more than 30% of the population earns below the federal poverty level. Majority Black and Majority Hispanic Communities are ZCTAs where at least 50% of the population identifies as non-Hispanic Black or Hispanic, respectively.

Figure 3 – Difference-in-Difference Estimations on AFS Use by Group

Panel A - Utility Shutoff Moratorium



Panel B - Eviction Moratorium

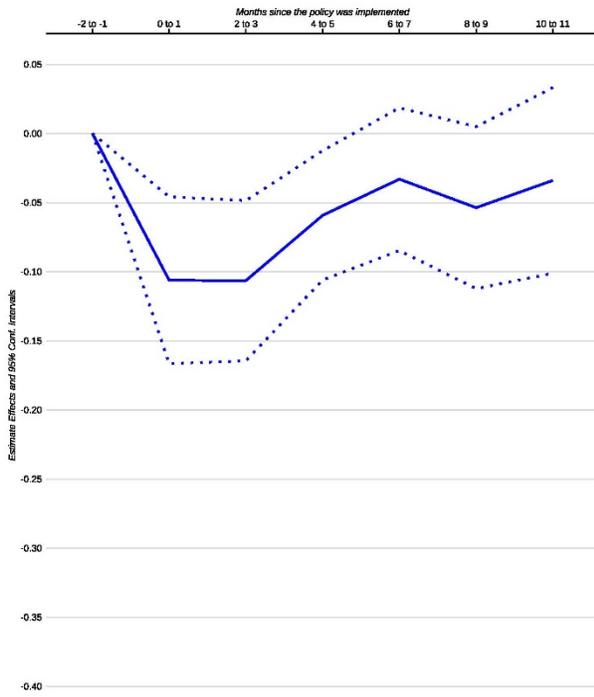


Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

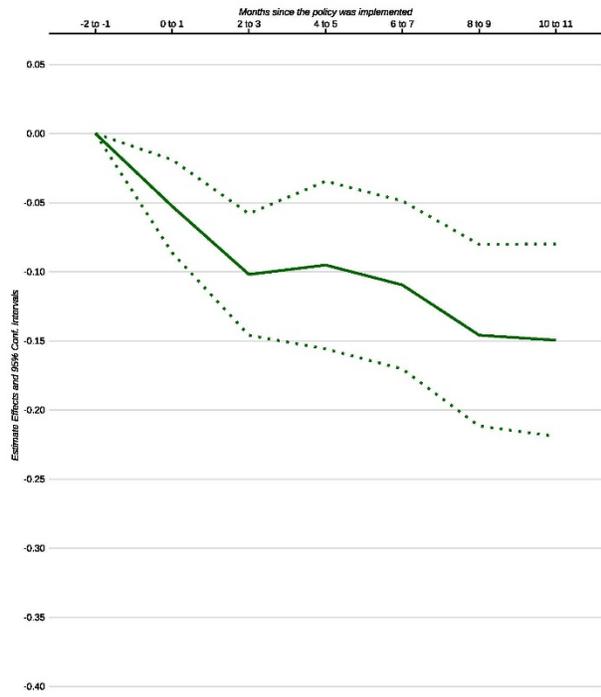
Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. Subprime consumers have a Vantage Score below 600 in February 2020. High-poverty communities are ZCTAs where more than 30% of families earn incomes below the federal poverty level. Majority Black and Majority Hispanic Communities are ZCTAs where at least 50% of the population identifies as non-Hispanic Black or Hispanic, respectively. Bars show the difference-in-difference coefficients estimated based on our preferred model, including county-fixed effects and a rich set of state-level controls (See notes from Table 3). 95% confidence intervals are based on standard errors clustered at the state level. Regression tables are presented in Appendix Table A1.

Figure 4 – Effects of Utility Shutoff Moratorium on AFS Use by Months Since Policy Implementation

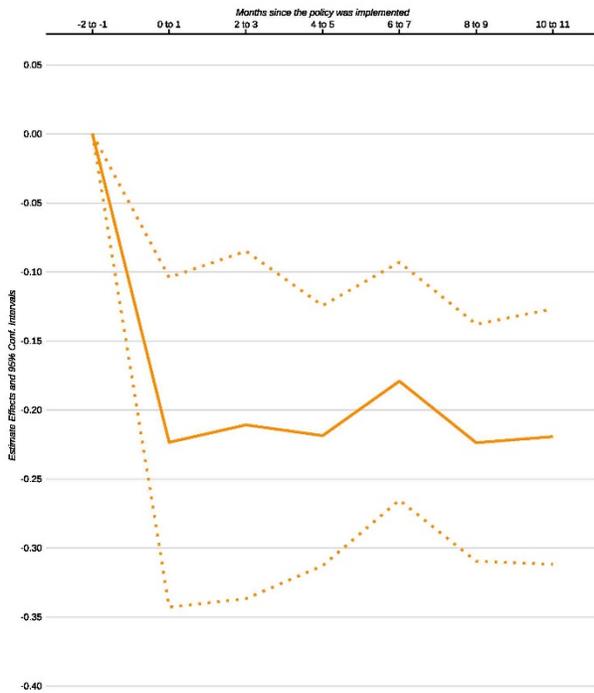
Panel A - Policy Active Between 0 to 3 Months



Panel B - Policy Active Between 4 to 9 Months



Panel C - Policy Active Between 10 Months or more

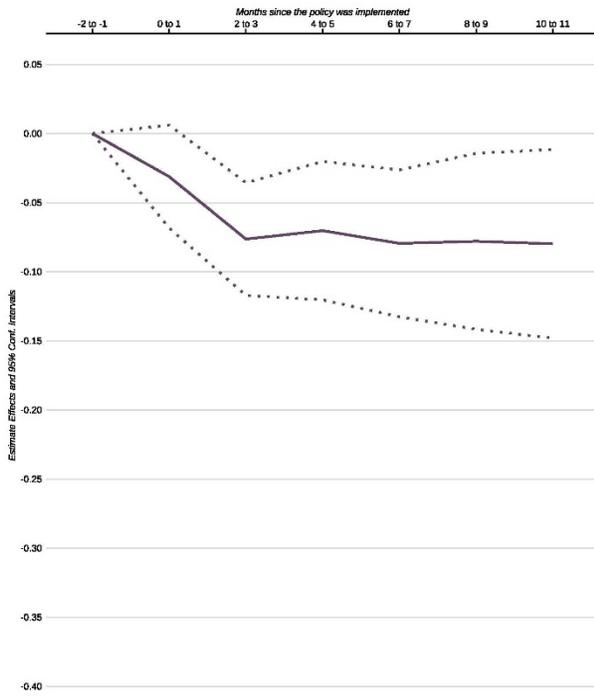


Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

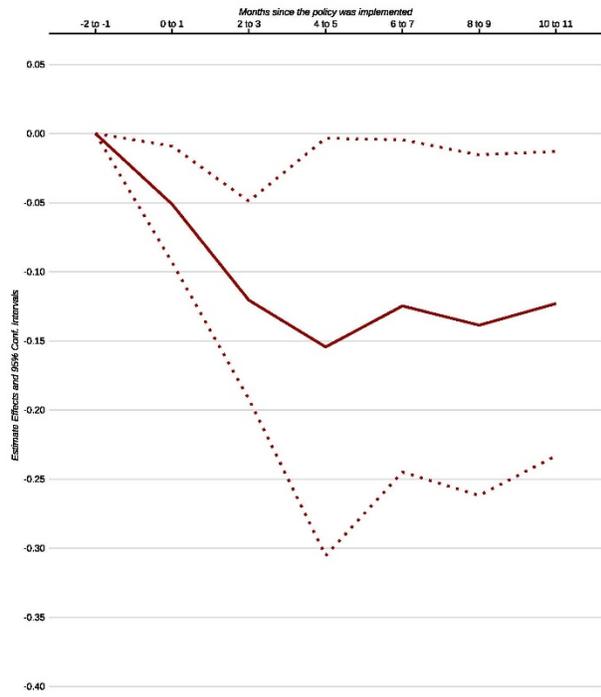
Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. In each panel, we restrict the sample to consumers living in states with an active utility shutoff moratorium in the respective time periods and states that have never implemented a utility shutoff moratorium. The graph reports the interaction coefficients between month-year indicators and an active policy indicator based on our preferred model, including county-fixed effects and a rich set of state-level controls (See notes from Table 3). 95% confidence intervals are based on standard errors clustered at the state level.

Figure 5 – Effects of Eviction Moratorium on AFS Use by Months Since Policy Implementation

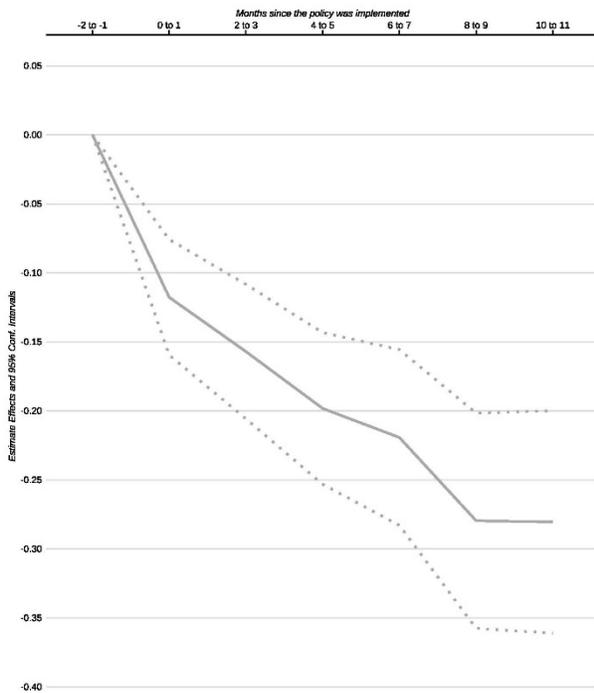
Panel A - Policy Active Between 0 to 3 Months



Panel B - Policy Active Between 4 to 9 Months



Panel C - Policy Active Between 10 Months or more



Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. In each panel, we restrict the sample to consumers living in states with an active eviction moratorium in the respective time periods and states that have never implemented an eviction moratorium. The graph reports the interaction coefficients between month-year indicators and an active policy indicator based on our preferred model, including county-fixed effects and a rich set of state-level controls (See notes from Table 3). 95% confidence intervals are based on standard errors clustered at the state level.

Appendix

Table A1 – Difference-in-Difference Estimations on AFS Use by Group

Dependent Variable: Indicator for whether a consumer has an Alternative Financial Service Loan

Subgroup	All	Subprime	High Poverty	Majority Black	Majority Hispanic
	(1)	(2)	(3)	(4)	(5)
Utility Shutoff Moratoria	-0.03946 (0.01083)***	-0.06241 (0.02674)**	-0.08869 (0.03748)**	-0.05922 (0.03597)	-0.17807 (0.06417)***
Eviction Moratoria	-0.05360 (0.01507)***	-0.09212 (0.03570)***	-0.10345 (0.04048)**	-0.07582 (0.03548)**	-0.14261 (0.04308)***
Fixed Effects	County and Time				
Controls	Yes				
Observations	35,058,123	8,610,891	1,635,294	1,913,053	3,354,209
Mean of Dep. Variable (Feb 2020)	4.41	11.88	6.39	8.01	5.79

Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. Subprime consumers have a Vantage Score below 600 in February 2020. High-poverty communities are ZCTAs where more than 30% of families earn incomes below the federal poverty level. Majority Black and Majority Hispanic Communities are ZCTAs where at least 50% of the population identifies as non-Hispanic Black or Hispanic, respectively. Difference-in-difference estimates are based on our preferred model, including county-fixed effects and a rich set of state-level controls (See notes from Table 3). Standard errors clustered at the state level.

Table A2 – Difference-in-Difference Estimations on Mainstream Credit Use

Panel A: Difference-in-Difference Estimations on Number of Credit Cards

Dependent Variable: Number of Credit Cards

	(1)	(2)	(3)	(4)
Utility Shutoff Moratoria	-0.00378 (0.00210)*	-0.00330 (0.00160)**	-0.00793 (0.00196)***	-0.00647 (0.00152)***
Eviction Moratoria	-0.00273 (0.00249)	-0.00055 (0.00212)	-0.00504 (0.00197)**	-0.00115 (0.00191)
Fixed Effects	County and Time		Individual and Time	
Controls	No	Yes	No	Yes
Observations	35,058,123	35,058,123	35,058,123	35,058,123
Mean of Dep. Variable (Feb 2020)	2.99	2.99	2.99	2.99

Panel B: Difference-in-Difference Estimations on Credit Card Limit

Dependent Variable: Credit Card Limit (\$)

	(1)	(2)	(3)	(4)
Utility Shutoff Moratoria	30.11938 (15.48439)*	17.50071 (11.33429)	-14.80039 (11.32981)	-13.51214 (9.20050)
Eviction Moratoria	3.61947 (17.71095)	3.73994 (14.83755)	-20.74307 (12.89295)	-3.87290 (11.86985)
Fixed Effects	County and Time		Individual and Time	
Controls	No	Yes	No	Yes
Observations	35,058,123	35,058,123	35,058,123	35,058,123
Mean of Dep. Variable (Feb 2020)	21,293	21,293	21,293	21,293

Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. Time-fixed effects are month-year fixed effects. At the individual level, controls include age and age squared. At the county level, controls include the number of COVID-19 cases per capita and the number of COVID-19 deaths per capita. At the state level, controls include the COVID-19 vaccination rate, unemployment rate, indicator for whether the state had an active extended UI benefits program, the share of UI payments made within three weeks, indicators for whether states had closure orders for restaurants, bars, movie theatres, gyms, and childcare centers, and indicators for whether the state had an active garnishment suspension and vehicle repossession suspension. Standard errors are clustered at the state level. *** p<0.01, ** p<0.05, * p<0.1

Table A3 – Pre-Trend Tests**Panel A: Mainstream Credit Health Outcomes**

Dependent Variable	% with Debt in Collections	Credit Card Utilization
<i>Omitted: Feb 2020</i>		
Eviction Moratoria * August 2018	-0.01548 (0.18494)	0.04526 (0.07557)
Eviction Moratoria * August 2019	0.06942 (0.11590)	-0.04452 (0.06789)
Utility Shutoff Moratoria * August 2018	0.20287 (0.18062)	0.09806 (0.06055)
Utility Shutoff Moratoria * August 2019	0.14955 (0.10904)	0.07770 (0.04576)*
Observations	14,906,441	8,976,678
Mean of Dependent Variable in Feb 2020	29.7	32.2

Panel A: Economic Outcomes

Dependent Variable	Unemployment Rate	Poverty Rate	% Food Insecure
<i>Omitted: 2019</i>			
Eviction Moratoria * 2017	-0.00901 (0.20328)	0.48459 (0.59203)	-1.03529 (1.33600)
Eviction Moratoria * 2018	0.01192 (0.11269)	-0.25145 (0.62000)	0.24690 (1.43040)
Utility Shutoff Moratoria * 2017	-0.08687 (0.15045)	-0.55556 (0.52769)	0.25543 (0.92612)
Utility Shutoff Moratoria * 2018	-0.15404 (0.09615)	-1.04242 (0.48042)**	0.40404 (0.97057)
Observations	153	153	153
Mean of Dependent Variable in 2019	3.6	10.2	11.1

Source: Panel A is based on August 2019 to February 2020 Urban Institute longitudinal credit bureau data. Panel B is based on data from 2017 to 2019 from the University of Kentucky Center for Poverty Research.

Note: In panel A, the sample is restricted to consumers observed in the credit bureau data in February 2020. Standard errors are clustered at the state level. *** p<0.01, ** p<0.05, * p<0.1

Table A4 – Interstate Mobility in the Bordering County Analysis

<u>Dependent Variable: Indicator for Interstate Mobility after February 2020</u>		
	(1)	(2)
Utility Shutoff Moratoria	0.00076 (0.00079)	
Eviction Moratoria		0.00085 (0.00051)*
Fixed Effects	County and Time	
Controls	Yes	Yes
Observations	10,665,529	11,164,249
Mean of Dependent Variable after Feb 2020	2.0%	2.1%

Source: February 2020 to February 2021 Urban Institute longitudinal credit bureau data merged with alternative financial service data, COVID-19 Eviction Moratoria & Housing Policy, New York Times, CDC, US Department of Labor, BLS, and NCLC datasets.

Note: The sample is restricted to consumers observed in the credit bureau data in February 2020. We further restrict the sample to consumers in bordering counties within states that implemented each protection policy and neighboring counties within states that never implemented that policy. Time-fixed effects are month-year fixed effects. At the individual level, controls include age and age squared. At the county level, controls include the number of COVID-19 cases per capita and the number of COVID-19 deaths per capita. At the state level, controls include the COVID-19 vaccination rate, unemployment rate, indicator for whether the state had an active extended UI benefits program, the share of UI payments made within three weeks, indicators for whether states had closure orders for restaurants, bars, movie theatres, gyms, and childcare centers, garnishment suspension, and vehicle repossession suspension. Column (1) also controls for whether the state had an active eviction moratorium. Column (2) also controls for whether the state had an active utility shutoff moratorium. Standard errors are clustered at the state level. *** p<0.01, ** p<0.05, * p<0.1