

The Effect of Payday Loan Extended Payment Plans on Financial Health: A Synthetic Difference-in-Differences Approach [‡]

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Abstract

Payday loans are long seen as predatory lending. Many states have taken steps to limit or even completely ban access to payday loans. Some states have passed extended payment plans to prevent consumers from falling into “debt traps.” This paper is the first paper to study the effect of these laws on individual financial health to the author’s best knowledge. Using the synthetic difference-in-differences method, I find that, on average, these laws reduce the total loan past due amount by \$25, and it decreases the charge-off amount by \$49. These laws are also reducing delinquency rate by about 2.9% and decreasing charge-off or debt in collections by about 2.7%.

Keywords: Household finance, consumer finance, payday loans, extended payment plans

JEL Codes: D12, D14, G2

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[†]Researcher(s) own analyses calculated (or derived) based in part on data from Clarity Services Inc. The conclusions drawn from the Clarity data are those of the researcher(s) and do not reflect the views of Clarity. Clarity is not responsible for, had no role in, and was not involved in analyzing and preparing the results reported herein.

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1 Introduction

This paper relates to several works on payday loan related topics in economics. The earlier works generally focus on the effect of access to payday loans on financial health. Using the National Survey of America’s Families (NSAF), [Melzer \(2011\)](#) found that, access to payday loans leads to hardships in paying mortgages, rent, and utility bills. Some researchers found no effect of these loans on financial well-being. For example, [Bhutta \(2014\)](#) and [Bhutta et al. \(2015\)](#) found that payday borrowing had little to zero effect on credit scores, new delinquencies, and other measures of financial health.

Recent researchers start to analyze how easier (and cheaper) access to traditional credit affects alternative borrowing. For example, [Di Maggio et al. \(2020\)](#) analyzed the effect of banks being banned to practice the reordering of transactions from “high-to-low” for their overdraft fees¹. After banks stop practicing high-to-low reordering, consumers experience improved financial health. Specifically, consumers decrease their payday loan borrowing after the ban. This is because traditional credit becomes relatively cheaper than alternative ones, hence this ban increases access to traditional banking (which in return increases credit scores and overall financial well-being). [Miller and Soo \(2020\)](#) analyzed the effect of removal of Chapter 7 bankruptcy flag² on payday borrowing. By linking traditional credit data from Experian and alternative credit data from Clarity Services, they found that flag removals increase the use of alternative credit products such as subprime installment loans.

There are also attempts on studying the effect of payday loan laws that aim to protect borrowers. For example, in January 2022, Texas mandated disclosure for consumers taking out payday loans³. In the meantime, the cities of Austin and Dallas applied stricter supply restrictions through city ordinances. [Wang and Burke \(2022\)](#) found that both statewide and city ordinances led to a significant decline in payday loan borrowing.

¹High-to-low transaction reordering significantly increases banking overdraft fees. For example, a customer has only \$400 in his checking account balance. On a particular day, he wants to withdraw a \$50 first to cover an electric bill, a \$50 for the groceries, and then a \$500 bill for rent. The typical overdraft fee for each transaction is \$35. Under a chronological transaction ordering, only one overdraft is incurred, and by end of the day, his account balance = $\$400 - \$50 - \$50 - \$500 - \$35 = -\235 . However, under the high-to-low transaction reordering, each transaction is ordered from the highest to the lowest. So the number of overdrafts incurred under this rule is 3, and by end of the day, his account balance = $\$400 - \$500 - \$35 - \$50 - \$35 - \$50 - \$35 = -\305 .

²The Fair Credit Reporting Act requires credit bureaus to remove Chapter 7 bankruptcy flags from individual credit reports after ten years.

³The disclosure requires lenders to compare the cost of payday loans with other credit products and present the likelihood of renewal in easier-to-understand terms.

2 Background on Payday Loans

Payday loan⁴ is one form of small-dollar loans⁵, which is usually repaid in a single payment on the borrower’s next payday, or other receipts of income (CFPB, 2022b). The typical loan limit is \$500, and the typical annual percentage rate (APR) is between 300% to 500%. In comparison, the APRs on credit cards only range between 12% and 30%.

Despite their high APRs, payday loans are still popular for quick cash. To illustrate, I have collected payday loan descriptions from 11 large payday loan lenders’ websites⁶ and conducted a simple text analysis. Figure D.1 illustrates the results. We can see that “cash, quick, fast, easy” are some of the most significant features. Payday loans are also described to cover “unexpected” or “emergency bills.”

2.1 Payday Loan Protection Laws in the U.S.

Because of their high APRs and the consequence of “debt traps,” Payday loans are long seen as predatory loans. Many states have passed laws to battle bad debts caused by these loans. There are four main categories of regulation on payday loans: (1) prohibitions (i.e. completely banning payday loans); (2) price caps (e.g. Some states limit payday loan APR to 36%); (3) contract requirements (e.g. Some states may restrict the number of rollovers or renewals); and (4) disclosures (e.g. Texas requires payday loan information disclosures in summer 2011).

Figure A.1a illustrates a map of each state’s payday loan laws including legal status and price caps. As of the end of 2020, thirteen states have laws in place that explicitly ban payday loans⁷. Nine states have laws that limit payday loan APRs to 36%. This is considered an effective ban since below 36% APRs are not profitable which would eventually drive all payday lenders shut down their business⁸. Figure A.1b is an example of contract requirements. This map considers both prohibited states and effective-ban states not allow payday loans. Looking at only states where payday loans are legal, most states do not allow any rollovers except for two: Texas and Nevada.

⁴In some states, a payday loan is referred to as deferred deposit, deferred presentment loans, cash advance loans, and check loans.

⁵Common small-dollar loans may include payday loans, auto title loans, rent-to-own (RTO), and pawn loans.

⁶These payday lenders are Ace Cash Express, Advance America, Cash Central, Cash Store, Check City, Check into Cash, Check n’ Go, DirectPaydayLoans, Money Tree-California, My Payday Loan, Oasis Payday Loans, and PaydayChampion.

⁷These states are: Arizona, Arkansas, Connecticut, District of Columbia, Georgia, Maryland, Massachusetts, New Jersey, New York, North Carolina, Pennsylvania, Vermont, and West Virginia.

⁸These states are Colorado, Maine, Montana, New Hampshire, New Mexico, Ohio, Oregon, South Dakota, and Virginia.

2.2 Extended Payment Plan Laws for Each State

Among the states where payday loans are legal, some have passed extended payment plan laws⁹ to help alleviate the repayment burdens - Consumers may choose these extended payment plans to pay back their outstanding payday loans in installments at no extra charge (CFPB, 2022a). The typical features of extended payment plans may include installments, plan length, allowable fees, frequency of use, consumer eligibility, and disclosures.

Figure A.1c plots the map for each state that has passed the extended payment plan laws. Table B lists detailed extended payment plans for each state. By end of the 2020, fifteen states that require lenders to provide extended payment plans¹⁰. The rest of the fourteen states where payday loans are legal do not have any extended payment plan laws passed¹¹.

3 Clarity Credit Data

This paper uses a novel dataset collected by Clarity Services, Inc. (later referred to as “Clarity”) Clarity is a subsidiary credit reporting agency of Experian that specializes in providing underwriting services and information to lenders who offer alternative credit products such as payday loans¹². Similar to traditional credit bureaus, lenders who use Clarity’s underwriting services report each loan applicant’s information to Clarity for verification purposes. Clarity then tracks each borrower’s tradeline activity. These tradelines are very similar to traditional credit reports, which include account types, balances, delinquencies, and repayment histories. This information is valuable to lenders for assessing an applicant’s default probabilities.

Clarity data includes over 60 million borrowers and covers more than 70% of non-prime consumers in the U.S. One caveat to note is that Clarity data only contains loan records of who uses its underwriting services. Despite this, Clarity may be the best existing coverage of payday loan behavior in the U.S. In addition, Clarity data has more online payday lending recorded than storefront payday lending. Figure C.1 shows these differences.

⁹Sometimes it is referred to as an “offramp.”

¹⁰These states are Alabama, Alaska, California, Delaware, Florida, Idaho, Indiana, Louisiana, Michigan, Nevada, South Carolina, Utah, Washington, Wisconsin, and Wyoming (CFPB, 2022a).

¹¹These states are Hawaii, Illinois, Iowa, Kansas, Kentucky, Minnesota, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, Rhode Island, Tennessee, and Texas.

¹²In my sample data between 2015 and 2020, about half of the observations are payday loans, the rest of them are mostly installment loans.

3.1 Sample Construction

The Clarity panel data used in this research range from 2015 January 1st to 2020 December 31st. There are two main data files. The first file “Inquiries” records each loan applicant’s characteristics, which include age, net monthly income, pay frequency, housing status, months at address, state, zip code, inquiry received date and inquiry type. The second file “Tradelines” records each borrower’s (who has opened a loan account) repayment history. The information may include the account opened date, account and portfolio type, current balance, delinquency status, and other types of account status. Each individual has a unique ID, which is used to merge these two files.

Due to data limitations, only these five states have data before the extended payment plan laws were rolled out: Delaware, Florida, Louisiana, Nevada, and Utah. The time period is measured in quarters for a few reasons. The first reason is that a smaller time period (e.g., in months) would lead to many missing periods because some states may not have recorded data. Another reason is that measurements in quarters may be more accurate since it may take some time for the new laws to take effect.

Table 1 presents each treated state’s treated date, the quarter being treated, and the total treated quarters. The quarters are being aggregated for the six years, i.e. from 2015 to 2020, the quarters range between one to twenty-four. Then the quarter being treated is assigned based on three months after the treated date. For example, if the law was effective on 2016-07-01 for Utah, then I assume the real effect takes after three months, which is on 2016-10-01. That said, the (aggregated) quarter being treated for Utah is quarter 8. This works the same for the other four states.

Table 1: STATES THAT PASSED EXTENDED PAYMENT PLANS BETWEEN 2015-2020

Treated state	Date being treated	Quarter being treated	Total treated quarters
Delaware	2018-12-12	17	8
Florida	2019-07-01	20	5
Louisiana	2015-01-01	3	22
Nevada	2017-07-01	12	13
Utah	2016-07-01	8	17

Notes: The other 11 states that also passed extended payment plans were excluded because our clarity data does not have a pre-treatment record.

3.2 Outcome Variables

The outcome variables are related to each borrower’s financial health. There are four variables that I use to measure an individual’s financial health after the law: (1) Total amount past due; (2) Total charge-off amount; (3) Delinquency rate; and (4) Charge-off or debt in collections rate. These are common measures based on multiple papers and CFPB reports.

3.3 Summary Statistics

Table 2 reports summary statistics for both control and treated states. The first half of the table compares the mean and standard error for each state’s borrower characteristics. The second half gives outcome variables statistics. We can see that the control and treated states are generally comparable, and thus their differences are unlikely to affect the model results.

4 Empirical Strategy

This section compares changes in financial health between the states that have passed the extended payment plan laws and those that did not. The synthetic difference-in-differences (SDiD) model combines advantages from both difference-in-differences (DiD) model and the synthetic control (SC) model, and it tries to solve the shortcomings of both DiD and SC models. The SDiD model follows the method presented by [Arkhangelsky et al. \(2021\)](#).

A DiD estimator is estimated as follows:

$$\hat{\tau}^{DiD} = \underset{\mu, \alpha, \beta, \tau}{\operatorname{argmin}} \left\{ \sum_{n=1}^N \sum_{t=1}^T (Y_{it} - \mu - \alpha_i - \beta_t - \tau D_{it})^2 \right\} \quad (1)$$

Where τ is our parameter of interest. The key assumption for the DiD model is the parallel trend assumption, i.e., there are no time-variant consumer-specific unobservables from the control and treated states. This assumption may not be guaranteed in all cases.

The SC estimator is estimated a bit differently:

$$\hat{\tau}^{SC} = \underset{\beta, \tau}{\operatorname{argmin}} \left\{ \sum_{n=1}^N \sum_{t=1}^T (Y_{it} - \beta_t - \tau D_{it})^2 \hat{w}_i \right\} \quad (2)$$

Table 2: SUMMARY STATISTICS FOR CONTROL AND TREATED STATES

Borrower's Characteristics		
Variables	Control States	Treated States
Age	43.993 (12.615)	44.034 (13.132)
Net Monthly Income	\$3,055.509 (\$1,724.401)	\$3,143.424 (\$1,727.416)
Months at Address	28.624 (15.018)	30.038 (16.568)
Pay Frequency: Biweekly	52.647 (6.157)	59.196 (5.525)
Pay Frequency: Monthly	21.985 (2.575)	20.738 (1.947)
Pay Frequency: Weekly	12.952 (1.350)	12.169 (1.121)
Pay Frequency: Semimonthly	12.293 (1.577)	10.611 (0.690)
Pay Frequency: Annual	0.123 (0.025)	0.287 (0.028)
Housing Status: Rent	56.368 (6.340)	58.187 (5.259)
Housing Status: Own	39.545 (4.204)	38.864 (3.466)
Housing Status: Other	3.072 (0.378)	2.554 (0.228)
Housing Status: Living with Family	0.343 (0.045)	0.144 (0.013)
Housing Status: Living with Friends	0.263 (0.064)	0.306 (0.002)
Housing Status: Living with Parents	0.408 (0.054)	0.225 (0.019)
Outcome Variables		
Variables	Control States	Treated States
Amount Past Due	\$40.680 (\$190.745)	\$41.470 (\$221.05)
Original Charge-Off	\$116.016 (\$330.941)	\$120.926 (\$359.866)
Delinquency Rate	6.861 (1.127)	5.887 (1.521)
Charge-Off or Debt-in-Collections Rate	7.563 (1.237)	6.190 (0.552)
Observations	2,498,231	360,453

Notes:

Where τ is the key parameter. The two main differences between the SC model and DiD model are that the SC model does not have the intercept and individual fixed effect, and it has a unit weight \hat{w}_i term. This vector of weights is to re-weight the so-called “donor pools” (all potential control units) and make the constructed synthetic controls very similar to the treated units’ pre-treatment periods.

Researchers have then invented the SDiD model which not only accounts for unit and time fixed effects, but also uses donor pools to construct synthetic controls to make them very similar to the

treated units before the treatment periods. One change is that the weights not only try to minimize the differences between the control and treated units, but also attempt to minimize the differences between the pre and post-treatment periods. This way, we not only have a clear parallel trend before the treatment, but we can also obtain the average treatment effect.

4.1 Synthetic Difference-in-Differences

The synthetic difference-in-differences (SDiD) model is defined as follows:

$$\hat{\tau}^{SDiD} = \underset{\mu, \alpha, \beta, \tau}{\operatorname{argmin}} \left\{ \sum_{n=1}^N \sum_{t=1}^T (Y_{it} - \mu - \alpha_i - \beta_t - \tau D_{it})^2 \hat{w}_i \hat{\lambda}_t \right\} \quad (3)$$

where Y_{it} is the outcome variable that is related to the borrower's financial health; it can be the total amount past due, total charge-off amount, delinquency rate, charge-off or debt-in-collections rate, or the total number of loans. μ is the intercept. α_i is the state fixed effect, β_t is the quarter fixed effect, D_{it} is the treatment variable, which means whether an individual lives in a state that has the extended payment plan laws or not. Our interest of parameter is τ , which identified the average treatment effect on the treated.

Note that in the equation, there are two weights: time weights and unit weights. The time weights are obtained by the following:

$$\hat{\lambda} = \underset{\lambda}{\operatorname{argmin}} \left\| \bar{y}_{post,control} - (\lambda_0 + \lambda_{pre} \cdot Y_{pre,control}) \right\|^2 \quad (4)$$

such that $\sum \lambda_t = 1$ and $\lambda_t > 0 \forall t$. Note that $\bar{y}_{post,control}$ is a 1 by $N_{control}$ row vector, λ_{pre} is a 1 by T_{pre} row vector, and $Y_{pre,control}$ is a T_{pre} by $N_{control}$ matrix of outcomes where the rows represent time and the columns represent units.

The unit weights, which is identified by \hat{w}_i , is calculated as follows:

$$\hat{w} = \underset{w}{\operatorname{argmin}} \left\| \bar{y}_{pre,treat} - (w_0 + Y_{pre,control} \cdot w_{control}) \right\|^2 + \xi^2 T_{pre} \left\| w_{control} \right\|^2 \quad (5)$$

such that $\sum w_i = 1$ and $w_i > 0 \forall i$.

The extra ξ^2 term is identified by the following:

$$\xi^2 = (N_{treat} \cdot T_{post})^{(1/4)} \sigma(\Delta_{it}) \quad (6)$$

where Δ_{it} is the first difference of $Y_{it} - Y_{i,t-1}$, and $\sigma(\Delta_{it})$ is the standard deviation of this difference.

In practice, obtaining the treatment effect will require extra steps since the treatment here involves differential timing. To illustrate, the block matrix D below shows how each state passed the extended payment plan laws at different periods. All of the control states are combined in the first column vector. The vector's values are denoted as 0 and are labeled with the corresponding quarters. For Delaware, the treatment switches on at quarter 17, so the value switches from 0 to 1 at quarter 17. For Florida, the value switches from 0 to 1 in quarter 20. And so on for the rest of the treated states.

$$D = \begin{bmatrix} \textit{Control States} & \textit{Delaware} & \textit{Florida} & \textit{Louisiana} & \textit{Nevada} & \textit{Utah} \\ 0_{Q_1} & 0_{Q_1} & 0_{Q_1} & 0_{Q_1} & 0_{Q_1} & 0_{Q_1} \\ 0_{Q_2} & 0_{Q_2} & 0_{Q_2} & 0_{Q_2} & 0_{Q_2} & 0_{Q_2} \\ 0_{Q_3} & 0_{Q_3} & 0_{Q_3} & \mathbf{1}_{Q_3} & 0_{Q_3} & 0_{Q_3} \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ 0_{Q_8} & 0_{Q_8} & 0_{Q_8} & \mathbf{1}_{Q_8} & 0_{Q_8} & \mathbf{1}_{Q_8} \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ 0_{Q_{12}} & 0_{Q_{12}} & 0_{Q_{12}} & \mathbf{1}_{Q_{12}} & \mathbf{1}_{Q_{12}} & \mathbf{1}_{Q_{12}} \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ 0_{Q_{12}} & \mathbf{1}_{Q_{17}} & 0_{Q_{17}} & \mathbf{1}_{Q_{17}} & \mathbf{1}_{Q_{17}} & \mathbf{1}_{Q_{17}} \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ 0_{Q_{20}} & \mathbf{1}_{Q_{20}} & \mathbf{1}_{Q_{20}} & \mathbf{1}_{Q_{20}} & \mathbf{1}_{Q_{20}} & \mathbf{1}_{Q_{20}} \\ 0_{Q_{24}} & \mathbf{1}_{Q_{24}} & \mathbf{1}_{Q_{24}} & \mathbf{1}_{Q_{24}} & \mathbf{1}_{Q_{24}} & \mathbf{1}_{Q_{24}} \end{bmatrix}$$

It is challenging to apply the SDiD model at once to all the data. However, it is possible to decompose the block matrix D into five smaller block matrices, each with control states and one treated state only. This way, we can apply a simple two-by-two DiD model for each small block matrix. To illustrate, the matrix D_1 is for control states and Delaware, where all values for control states are 0, and values for Delaware switch from 0 to 1 at quarter 17. Similarly, we can construct a

small block matrix D_2 for Florida.

$$D_1 = \begin{bmatrix} \textit{Control States} & \textit{Delaware} \\ 0_{Q_1} & 0_{Q_1} \\ 0_{Q_2} & 0_{Q_2} \\ \vdots & \vdots \\ 0_{Q_{16}} & 0_{Q_{16}} \\ 0_{Q_{17}} & \mathbf{1}_{Q_{17}} \\ \vdots & \vdots \\ 0_{Q_{23}} & \mathbf{1}_{Q_{23}} \\ 0_{Q_{24}} & \mathbf{1}_{Q_{24}} \end{bmatrix}$$

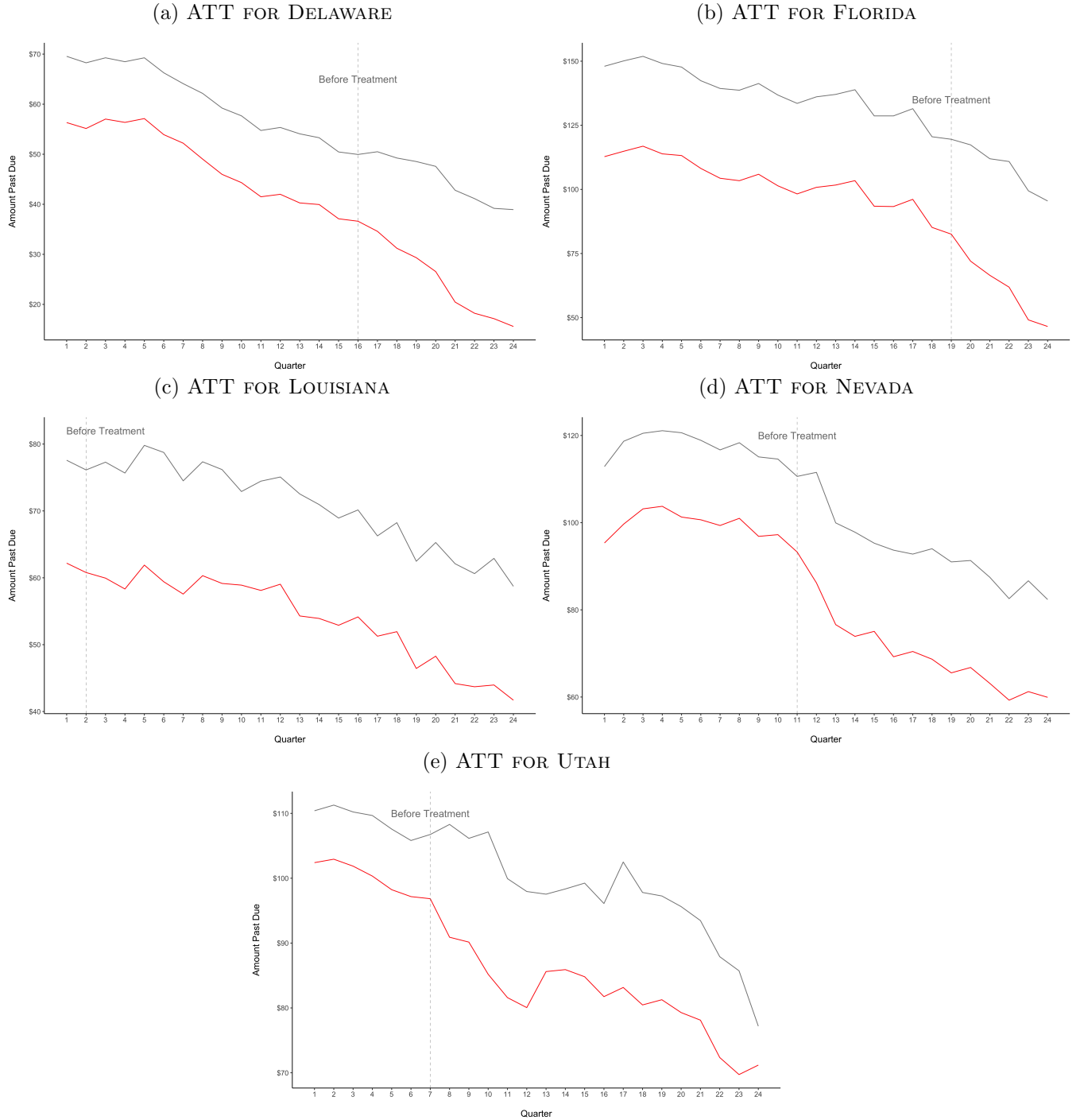
$$D_2 = \begin{bmatrix} \textit{Control States} & \textit{Florida} \\ 0_{Q_1} & 0_{Q_1} \\ 0_{Q_2} & 0_{Q_2} \\ \vdots & \vdots \\ 0_{Q_{19}} & 0_{Q_{19}} \\ 0_{Q_{20}} & \mathbf{1}_{Q_{20}} \\ \vdots & \vdots \\ 0_{Q_{23}} & \mathbf{1}_{Q_{23}} \\ 0_{Q_{24}} & \mathbf{1}_{Q_{24}} \end{bmatrix}$$

After I run simple two-by-two DiD models separately for each treated state, I can re-weight each state's average treatment effect on the treated (ATT) by their treated periods and get a final treatment effect. For example, based on Table 1, the total treated quarters for all five states are 65, then the weight is $\frac{8}{65}$ for Delaware ATT, $\frac{5}{65}$ for Florida ATT, and so on.

Figure 1 shows average treatment effect (ATT) for each treated state using SDiD model.

Table 3 presents the results from both DiD and SDiD models. After passing the extended payment plan laws, on average, the treated states have reduced \$25 amount past due and \$49 charge-off. Similarly, the delinquency rate has decreased by about 2.9%, and the charge-off or debt-in-collections

Figure 1: SDID PLOT: ATT FOR EACH TREATED STATE



Notes: For each plot, the red line represents the treated state, and the gray line is the synthetic control.

rate has reduced by 2.7%. However, the total number of loan accounts has increased by about 0.69. Because the data ends in December 2020, the results should not be affected by any Covid shocks (e.g. economic slowdowns or financial relief packages).

Table 3: STATES THAT PASSED EXTENDED PAYMENT PLANS BETWEEN 2015-2020

Post	DiD	SDiD
Outcome Variable:		
Amount Past Due	-30.5277** (14.1838)	-25.3166* (13.8418)
Original Charge Off	-52.8416*** (17.1973)	-49.4988** (19.9673)
Delinquency Rate	-0.0308* (0.0180)	-0.0289** (0.0136)
Charge Off or Debt in Collections Rate	-0.0351* (0.0212)	-0.0265** (0.0135)
Observations	3,700,369	3,700,369

Notes: The standard error for the SDiD model is obtained by bootstrap with 1,000 iterations.

4.2 Robustness Checks

Table 4: PLACEBO TEST RESULTS

Post	SDiD Placebo Test
Outcome Variable:	
Amount Past Due	0.3218 (0.4370)
Original Charge Off	-2.2471 (2.8075)
Delinquency Rate	-0.0061 (0.015)
Charge Off or Debt in Collections Rate	-0.001 (0.001)
Observations	2,498,231

Notes: The fake (randomly sampled) states are Oklahoma, Texas, Missouri, Kentucky, and Nebraska. The standard error for the SDiD model is obtained by bootstrap with 1,000 iterations.

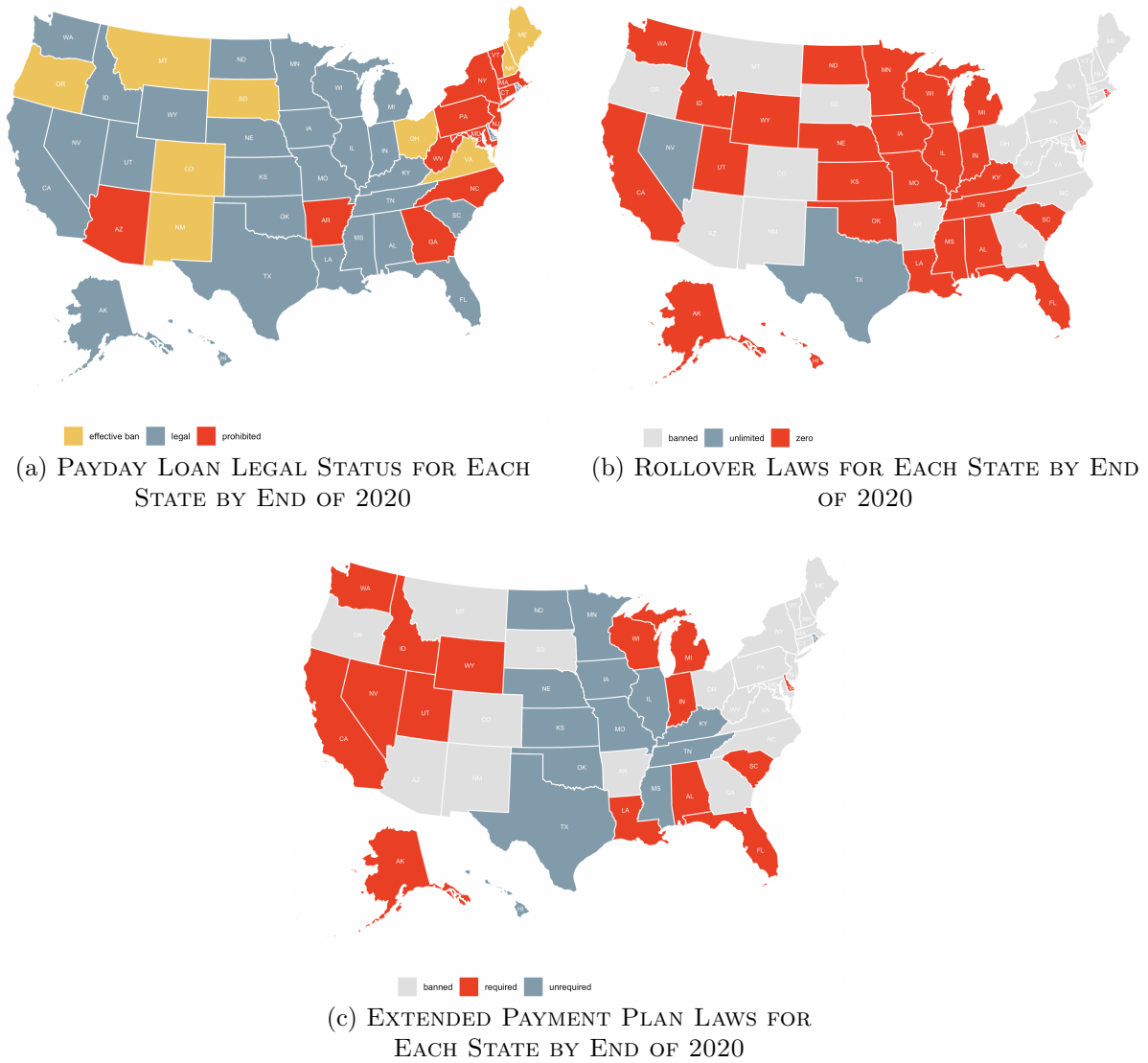
5 Conclusions and Discussions

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A Appendix: Payday Loan Laws in the U.S.

Figure A.1: MAP: PAYDAY LOAN LAWS



Notes: For figure (a), the effective-ban states are those that limit payday loan APRs to 36%. For figure (b) and (c), the gray areas represent those states that ban payday loans. The states that do not allow rollovers are in red and those who allow rollovers are in blue. Similarly, the red states require extended payment plans while the blue ones do not.

B Appendix: Extended Payment Plan Laws for Each State

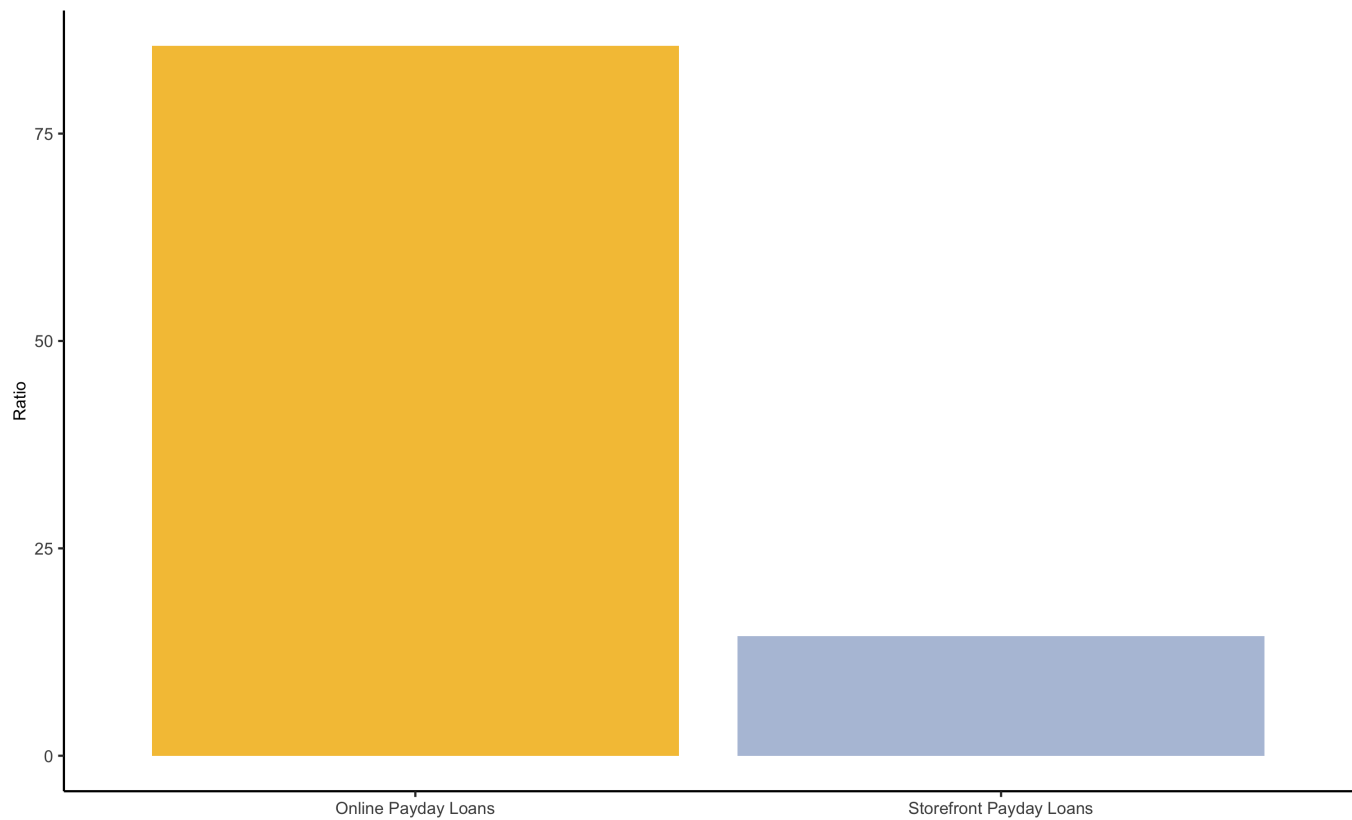
State	Law Date	Effective	Installments	Plan Length	Allowable Fees	Frequency of Use	Eligibility	Disclosure
Alabama	2004-01-01		≥ 4	NA	\$0	no time limit specified or on notice of inability to pay	loan or rollover threshold	inability to pay or default
Alaska	2010-01-01		NA	NA	\$0	no time limit specified or on notice of inability to pay	NA	loan agreement; inability to pay or default
California	2003-01-01		NA	NA	\$0	NA	NA	NA
Delaware	2018-12-12		NA	≥ 60 days	\$0	NA	loan or rollover threshold	NA
Florida	2019-07-01		NA	≥ 60 days	\$0	no time limit specified or on notice of inability to pay	credit or counseling	loan agreement; inability to pay or default
Idaho	2014-07-01		≥ 4	≥ 60 days	\$0	once per 12-month	NA	loan agreement
Indiana	2002-01-01		≥ 4	≥ 60 days	\$0	no time limit specified or on notice of inability to pay	loan or rollover threshold	loan agreement
Louisiana	2015-01-01		≥ 4	NA	\$0	once per 12-month	NA	loan agreement
Michigan	2005-11-28		≥ 3	pay schedule	allow fees	NA	loan or rollover threshold	loan agreement
Nevada	2017-07-01		≥ 4	≥ 60 days	\$0	once per 12-month	NA	inability to pay or default
South Carolina	2009-06-16		≥ 4	pay schedule	\$0	once per 12-month	NA	loan agreement
Utah	2016-07-01		≥ 4	≥ 60 days	\$0	once per 12-month	loan or rollover threshold	loan agreement; inability to pay or default

Washington	2003-10-01	≥ 3	NA	\$0	no time limit specified or on notice of inability to pay	NA	inability to pay or default
Wisconsin	2013-07-07	≥ 4	pay schedule	\$0	once per 12-month	NA	loan agreement; inability to pay or default
Wyoming	2014-07-01	≥ 4	≥ 60 days	\$0	once per 12-month	NA	NA

Notes:

C Appendix: Clarity Online vs Storefront Payday Loans

Figure C.1



D Appendix: Payday Loan Features

Figure D.1

