

Bankruptcy And The COVID-19 Crisis

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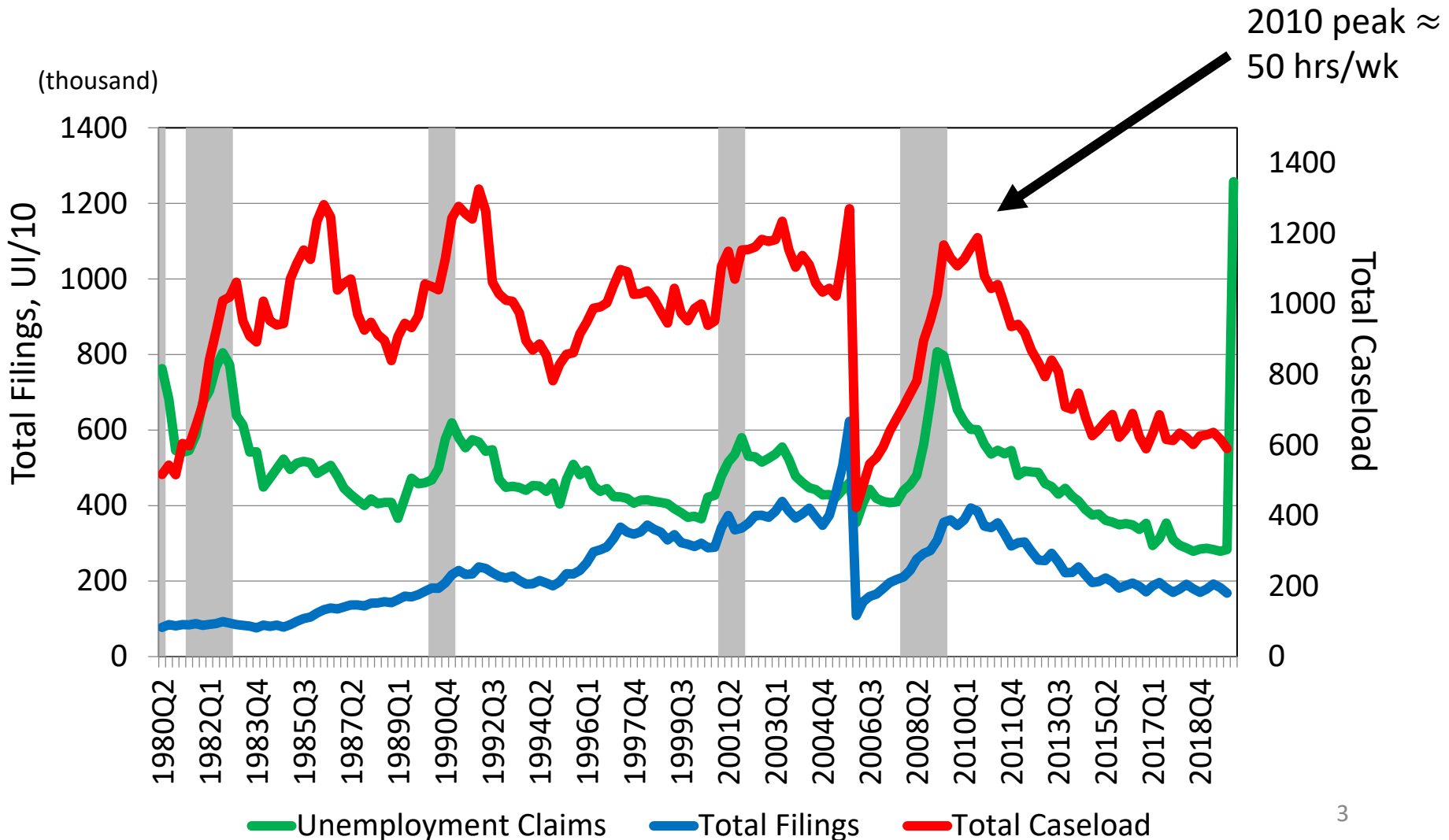
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July 2020

Updated descriptive statistics here:
<https://sites.google.com/site/jialanw/financial-impact-of-covid-19>

Research Question and Motivation

Bankruptcies Are Counter-Cyclical, Correlated With Unemployment



Bankruptcy Will Play An Important Role in the COVID-19 Crisis

- Bankruptcy plays an essential role in downturns
 - For households → discharging (Ch 7) or reorganizing (Ch 13) debt when it becomes unmanageable
 - For businesses → offering a formal process for liquidation (Ch 7) or reorganization of debts to allow businesses to stay afloat (Ch 11)
 - Demand for these functions will probably increase in the coming months
 - Reduced court capacity to process filings could lead to congestion and inefficiency
- Bankruptcies during the COVID-19 crisis have big macro consequences. Congestion likely to worsen outcomes for all parties.

Objectives and Research Questions

Short-term objectives:

1. Understand how bankruptcy filings are responding to the combination of court closures and worsening economic conditions
 - Decompose the key mechanisms driving filing rates
2. Create forecasts of future filing rates and court congestion
 - What policy changes could mitigate inefficiencies?

Data and Initial Findings

Bankruptcy Data: Universe of Consumer + Business in U.S.

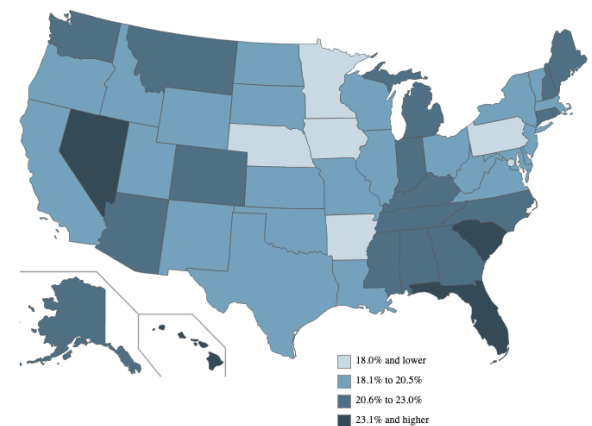
Universe of Real-Time Bankruptcy Filings

- PACER ([link](#))
 - Administrative court database for all districts
 - Information about each case is usually available within 24 hours after filing
 - Data starting on 10/1/2019, updated on a weekly basis
- Federal Judicial Center ([link](#)):
 - Bankruptcy filings from 1/1/2019-9/30/2019

Both datasets include: date of filing, name, chapter, court & office, and consumer vs. business filing

Data Collection: Leading Indicators + Cross Sectional Variation

- **Google Trends** ([link](#)) search terms related to bankruptcy
- **Unemployment Rates & UI Claims** by county
- **Equifax Insights** credit report tracker
- **Public Health Response**
 - Timing of shelter-in-place guidance (state, local)
 - Safegraph cell phone data on extent of distancing
- **Share of Employment in Exposed Sectors:**
- **Variation in PPP Receipt**
 - Geographic
 - By Sector
- **Other suggestions?**



Hover over a state to see data.
Hover over legend items to see states in a category.
Source: Authors' calculations based on U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages data.

Key Findings: Large Decline in Ch13 Consumer Bankruptcies Since April

- 1) As of March, overall filings in 2020 were similar to seasonal trends from 2019
- 2) Consumer filings down close to 50% YOY in April, but signs of rebound, consistent with decline in Google Trends
 - Drop in consumer filings driven by large decline in Chapter 13 filings
- 3) Business filings stayed on trend through June

Most Courts Have Physically Shut Down

The screenshot shows the United States Courts website. At the top, there is a navigation bar with links for 'Email Updates', 'Federal Court Finder', 'Careers', and a search icon. Below this is a secondary navigation bar with a home icon and links for 'About Federal Courts', 'Judges & Judgeships', 'Services & Forms', and 'Court Records'. The main content area features a sidebar on the left with 'About Federal Courts', 'Federal Courts & the Public', 'Visit a Federal Court', 'Court Website Links', and 'Federal Court Scams'. The main heading is 'Court Orders and Updates During COVID-19 Pandemic'. The text explains that federal courts are coordinating local information about the coronavirus and provides links to court websites. A specific court order is highlighted: 'UNITED STATES BANKRUPTCY COURT FOR THE MIDDLE DISTRICT OF ALABAMA'. The order is titled 'In re: COURT OPERATIONS DURING COVID-19 OUTBREAK.' and is identified as 'Administrative Order No. 2020-06'. A 'FILED' stamp from 'United States Bankruptcy Court Middle District of Alabama' dated 'MAR 27 2020' is visible on the right side of the order.

Due to the continued issues with the COVID-19 virus, it is necessary and prudent in the interest of public health and for the safety and welfare of court employees that the Bankruptcy Court for the Middle District of Alabama will cease all in-person hearings effective as of the date of this order.

EFFECTIVE MARCH 27, 2020 THROUGH MAY 31, 2020, ALL HEARINGS NOTICED FOR THE BANKRUPTCY COURT IN THE MIDDLE DISTRICT OF ALABAMA WILL BE HELD TELEPHONICALLY ONLY. THIS APPLIES TO ALL DIVISIONS AND ALL LOCATIONS.

Why Are Consumer Bankruptcies Dropping?

- 1) **Substitutes expanding** – UI, lender forbearance, moratoria on evictions & foreclosure, less collections activity (?)
- 2) **Uncertainty / mental scarcity** – awaiting news on debt forgiveness & government relief before deciding whether to file, waiting to hit bottom (?)
- 3) **Physical constraints** – courts & lawyers have shut down in-person meetings, electronic filing is still available
- 4) **Liquidity constraints** – no funds to pay for lawyers and filing fees (Gross Notowidigdo Wang, 2014)

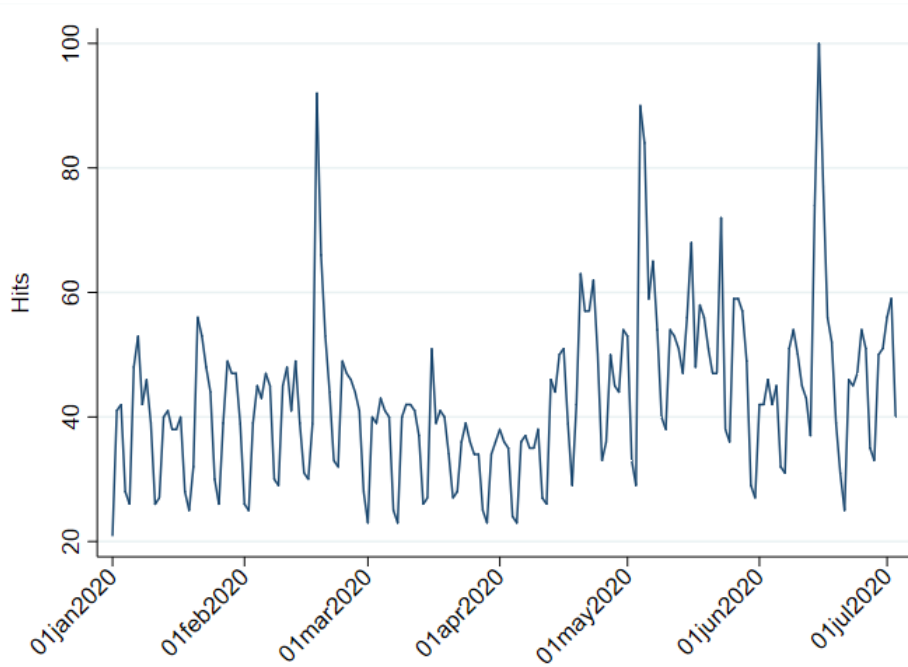
Anecdotal Evidence: Why Are Consumer Bankruptcies Dropping?

“We had hoped with the economic changes and the stimulus checks, folks who needed bankruptcy would still be filing but this is not the case.”

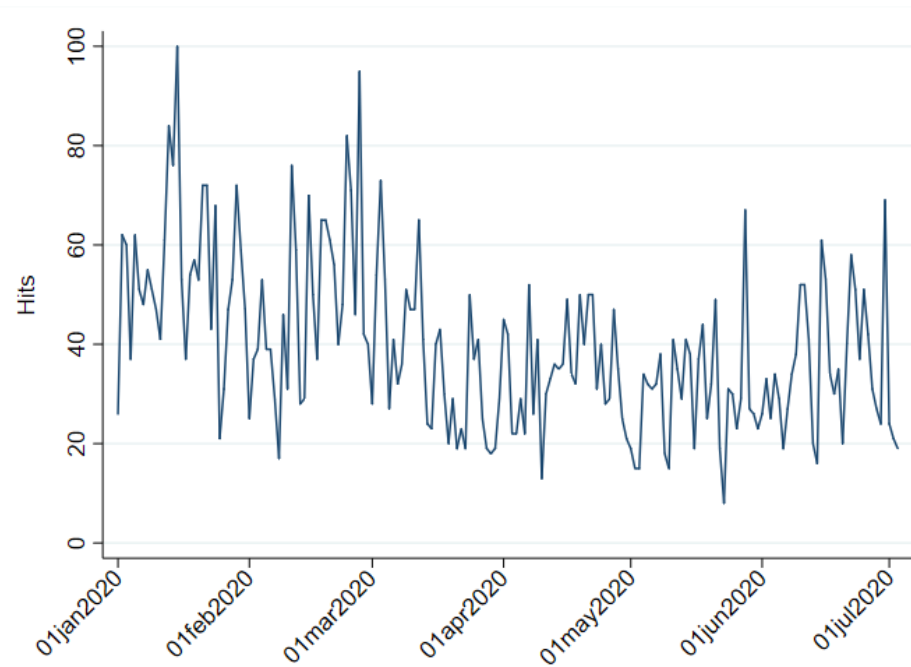
- “People are more worried about basic food and shelter, so they don’t have the time or mental bandwidth to think about bankruptcy.”
- “Many people just assume courts are closed.”
- “It doesn’t make sense to file bankruptcy and then just fall into more debt”

Google Trends: Interest In Bankruptcy Holding Steady

“Bankruptcy”



“Bankruptcy Lawyer”

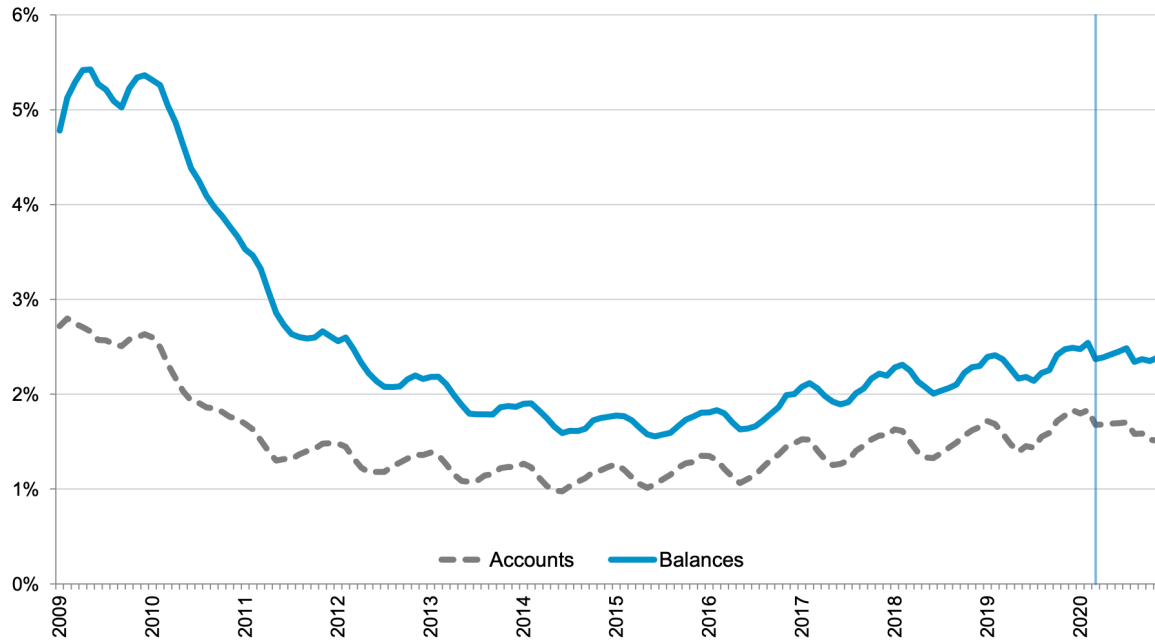


Delinquency Rates Trending Down

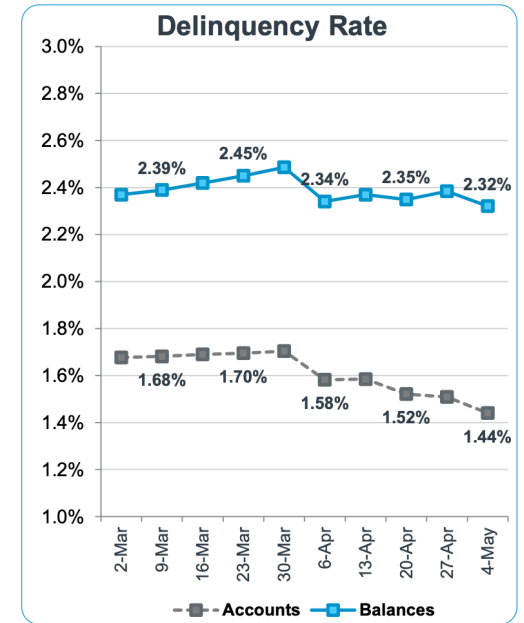
Severe Delinquency Rate

60+ Days Past Due

Percent of Accounts and Balances; NSA; Excludes Severe Derogatory and Bankruptcy

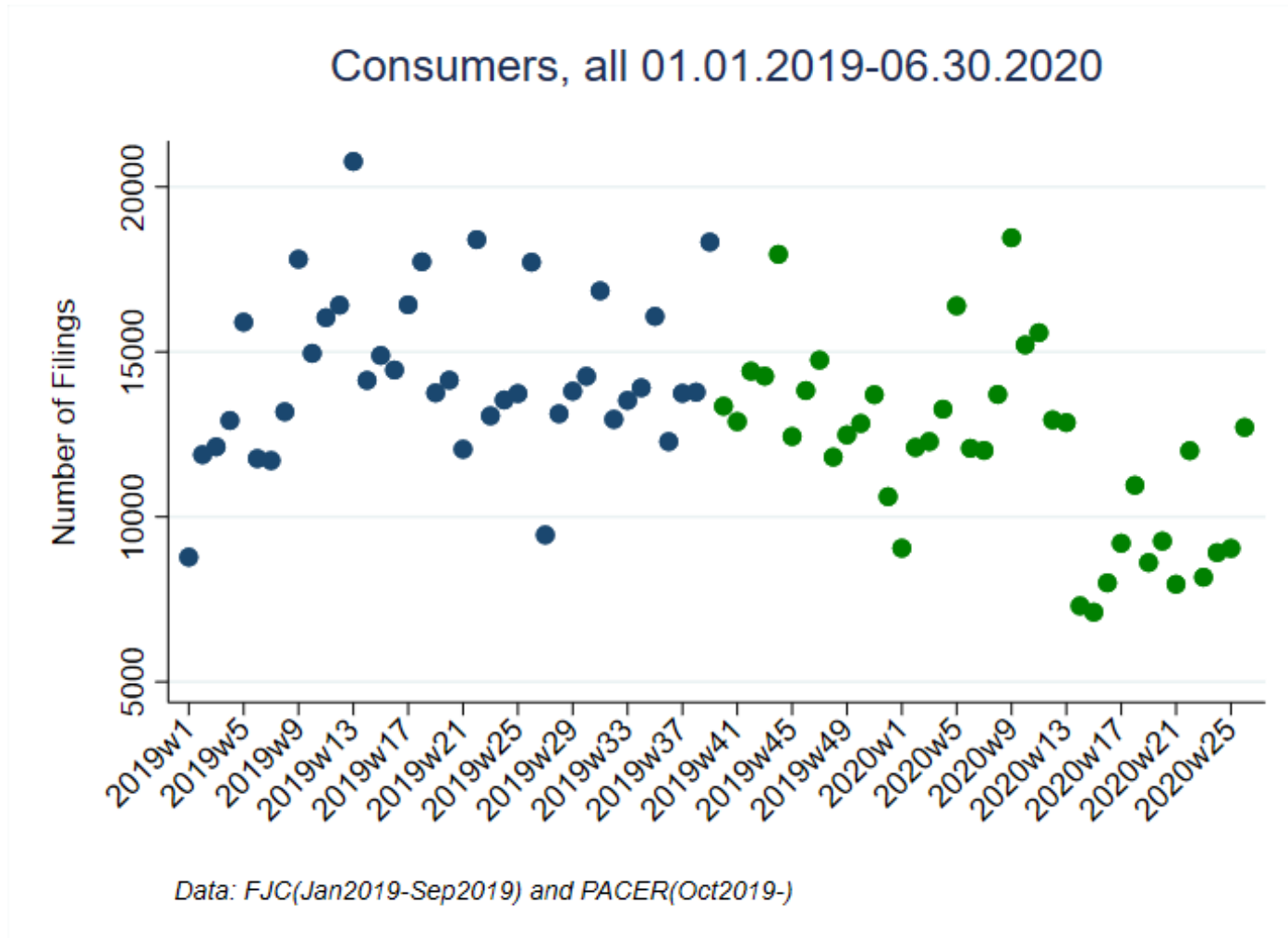


Source: Equifax Inc.



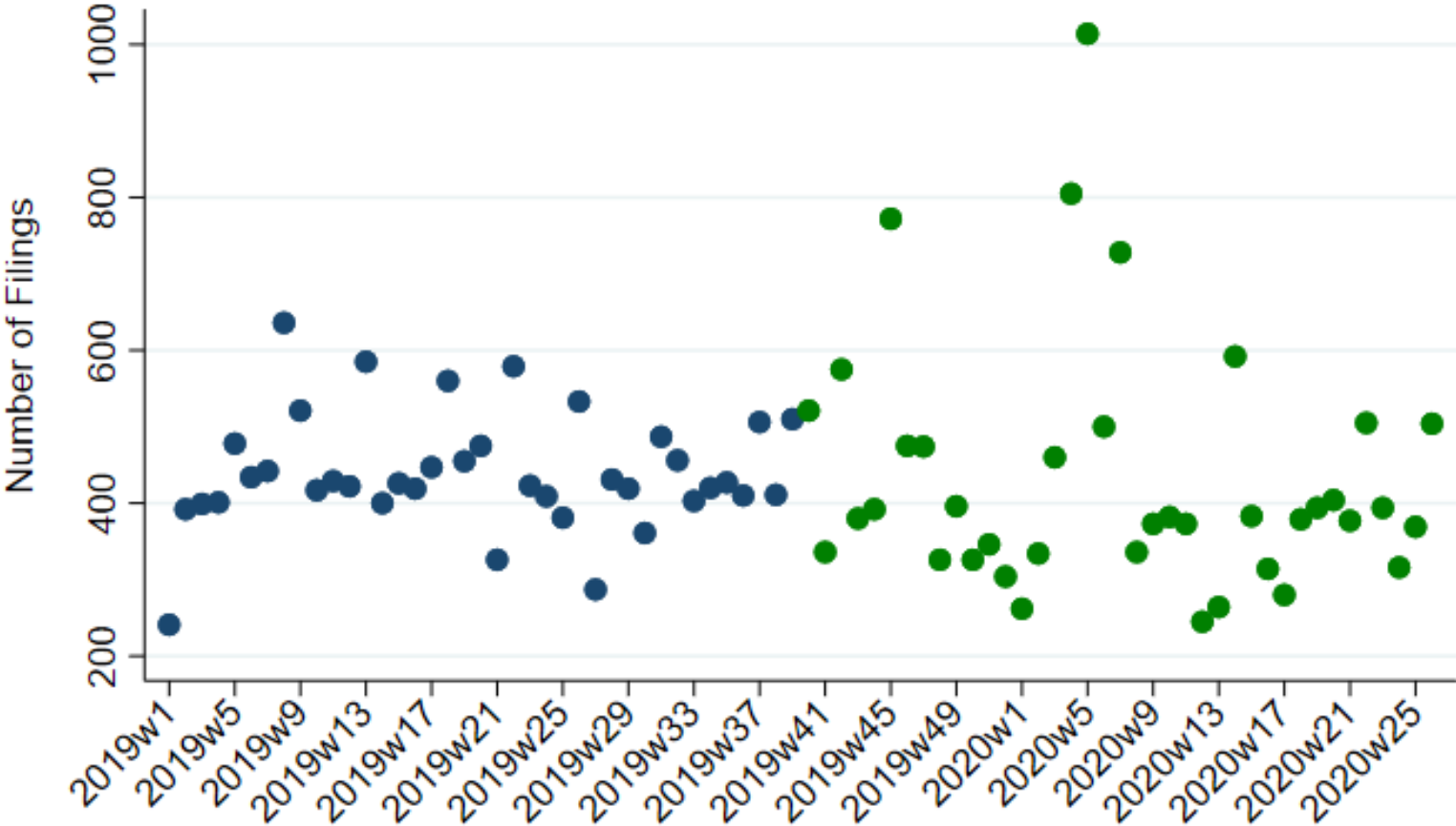
Data as of May 4, 2020

Consumer filings, all districts



Business filings, all districts

Business, all 01.01.2019-06.30.2020



Data: FJC(Jan2019-Sep2019) and PACER(Oct2019-)

Event Studies

Year-on-year comparisons to 2019

Court policies:

- Physical closure → telephonic-only

State policies (appendix):

- Emergency declaration
- Stay-at-home orders

Event Study Specification

$$y_{ste} = \sum_{\tau=-30}^{30} \delta_e 1\{e = \tau\} + \gamma_{DOW} + \gamma_{DOM} + \gamma_{Month} + \gamma_s + \epsilon_{ste}$$

State s , calendar day $t \Leftrightarrow$ event day e .

y_{ste} : logs and levels of daily bankruptcy cases per state

$\gamma_{DOW}, \gamma_{DOM}, \gamma_{Month}$: day-of-week, day of month, month of year fixed effects

γ_s : state fixed effects

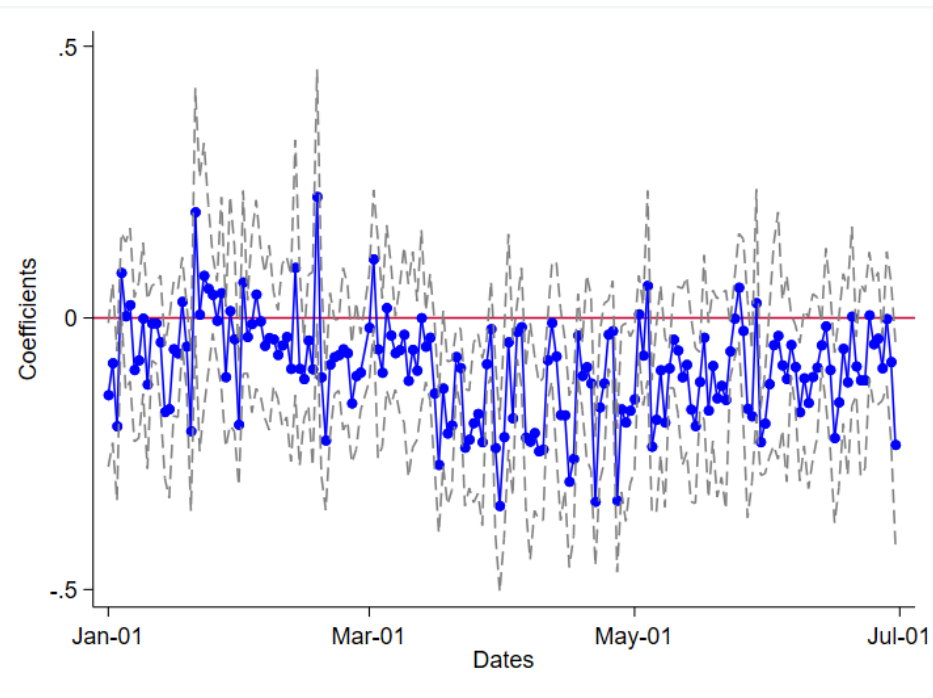
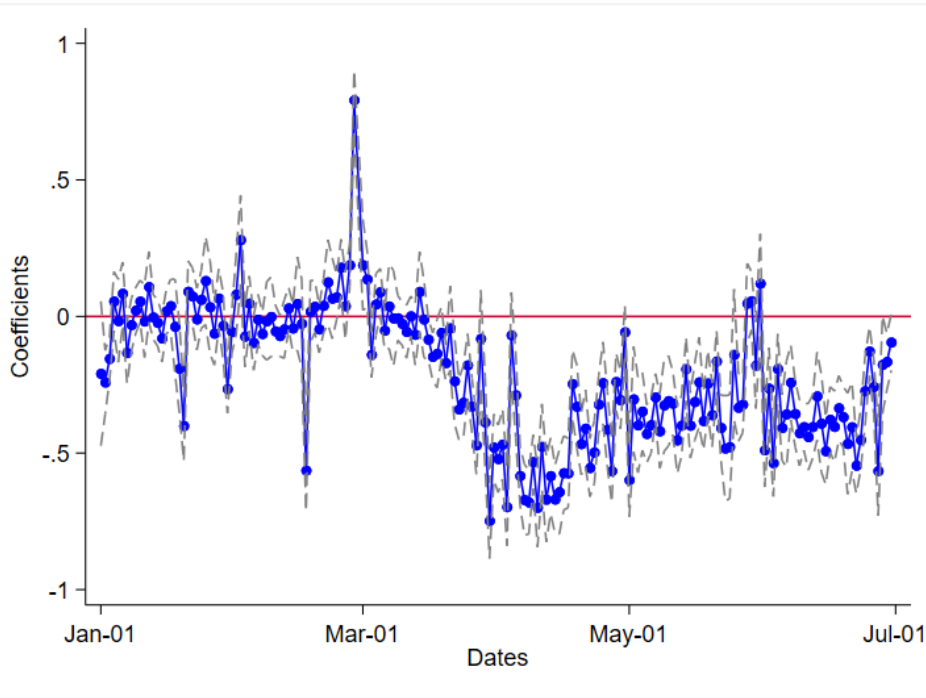
δ_e : event-study coefficient of event-day e , absorbing event days above 30 and below -30

Standard errors clustered by state

Event Studies: Log Changes Relative to 2019

Consumer

Business

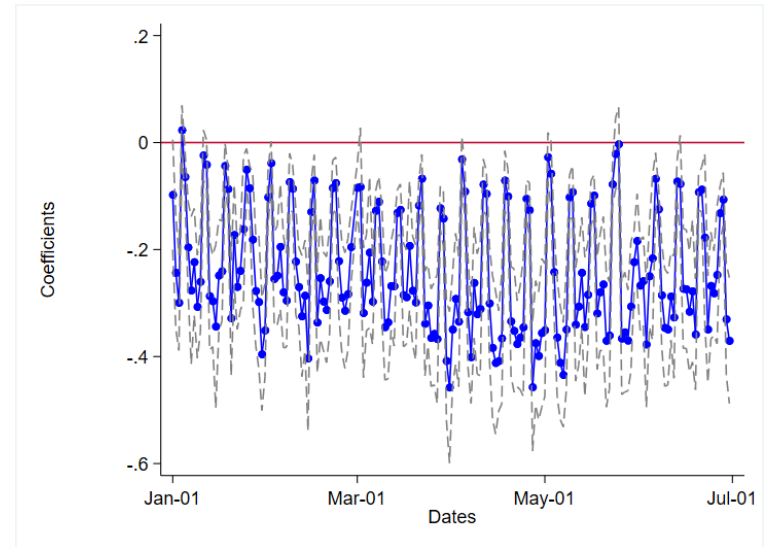
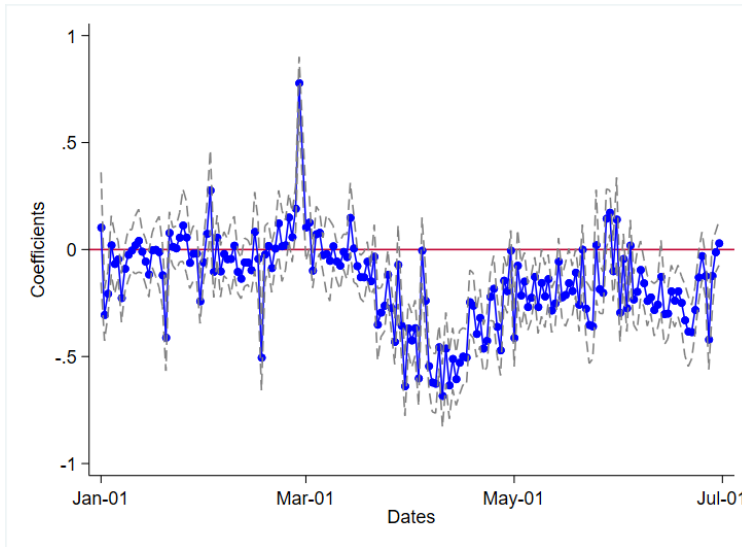


Event Studies By Chapter

Consumer

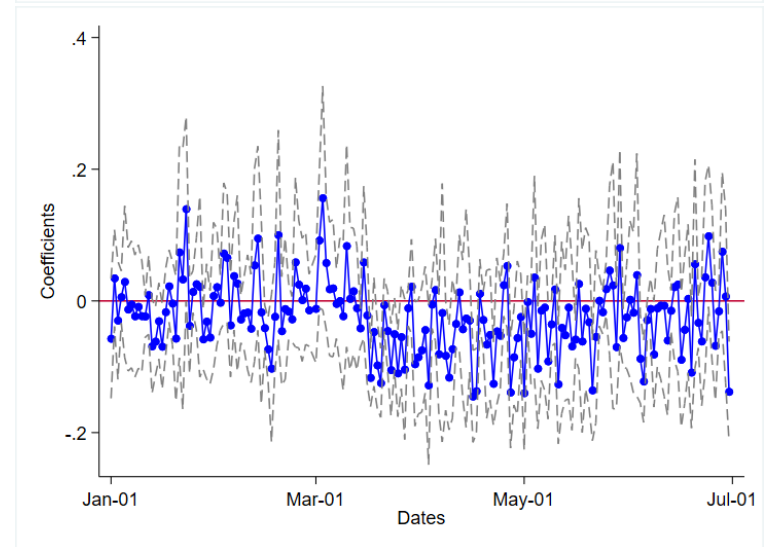
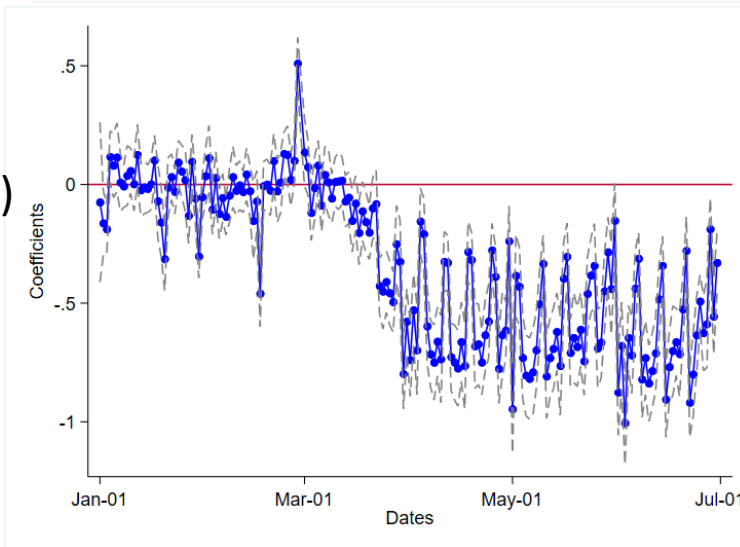
Business

Chapter 7



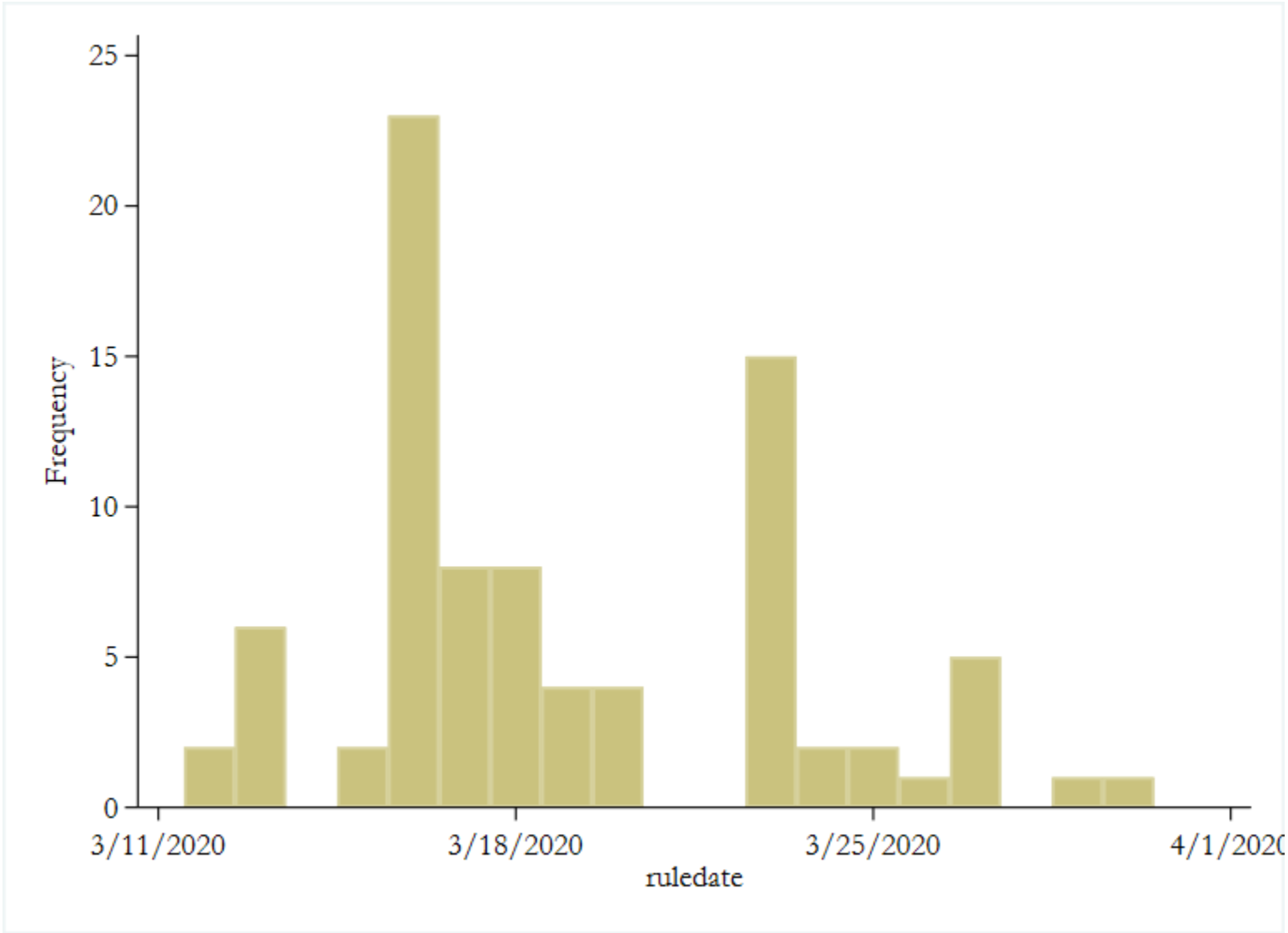
Ch 13 (cons)

Ch 11 (bus)



Court Shutdowns

Most Courts Have Physically Shut Down

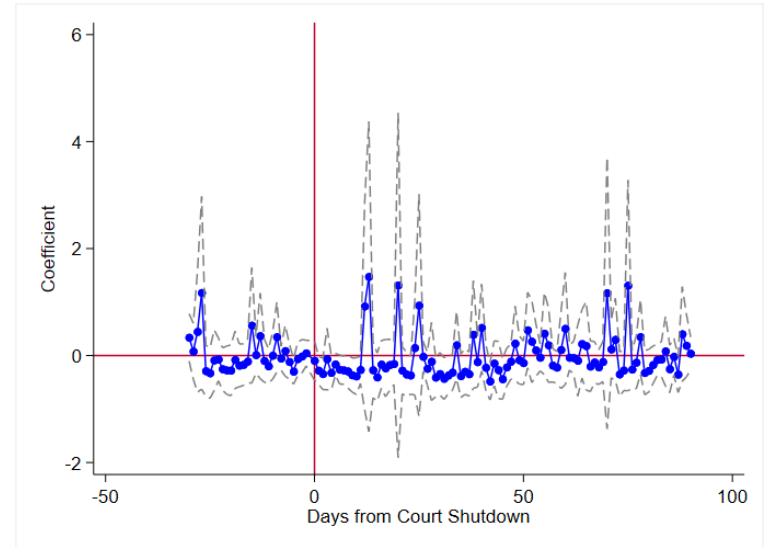
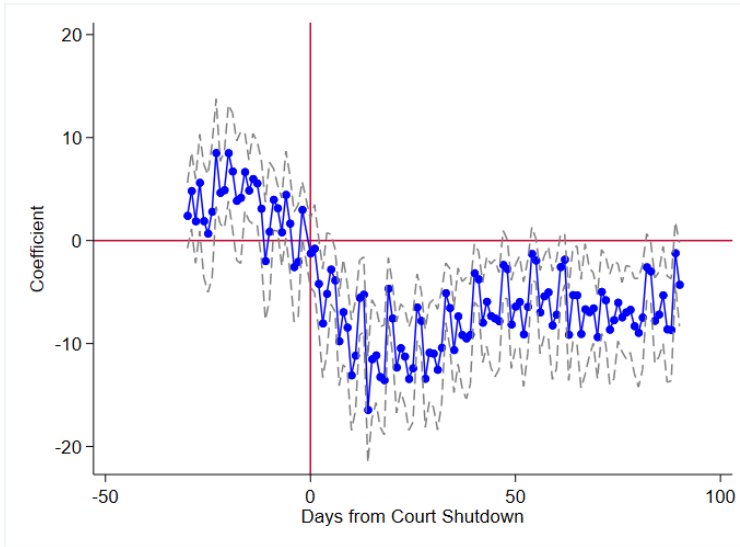


Court Physical Shutdown Event Dates

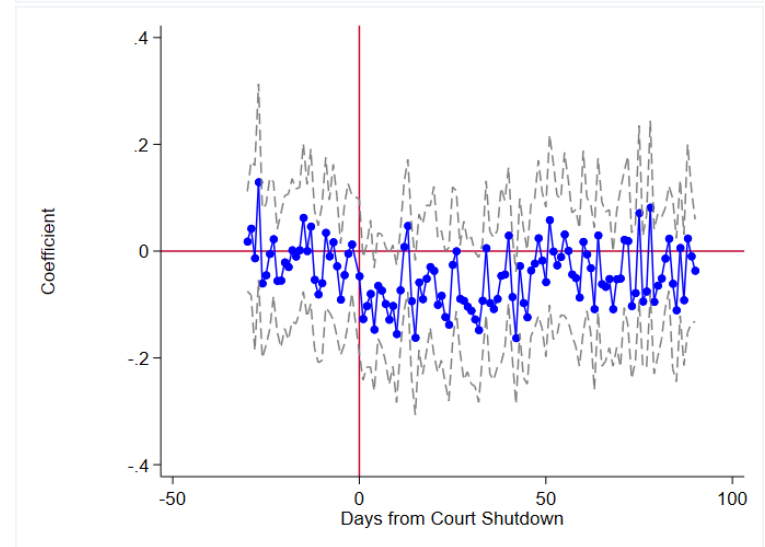
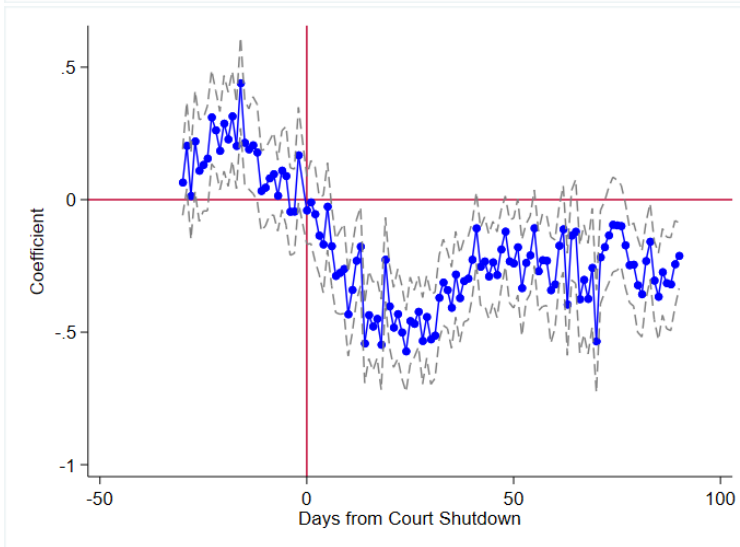
Consumer

Business

Levels



Logs



Forecasting Court Congestion

Forecasting Court Overcrowding (1)

- Use weights from a judge time study done in 1991 to estimate caseload in hours per week
- Roughly 50% of judge time is spent on bankruptcy cases, other 50% on adversarial cases, admin work, travel, conferences, etc.

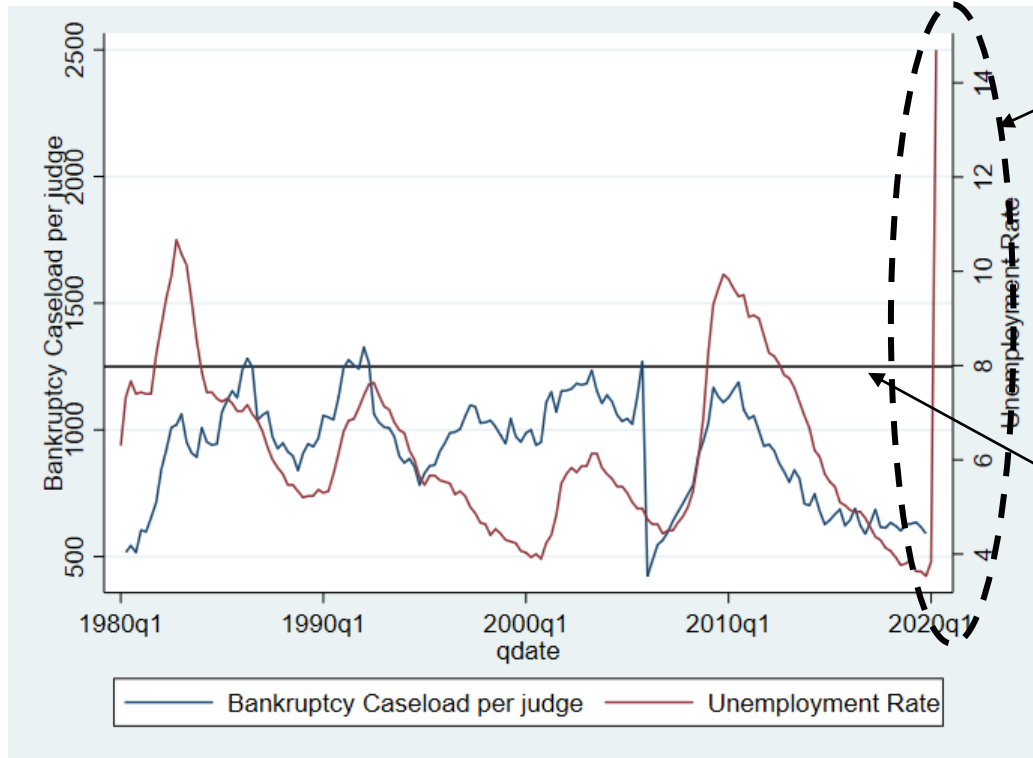
Case weights (hours):

Type	Weight
Consumer Ch. 7	0.101
Business Ch. 7	0.397
Ch. 11	7.559
Ch. 12	4.04
Ch. 13	0.381
Other	0.194

Forecasting Court Overcrowding (2)

- Caseload = estimated total hours spent / # of judges
 - Hours per case from 1991 weights
 - Likely underestimates the time spent post-2005, with additional BAPCPA requirements
- # of judgeships is determined by Congress, and has been relatively constant
 - 2017 act added 4 judgeships
 - Current total: 350 judges (18 of these are temporary, 5-year judgeships)
- Trustees also play important role, but we don't have data on # of trustees

Unemployment and Caseload

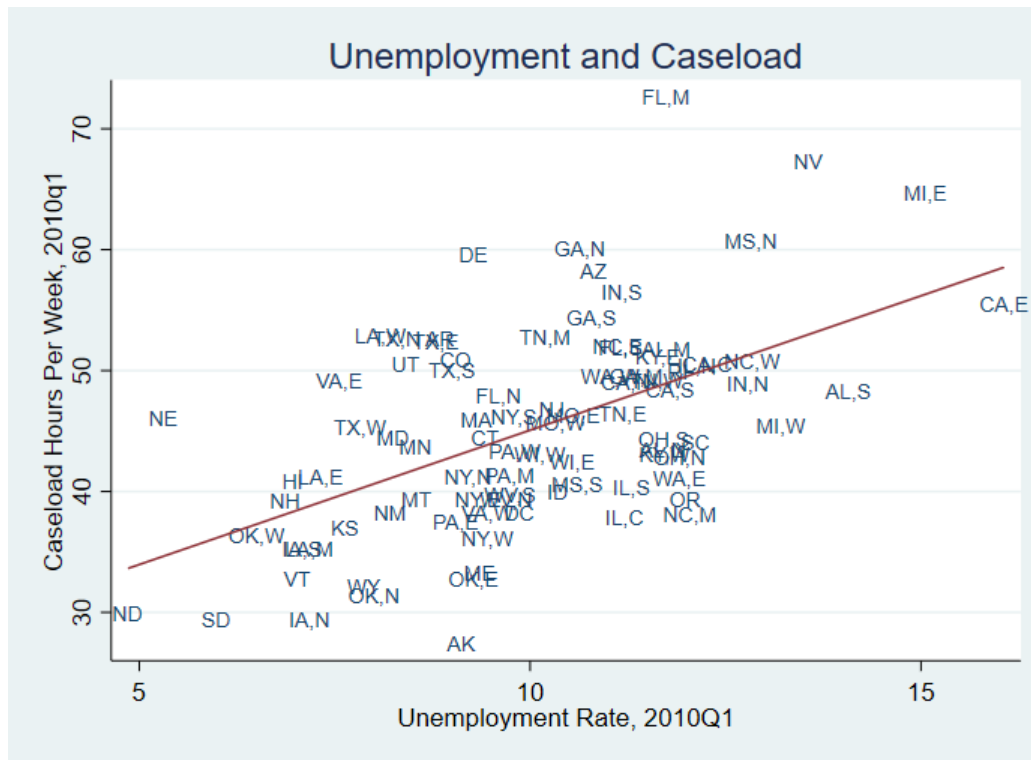


April 2020 Unemployment = 14.7%

Will CARES and other stimulus temper relationship between unemployment and bankruptcy?

Reference point:
Roughly 50 hours/week
of work per judge

Unemployment and Caseload In the Cross Section: The (Last) Crisis



MI,E and CA,E → outliers with unemployment rates around 15%

Today, entire U.S. averages this level!

Large heterogeneity in caseloads

- 1/3rd of districts above 50 hours/week
- AK, ND, SD, and IA,N still under 30 hours/week

Back-of-the-Envelope Forecasting

1. For each district X year X bankruptcy type: calculate (# of bankruptcy filings / # of unemployed)

Accounts for heterogeneity: some districts see lots of business cases (DE, NYS), while others see more consumer cases (IN, OK, UT)

2. Average across years for each district

Drop 2005-2006 to remove BAPCPA shock

3. Estimate # of cases per unit of unemployment → translate to caseload per judge

Hypothetical:

If every district experienced 15% unemployment in 2020Q2 (nationwide April = 14.7%), what would the expected caseload be in each district? How many judges would be needed in each district to keep caseload under 50 hrs/week?

Results: Back-of-the-Envelope Forecasting

- 11 of 89 districts already have enough judges to keep caseloads < 50 hrs/week
 - Nearly all are rural: AK, SD, IAN, ME, VT, OKN, OKE, WY, DC, ND, WVN
- 22 of 89 need ≥ 5 new judges
 - 9 → South
 - 5 → Southwest
 - 4 → Midwest
 - 4 → Mid-Atlantic
 - **Need ≥ 10 : GA Northern, FL Middle, TX Northern, VA Eastern, IL Northern**
- In total, would need 301 new judges – close to a doubling of current number

Caveats: Back-of-the-Envelope Forecasting

- Assuming prior relationships hold!
 - Is this time different?
 - Non-economic cause of downturn
 - CARES act and other stimulus could help
 - Unprecedented decline in consumption of 40% (JPMCI 2020)
 - Declining default rates (Equifax 2020)
 - Assumes 15% unemployment in all districts
 - Some will be better, some will be worse
 - Still to do: micro-level forecasting of unemployment using COVID impact, prevalence of highly-impacted sectors
- But, model also has some heroic assumptions:
 - Assumes only 2 weeks of vacation for judges
 - 65% of judges are over 60 – most impacted by COVID-19
 - New judges will need time to get up to speed; probably can't handle full caseload
 - Unemployment could get worse 😬😬

Slightly More Formal Forecasts (1)

First-difference panel regression with lagged unemployment:

$$\begin{aligned} \Delta Caseload_{d,t} &= \alpha + \beta_0 \Delta UnempRate_{d,t} + \beta_1 \Delta UnempRate_{d,t-1} \\ &+ \beta_2 \Delta UnempRate_{d,t-2} + \beta_3 \Delta UnempRate_{d,t-3} + \varepsilon_{d,t} \end{aligned}$$

Quarterly data from 2001Q1 – 2019Q4

- Limiting to post-BAPCPA period doesn't affect estimates much
- Including additional lags has little effect

Slightly More Formal Forecasts (2)

Dependent variable:	Caseload Change		
	(1)	(2)	(3)
Unemployment Rate Change			
t	0.556* (0.301)	1.617** (0.644)	1.621** (0.643)
t-1	1.167*** (0.251)	0.475 (0.346)	0.478 (0.346)
t-2	0.450 (0.325)	0.400 (0.392)	0.401 (0.394)
t-3	0.447 (0.691)	0.258 (0.320)	0.258 (0.321)
District FE			X
Quarter FE		X	X
Obs.	6,408	6,408	6,408
Adj. R-squared	0.0072	0.0163	0.0041

- Accounting for seasonality with quarter FE matters
- Data is already first-differenced, so district FE don't matter
- Impact of unemployment is close to simultaneous, but lags still accumulate
- Economic magnitudes:
 - Have seen 11.3pp increase in unemployment in 2020Q2
 - For average judge, translates to:
 - 2020Q2: add'l 18.3 hrs./week
 - 2020Q3: add'l 23.6 hrs./week
 - 2020Q4: add'l 28.2 hrs./week
 - 2021Q1: add'l 31.1 hrs./week

Thanks!

follow our work @

<https://sites.google.com/site/jialanw/financial-impact-of-covid-19>

Twitter: [#CoronavirusIndicators](#)

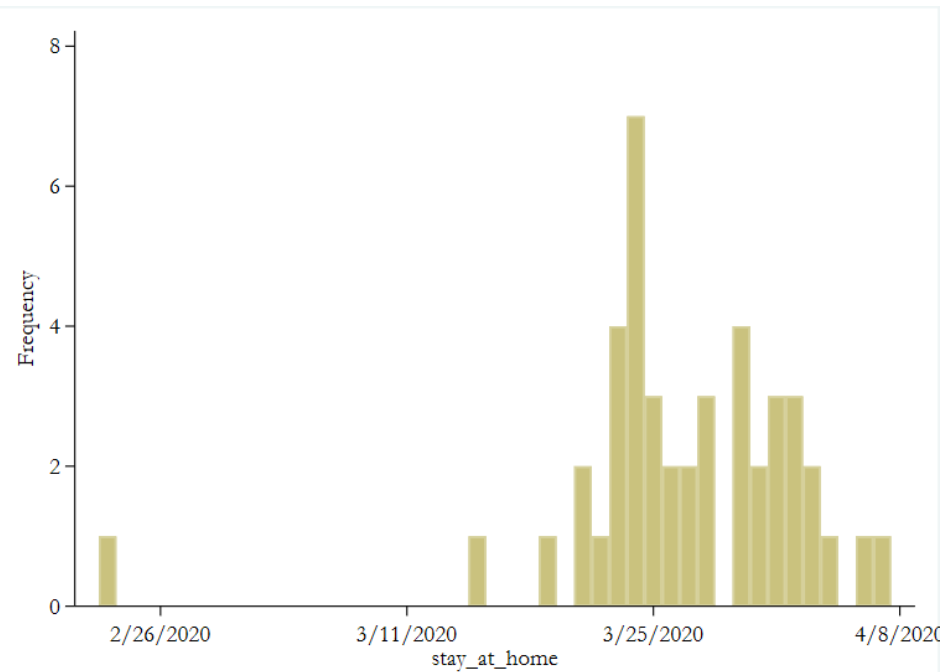
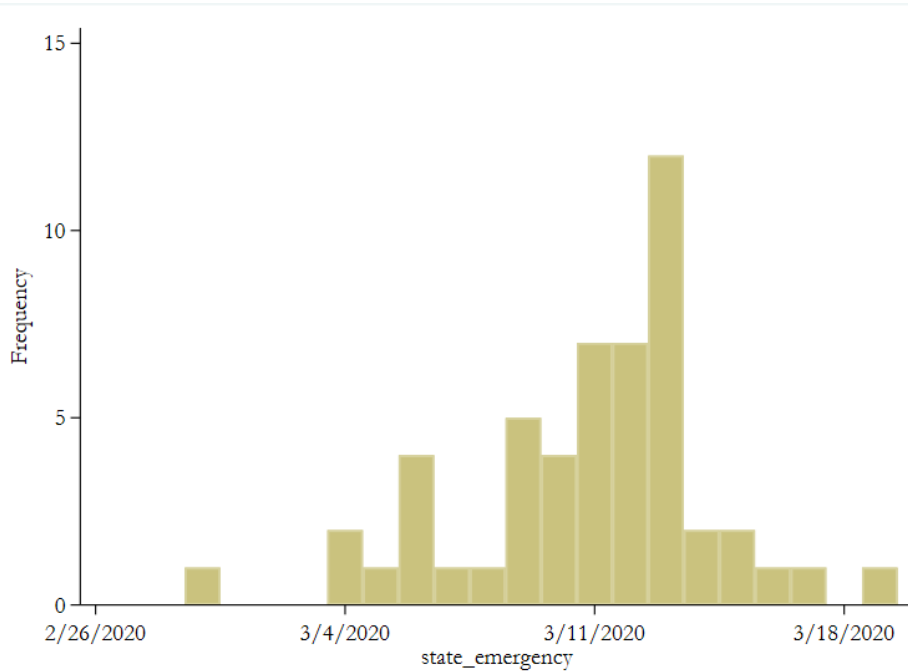
Appendix

State Shutdowns

Event Times: State Emergency and Stay-at-Home Orders

State Emergency

State Stay-at-home Order

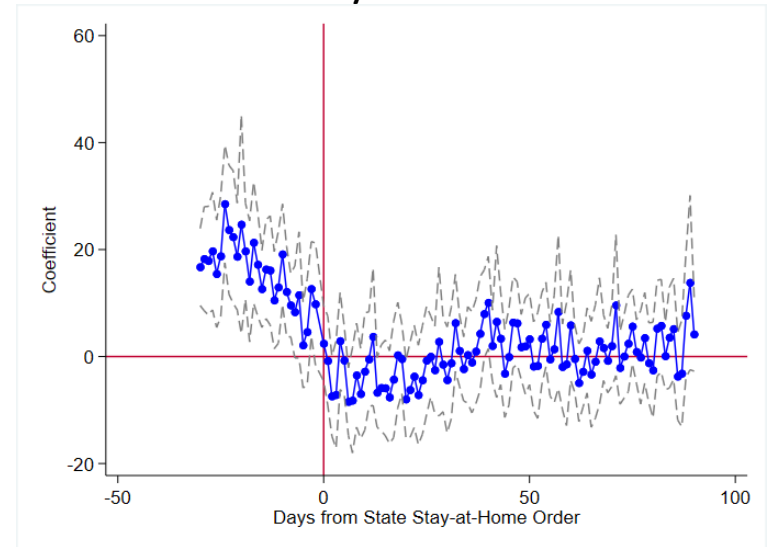
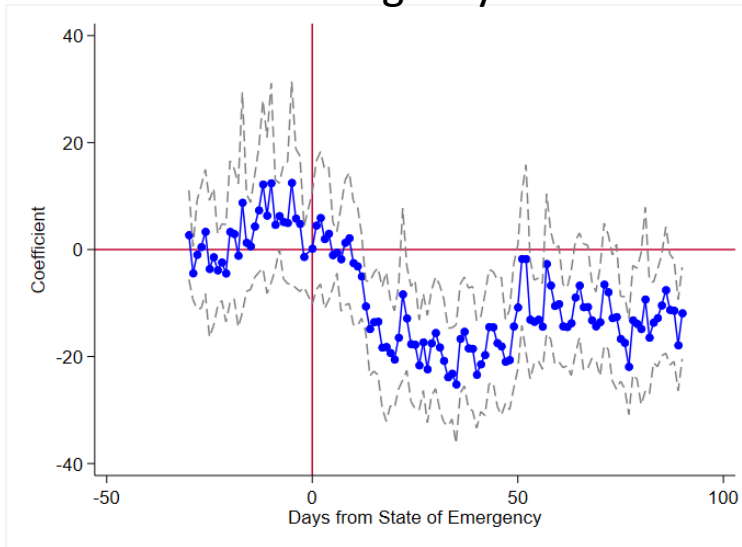


Event Studies: State Emergency and Stay-at-Home Orders, *Consumer*

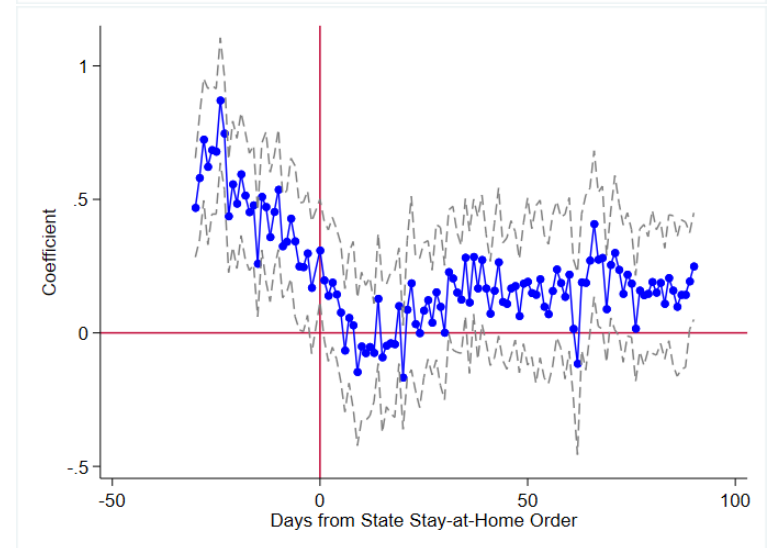
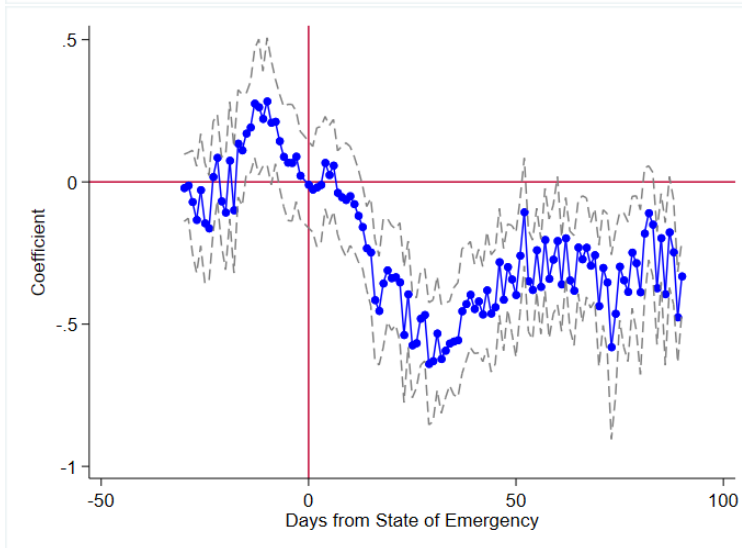
Emergency

Stay-at-home

Levels



Logs

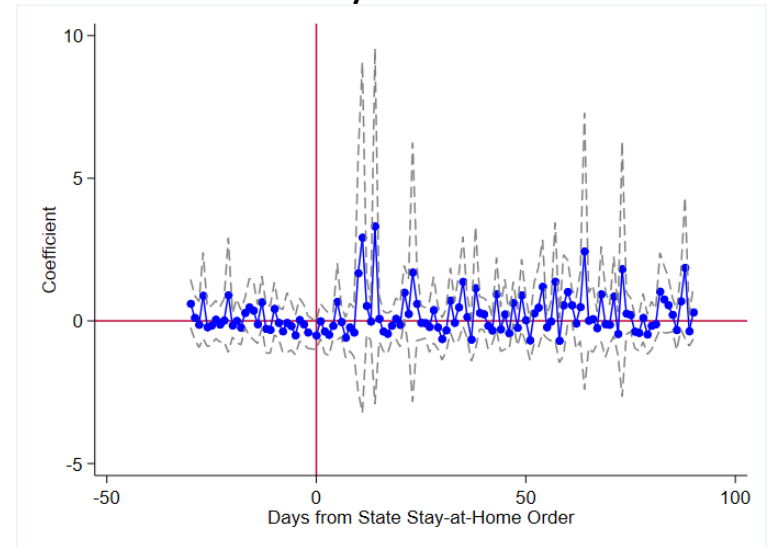
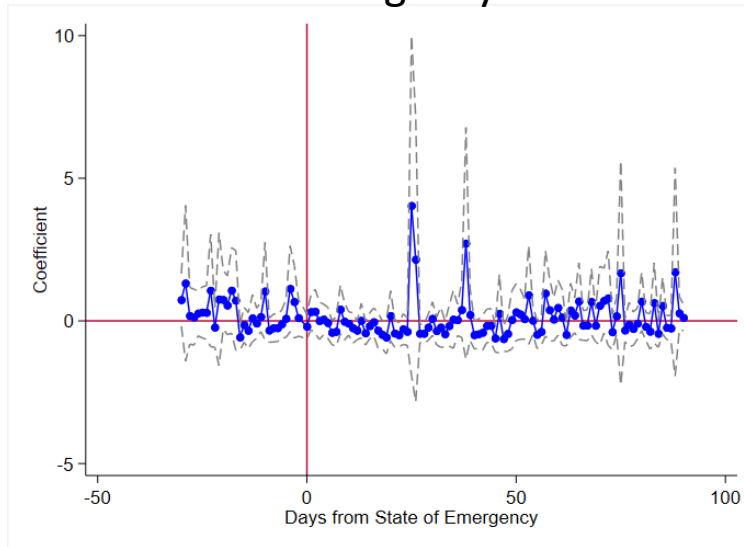


Event Studies: State Emergency and Stay-at-Home Orders, *Business*

Emergency

Stay-at-home

Levels



Logs

