

THE EFFECT OF MINIMUM WAGES ON CONSUMER BANKRUPTCY DURING THE COVID-19 PANDEMIC IN THE USA

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Abstract. Using a data mining methodology, this study aims to examine the impact of US state minimum wages on consumer bankruptcy trends during the COVID-19 economic crisis by analyzing data on minimum wage levels, bankruptcy filings, and unemployment rates.

Keywords: Global Economy; COVID-19 Pandemic; Wages; USA; Minimum Wage; Consumer Bankruptcy.

1. Introduction

Global economies, especially the US, have been affected by the COVID-19 pandemic disrupting the global economies. Measures taken during the COVID-19 pandemic, such as lockdowns and social distancing, have never been experienced before and have brought a lot of challenges to homes and businesses (McKibbin & Fernando 2023, p.1). However, it should be highlighted that the economic crisis of the pandemic impacted all people and companies in the US in various ways, leading to different bankruptcy patterns (Collins-Thompson et al. 2021). An important factor that led to different cases of bankruptcy was the impact of the minimum wage on consumer bankruptcy during the pandemic. In particular, the amount of the minimum wage was different in states and the level of bankruptcy also varied (The American Bankruptcy Institute 2023). The minimum wage policies play a crucial role in reducing consumer bankruptcies in the USA, especially during economic hardships, such as the COVID-19 pandemic. However, despite government intervention through stimulus packages and credit programs, which played an important role in supporting consumers and businesses during the COVID-19 pandemic, existing differences in minimum wage policies across the US states may have affected the number of bankruptcy filings, which requires detailed investigation and research of effective tools for managing economic resources during crisis events. Using a data mining methodology, this study aims to examine the impact of US state minimum wages on consumer bankruptcy trends during the COVID-19 economic crisis by analyzing data on minimum wage levels, bankruptcy filings, and unemployment rates.

2. Impact of the COVID-19 Economic Crisis on Business and Consumer Bankruptcies

Historically, bankruptcy rates are closely related to unemployment and the business cycle. Increased financial distress and bankruptcies among individuals and corporations usually result from rising unemployment during economic downturns. However, the COVID-19 pandemic has deviated from this historical trend. Comparing the dynamics of changes in the level of bankruptcy and unemployment (see Figure 1 and Figure 2), it can be seen that the expected surge in bankruptcies at the beginning of the pandemic did not occur, even despite the record-high level of unemployment, which increased from the 4.2% in 2018 up to 11% in the 2020 and a noticeable loss of economic activity (Martos-Vila & Shi, 2022). The unmatched breadth and scope of government action, which has offered a short-term safety net for businesses and consumers, is a significant reason for this discrepancy.

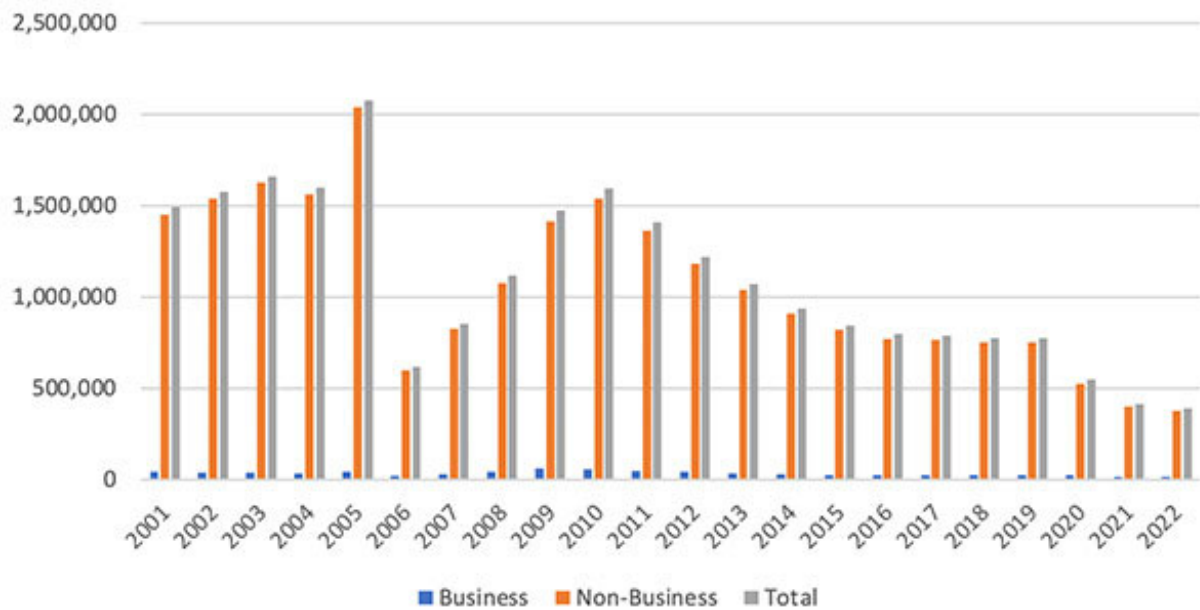


Figure 1: U.S Bankruptcies, 2001-2022 (Fay 2024).

Concerns about the possibility of a delayed wave of bankruptcies grew as a number of government support programs were terminated in the second half of 2020 and early 2021. Many people and businesses faced financial constraints that were momentarily eased when increased unemployment benefits, the eviction moratorium, and other financial relief measures ended.

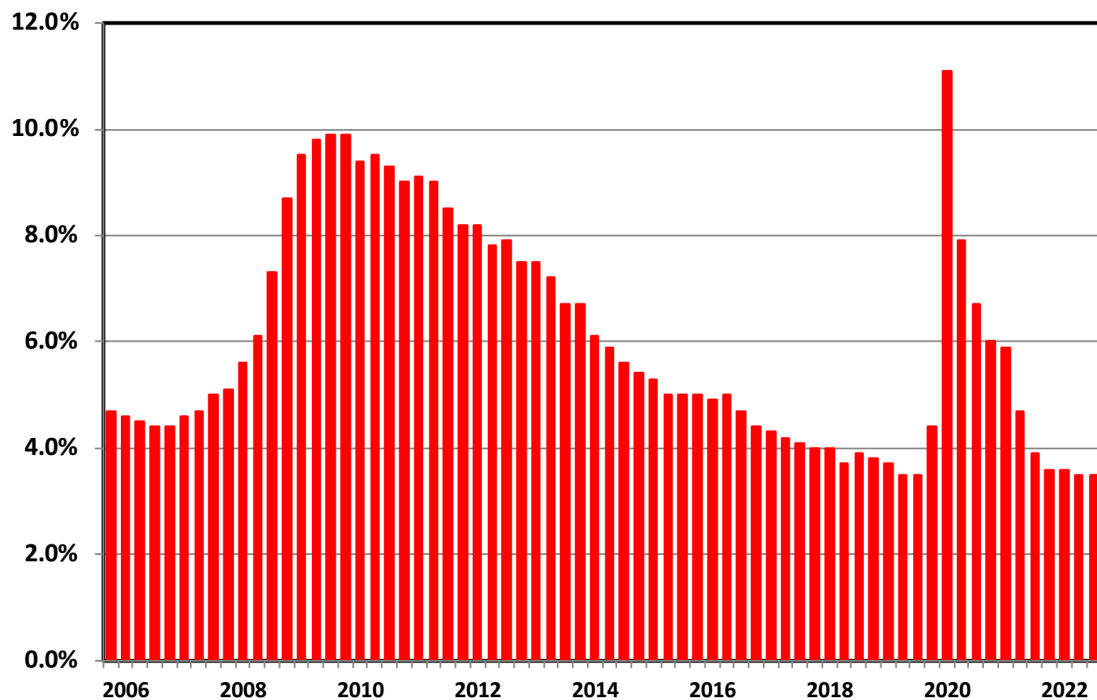


Figure 2: Unemployment rate by Quarter 2006-2022 (The American Bankruptcy Institute 2023).

3. Bankruptcy of consumers

Expectations of a sharp rise in consumer bankruptcies arose at the start of the COVID-19 pandemic due to widespread economic disruption and uncertainty. However, as Table 1 shows, despite these severe economic challenges, the dynamics of consumer bankruptcy have been unexpected. Despite

pessimistic forecasts, the number of consumer bankruptcy filings was on the 228378 filling less in the first year of the epidemic.

Table 1: Bankruptcy Fillings, 2018-2022 (Fay 2024; United States Courts 2023).

	Business	Changes in 2018	Non-Business	Changes in 2018	Total	Changes in 2018
2022	13481	-8751	374240	-376946	387721	-385679
2021	14347	-7885	399269	-351917	413616	-359802
2020	21655	-577	522808	-228378	544463	-228955
2019	22780	+548	752160	+947	774940	+1522
2018	22232		751186		773418	

There are a number of reasons for this decline. First, to help individuals and families, the federal government quickly implemented significant economic measures. The CARES Act passed in March 2020 provided direct stimulus payments to Americans, which temporarily increased family income by a significant amount (Dergiades et al. 2022, p.2). In addition, those who lost their jobs received financial assistance from the increase in unemployment benefits, which consisted of an additional \$600 per week on top of the regular state unemployment compensation (Dergiades et al. 2022, p.2). In addition, consumers received immediate relief from bankruptcy as a result of temporary moratoriums and evictions, as well as suspensions of student loan payments and other debt repayment programs. At least in the short term, these actions helped to stabilize household finances and stem a sudden surge in consumer bankruptcies.

4. Business bankruptcies

The effects of corporate failures appeared not as many analytics predicted and were heavily related to the scale and type of industry affected during the pandemic. The measures that caused the most harm to small businesses included quarantines and social distancing strategies, especially in the retail industry, hotels, and services (See Figure 3).

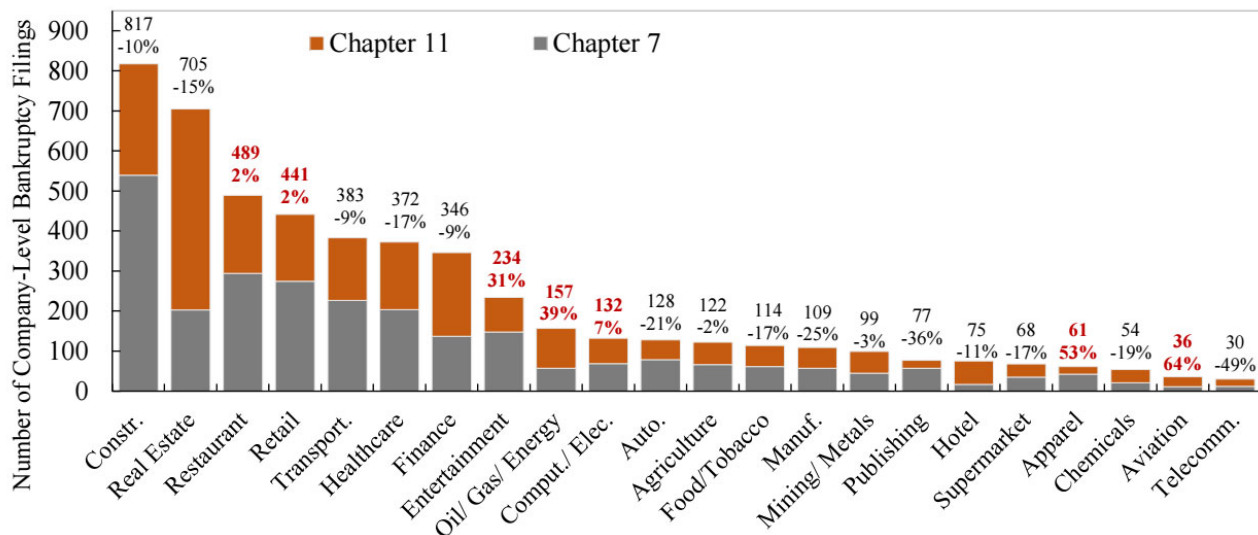


Figure 3: Company-Level Chapter 7 and Chapter 11 Bankruptcy Filings by Industry for 2020 (Collins-Thompson et al. 2021).

Examining the number of bankruptcy filings between 2018-2020 (see Table 2), small businesses that fall under Chapter 7, with the amount of 475575 in 2018 to 378953 in 2020 and to 225455 in 2022, and Chapter 13 bankruptcy with the amount of 290146 in 2018 to 156377 in 2020 and to 157087 in 2022 faced the most hit.

Table 2: Bankruptcy Filings by Type, 2018-2022 (Fay 2024; United States Courts 2023).

Bankruptcy Filings by Type			
YEAR	Chapter 7	Chapter 11	Chapter 13
2022	225,455	4,918	157,087
2021	288,327	4,836	120,002
2020	378,953	8,333	156,377
2019	480,206	7,020	286,979
2018	475,575	7,095	290,146

Chapter 11 bankruptcy is usually filed by partnerships and corporations (Rocket Lawyer n.d.). The number of Chapter 7 filings decreased significantly, showing that many lenders offered temporary pauses on loan repayments, thus easing the immediate financial burden on borrowers because the unemployment rate in 2020 was high and the minimum wage was still too low to change this situation, which aggravated this trend. As a result, companies facing reduced consumer spending and supply chain disruptions would be forced to sell assets and file for Chapter 7 bankruptcy to receive relief. On the other hand, notable changes in Chapter 13 filings indicate that fixed-income individuals and small businesses have sought to restructure their debt and preserve their assets through structured repayment programs. Despite high unemployment in 2020, some companies were still confident that it was possible for them to pay the debt in the future and opted for Chapter 13 bankruptcy as a way of restructuring their financial affairs.

However, the fact that Chapter 11 filings have evolved less than the Chapter 7 and Chapter 13 filings implies that large companies have been comparatively more adaptive and resilient despite the effects of the pandemic. The amount of Chapter 11 filling changed from 7095 in 2018 to 8333 in 2020 and 4918 in 2022 (see Table 2). Though businesses might have felt the pressure of unemployment in the fiscal calendar of 2020, which led to an increase in Chapter 11 filings since companies scrambled to reorganize debts and adapt to the economic challenges, further declines in unemployment and improvement in the economy may have reduced the need for formal bankruptcy procedures. The analysis of corporate bankruptcy shows that willingness to receive bankruptcy relief has changed with time and with the unemployment rate, indicating that corporate failures are dynamic, especially within the context of the current economic conditions.

The US government made an attempt to help small businesses survive by introducing a wage protection program. The Payroll Protection Program (PPP), which offered small businesses loan forgiveness to cover wages and other necessary expenses, was created by the government to reduce these effects (Staples & Krumel 2022, p.932). Although many small businesses were able to survive and receive vital support through this program, some firms continued to suffer insurmountable financial difficulties, leading to bankruptcy filings (Staples & Krumel 2022, p.932). On the other hand, large forms are more likely to have benefited from the Federal Reserve's efforts to stabilize financial markets and have better access to capital markets in general. For example, by lowering interest rates and buying corporate bonds, the Fed was able to guarantee liquidity and increase the availability of debt refinancing for large companies. As a result, the financial experience of bankruptcy of large companies differed from that of small enterprises.

As followed from the analysis, small and large businesses had very different financial experiences during the COVID-19 pandemic. Government support programs and business size have played a significant role in creating such different financial experiences for consumers, small businesses, and large corporations. Consumers have benefited from government aid in the form of additional funds, while small businesses have struggled due to the direct impact of the pandemic on their operations and less access to financial resources compared to larger companies. On the other hand, large corporations were financially stronger due to access to financial resources and the intervention of the Federal Reserve System.

5. The Impact of the Minimum Wages on the Consumer Bankruptcies

The minimum wage is an important economic factor that can affect the number of bankruptcy filings significantly, especially during a pandemic. First of all, it is important because it is necessary to protect the financial stability of low-wage workers, hence reducing the bankruptcy risks of these segments of the population (Medrano-Adán & Salas-Fumás 2023, p.379). In addition, low-wage workers can only borrow at high interest rates or use credit cards because they usually have poor access to low-cost loans (Medrano-Adán & Salas-Fumás 2023, p.379). This means that raising the minimum wage to some extent relieves the pressure on finances, which, in turn, reduces the need for this type of lending and the bankruptcy rate.

The impact of the minimum wage on the number of bankruptcy filings was particularly evident during the COVID-19 pandemic. It became clear that, despite the large financial aid provided by the country to citizens and business entities, the situation with the level of bankruptcy in various states of the country has been completely different. At the same time, the dynamics of the specified decrease in bankruptcy filings in some states is lower than in others (see Figure 4). Particularly, in the states colored in white color (North Dakota, Indiana, Kentucky, Texas), the decrease of the bankruptcy fillings was less than 45% whereas, in the states colored in red color (New York, Maine, New Mexico, California, Montana, Washington, Illinois), it was 55% or more. The data in Table 3 shows that, in 2020, some states, such as Arkansas (10), California (12), and Washington (13.5), had minimum wages consistently higher than the federal minimum wage (7.25). While this distribution indicates the overall bankruptcy situation, compared to the minimum wage data, there is a trend showing that states with the minimum wage remaining at the federal level have seen much slower declines in bankruptcy filings than states that have raised the minimum wage.

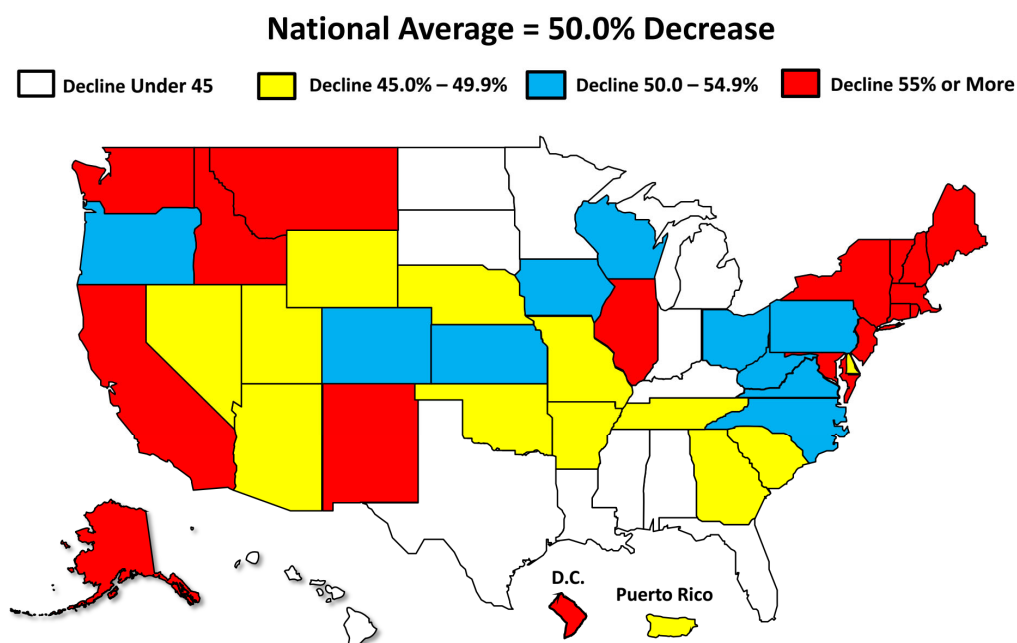


Figure 4: Bankruptcy Filling Trends During the Pandemic, 2022 vs 2019 (The American Bankruptcy Institute 2023).

Weighing potential benefits, such as increased consumer demand and fairness, against potential drawbacks, including effects on employment, business sustainability, potential inflation, and government deficits, is necessary when considering raising the minimum wage in the midst of COVID-19 and high unemployment. The results demonstrate that various methods of determining the minimum wage may significantly lower the number of bankruptcy petitions. Hence, the number of bankruptcy filings has decreased in certain states, such as Wisconsin, Idaho, Illinois, Kansas, and Kentucky, while other states have aggressively worked to raise the federal minimum wage in order to keep up with inflation and the cost-of-living increase. The lack of federal law on raising the minimum wage during this period is evidenced by the complete absence of an increase in the minimum wage.

Table 3: Minimum Wage Rates 2018-2022 (FRED n.d.).

Name	2018	2019	2020	2021	2022
Federal and Minimum Wage Rates	7.25	7.25	7.25	7.25	7.25
Alaska	9.84	9.89	10.19	10.34	10.34
Arkansas	8.50	9.25	10	11	11
Arizona	10.50	11	12	12.15	12.80
California	11	12	12	13	14
Colorado	10.20	11	12	12.32	12.56
Connecticut	10.10	11	12	13	14
Delaware	8.25	9.25	9.25	9.25	10.50
Florida	8.25	8.46	8.56	10	10
Georgia	5.15	7.25	7.25	7.25	7.25
Hawaii	10.10	10.10	10.10	10.10	12
Iowa	7.25	7.25	7.25	7.25	7.25
Idaho	7.25	7.25	7.25	7.25	7.25
Illinois	8.25	8.25	10	11	12
Indiana	7.25	7.25	7.25	7.25	7.25
Kansas	7.25	7.25	7.25	7.25	7.25
Kentucky	7.25	7.25	7.25	7.25	7.25
Massachusetts	11	12	12.75	13.50	14.25
Maryland	10.10	10.10	11	11.75	12.50
Maine	10	11	12	12.15	12.75
Michigan	9.25	9.45	9.65	9.65	9.87
Minnesota	9.65	9.86	10	10.08	10.33
Missouri	7.85	8.60	9.45	10.30	11.15
Montana	8.30	8.50	8.65	8.75	9.20
North Carolina	7.25	7.25	7.25	7.25	7.25
North Dakota	7.25	7.25	7.25	7.25	7.25
Nebraska	9	9	9	9	9
New Hampshire	7.25	7.25	7.25	7.25	7.25
New Jersey	8.60	10	11	12	13
New Mexico	7.50	7.50	9	10.50	11.50
Nevada	8.25	8.25	9	9.75	9.50
New York	10.40	11.10	11.80	12.50	13.20
Ohio	8.30	8.55	8.70	8.80	9.30
Oklahoma	7.25	7.25	7.25	7.25	7.25
Oregon	10.75	11.25	12	12.75	13.50
Pennsylvania	7.25	7.25	7.25	7.25	7.25
Rhode Island	10.10	10.50	10.50	11.50	12.25
South Dakota	8.85	9.10	9.30	9.45	9.95
Texas	7.25	7.25	7.25	7.25	7.25
Utah	7.25	7.25	7.25	7.25	7.25
Virginia	7.25	7.25	7.25	9.50	11
Vermont	10.50	10.78	10.96	11.75	12.55
Washington	11.50	12	13.50	13.69	14.49
Wisconsin	7.25	7.25	7.25	7.25	7.25
West Virginia	8.75	8.75	8.75	8.75	8.75
Wyoming	5.15	7.25	7.25	7.25	7.25
District Of Columbia	13.25	14	15	15.20	16.10

Apart from this, inflation can indirectly impact consumer bankruptcies by changing people's ability to repay debt and their financial situation. Statistical data on the minimum wage with and without accounting for the inflation was different in 2019-2022. Specifically, for 2019-2022, the inflation-adjusted wage was about 8, while the federal minimum wage was about 7.25 (Statista 2024). Yet, in states where the minimum wage remained at the federal level in 2019-2022, it did not even cover the level of inflation (Statista 2024). This means that people who earned the federal minimum wage were more likely to file for bankruptcy. Moreover, the disparity between federal and state minimum wage rates proves that the inconsistency in minimum wage laws and the need for federal intervention to determine fair wage policies across the country remain pressing issues.

6. Conclusion

The economic impact of the COVID-19 pandemic exceeded forecasts of a spike in consumer bankruptcies in the United States. Businesses were severely impacted, with a sharp decline in Chapter 7 filings, especially small businesses in such industries as retail and hospitality. Importantly, it appears that the minimum wage impacted the situation as well. States with federal minimum wages, which failed to keep up with inflation throughout the pandemic, observed a fall in bankruptcy filings that was greater than that of other states. This implies that bankruptcies may have been further reduced in the event of a greater minimum wage. Herein, the data clearly demonstrates a correlation implying that, in 2020–2022, such states as California, which maintained a minimum wage above the federal level, had a greater decline in bankruptcy filings than such states as Wisconsin, which adhered to the federal minimum wage. This result demonstrates the necessity of raising the federal minimum wage in order to implement uniform and equitable pay laws across the nation. Raising the federal minimum wage and factoring in inflation, as several states have done, may help to lower the bankruptcy rate and provide low-income people across the country with more financial stability.

Acknowledgements

This is the place to fill in information about funds, sponsors, etc. that need to be thanked.

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