

**The Effect of the Bankruptcy Abuse Prevention and Consumer Protection Act  
of 2005 on Credit Card Delinquency Rates**

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*I pledge my honor that this paper represents my own work in accordance with University  
regulations.*

/S/ Arthur Markley

## Table of Contents

Abstract.....	2
I. Introduction.....	3
II. Literature Review.....	7
III. Political History and Background.....	10
IV. Methodology.....	13
IV.A. Data.....	18
IV.B. Expected Results.....	20
V. Results.....	22
VI. Discussion.....	30
VII. Conclusion.....	34
References.....	36

## **The Effect of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 on Credit Card Delinquency Rates**

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### **Abstract**

The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (BAPCPA) was an Act of the U.S. Congress, passed in April 2005 and effective in October 2005, that overhauled personal bankruptcy procedure in the United States by making it more difficult for individuals to access the generous debt forgiveness provisions of Chapter 7 bankruptcy, instead pushing bankruptcy filers towards Chapter 13. The authors and proponents of BAPCPA argued that the Act would ensure only those who most needed debts discharged in bankruptcy would be able to access Chapter 7, thus inhibiting bankruptcy abuse and allowing creditors to recoup more of their capital. The Act consequently made it more difficult for bankruptcy filers to get their debt relieved, arguably placing an excessive financial burden on those in financial distress and making it harder for them to service those debts. This paper attempts to determine if BAPCPA had an effect on individuals' ability to service their debts; the analysis focuses on BAPCPA's effect on credit card delinquency rates in particular, a previously under-studied domain with regard to the Act. The findings indicate that while BAPCPA had no effect on credit card delinquency rates in 2006, the Act did lead to higher credit card delinquency rates in 2008 in those states in which it was most binding.

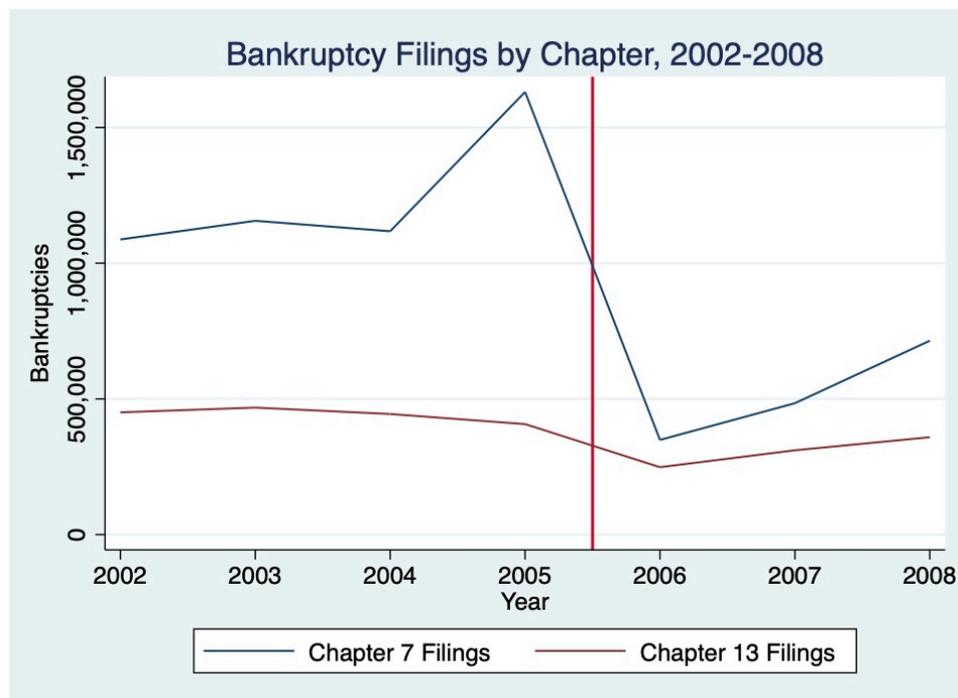
## **I. Introduction**

In April of 2005, Congress passed the Bankruptcy Abuse Prevention and Consumer Protection Act (“BAPCPA,” or “the Act”), a sweeping act that substantially changed the United States Bankruptcy Code, reshaping the bankruptcy options accessible to debtors and recovery mechanisms available for creditors. BAPCPA aimed to reform bankruptcy law in order to prevent opportunistic misuse of bankruptcy’s often generous forgiveness provisions and make it easier for creditors to recover debt from bankrupt debtors. BAPCPA focused in particular on making it more difficult for consumers to file for Chapter 7, a form of bankruptcy colloquially known as a “simple bankruptcy” that allows individuals to pay down a portion of their debts and eliminate the remaining amount in a short period of time, without provision of a future repayment plan. In lieu of Chapter 7 filings, BAPCPA sought to push more bankrupt debtors to Chapter 13, a significantly more stringent form of bankruptcy that, in short, requires debtors to pay back more of their debts. While it is not disputed that the Act may have accomplished its primary stated goal—to “make it more difficult for filers to abuse the most generous bankruptcy provisions” (Bush, 2005)—the consequences of the Act have extended beyond limiting bankruptcy abuse, making it more difficult for all filers to achieve debt forgiveness, and potentially placing an extreme burden on the most financially distressed individuals.

Chapter 7 is the most generous form of bankruptcy, generally allowing debtors to discharge either a large majority of or all unsecured debts, including credit card, medical, and any other uncollateralized debts. BAPCPA implemented a means test for Chapter 7 eligibility, created a legal “presumption of abuse” standard that disqualified individuals deemed potentially capable of paying their debts, mandated credit counseling prior to filing for bankruptcy, limited the amount of “luxury goods” debts that can be forgiven, and increased the requirements and fees

associated with filing for Chapter 7 bankruptcy. By making Chapter 7 filings more difficult, BAPCPA sought to shift debtors to Chapter 13 bankruptcy; under Chapter 13, debtors are required to establish a debt repayment plan over a period of three to five years, resulting in the repayment of a significantly larger share of debts than under Chapter 7. Chapter 13 is, in essence, more restrictive and less generous a form of bankruptcy than Chapter 7, operating under the presumption that filers who are deemed capable of paying their debts at some point in the future ought to be held liable for those debts. The Act was effective in reducing the overall number of bankruptcy filers, as well as pushing a greater proportion of filers into Chapter 13 bankruptcy; Figure I, below, shows the total number of Chapter 7 and Chapter 13 bankruptcies in the years preceding and following the implementation of BAPCPA (denoted by the vertical red line).

Figure I: Bankruptcy Filings by Chapter, 2003-2008



Notes: Data gathered from the Administrative Office of U.S. Courts Statistics & Reports Table F-2, 2002-2008.

BAPCPA consequently enjoyed legislative and lobbying support in Congress from banks and credit card companies, as a decrease in prospective Chapter 7 and increase in Chapter 13 bankruptcies would allow creditors to recover a greater share of capital than previously feasible; credit card companies were particularly supportive of BAPCPA, since unsecured credit card debt is likely to be entirely discharged under Chapter 7 bankruptcy. By making debt discharge more difficult, however, the Act exposed bankruptcy filers to further economic hardship; if an individual in financial duress's debts are not discharged, as under Chapter 13, it may become harder for them to service that debt later on, leading to future delinquency and default.

This paper will address the causal effect of BAPCPA on credit card delinquency rates; though BAPCPA's effect on other forms of personal debt and default, including mortgage delinquencies and personal bankruptcies, has been widely researched, its effect on credit card delinquency rates remains unexplored. Credit card debt, moreover, is one of the largest and most pervasive forms of personal debt in the United States, with delinquency rates representing a major indicator of consumer financial health; credit card delinquency rates certainly serve as a worthwhile area of investigation and analysis. Although BAPCPA was notoriously supported by the banks and the credit card lending industry, its effect on credit card delinquencies in particular has not been thoroughly studied. Moreover, though BAPCPA was intended to prevent bankruptcy abuse, it may have had the unintended effect of forcing individuals under financial duress into further delinquency and default; if this is the case, the implementation of BAPCPA would have led to a rise in credit card delinquency rates. The study's hypothesis is that BAPCPA led to an increase in credit card delinquency rates, as individuals experiencing financial hardship, unable to access Chapter 7 bankruptcy's debt forgiveness, became unable to service their debts.

This paper uses a difference-in-differences regression of credit card delinquency rates before and after the passage of BAPCPA, using state-level data from 2004, 2006, and 2008; for the purpose of this investigation, states where the Act was most binding are considered the treatment group, while states where the Act was less binding are the control group. If BAPCPA did in fact cause an increase in credit card delinquency rates, as the hypothesis conjectures, then it should be that states where the Act was most binding exhibit a greater increase in credit card delinquency rates than states where the Act was less binding. The results indicate that states where the Act was most binding did not have higher credit card delinquency rates in 2006, but did in 2008 during the early stages of the global financial crisis. These findings demonstrate that BAPCPA led to an increase in credit card delinquency rates, at least in times of financial distress, suggesting the Act had far-reaching unintended consequences detrimental to consumers in need of bankruptcy relief.

The paper will proceed as follows: Section II will provide an overview of the existing literature on BAPCPA and its effects; Section III will discuss the political history and background of BAPCPA and provide context to the Act's reputation and significance; Section IV will detail the empirical methodology, data, and expected results of the investigation; Section V will summarize the results of the analysis; Section VI will interpret and discuss the significance of the results, as well as offer an evaluation of the paper's method; Section VII will briefly conclude and offer questions for further research.

## II. Literature Review

Li, White, and Zhu (2011) explored how BAPCPA's measures to make bankruptcy, and Chapter 7 bankruptcy in particular, more difficult affected mortgage default rates. The paper focused on how BAPCPA's limitations on debts that could be discharged in bankruptcy and caps on repayment exemptions impacted homeowners under financial duress, using detailed individual mortgage data to control for differences in mortgages and bankruptcy filers' individual characteristics. The paper found that BAPCPA "caused prime and subprime mortgage default rates to rise by 23% and 14% respectively," affecting bankruptcy filers in states impacted by exemption caps more acutely than those unaffected by the cap (Li, White, and Zhu 2011, 137). The authors concluded that "bankruptcy reform squeezed homeowners' budgets by... reducing the amount of debt discharged" under the new BAPCPA policies (Li, White, and Zhu 2011, 144). The authors noted, however, the difficulties in determining BAPCPA's effect on default and bankruptcy with regard to the global financial crisis of 2008-2009, as the crisis and its effects likely increased default and bankruptcy rates in general. While mortgage default fundamentally differs from credit card default in a number of ways, the authors' analysis is nonetheless highly analogous to a study of credit card default rates; the conclusion that BAPCPA financially constrained those in bankruptcy, subsequently leading to higher mortgage default rates, implies that the Act may have had a similar effect on credit card defaults. This paper will explore that question in more detail, extending the analysis of BAPCPA's wide-ranging effects to credit card delinquency rates.

Morgan, Iverson, and Botsch (2012) examined the effect of BAPCPA on subprime mortgage foreclosure rates, comparing the Act's effect across states in which its application varied. The authors sorted states by the ratio of their homestead exemptions (debt exemptions

available to homeowners in Chapter 7 bankruptcy) to the median home price in order to compare the relative generosity of the exemptions. Because BAPCPA reduced the accessibility of Chapter 7 filings, and because exemptions only absolve debt under Chapter 7 filings, the authors posited that the Act was more likely to have a larger effect in states with high exemptions, as “Chapter 7 is more protective in high-exemption states, so limiting access to it will matter more” (Morgan, Iverson, and Botsch 2012, 51). The approach of sorting states by exemption strength allowed the authors to use a difference-in-differences regression to assess the effect of BAPCPA, a useful methodological tool. The paper concluded that BAPCPA led to an 11% increase in the subprime foreclosure rate for a state with a mean homestead exemption level; the authors further suggested that the increase in subprime foreclosures was a result of BAPCPA’s strengthening of personal lenders’, such as credit card companies’, claims to debt in bankruptcy, hypothesizing that the Act may have conversely *reduced* personal loan defaults (Morgan, Iverson, and Botsch 2012). While BAPCPA may have caused personal loan default rates to fall in aggregate, as the authors suggested, the effect the Act had on credit card delinquencies in particular is unclear; credit card debt is in many ways fundamentally similar to personal loans, indicating that BAPCPA may have correspondingly reduced credit card delinquency rates, a proposition that is at odds with the hypothesis of this paper. Resolving this conflict empirically will be the object of analysis in this paper.

The existing literature on BAPCPA focuses largely on mortgage default and foreclosure rates, perhaps because the Act immediately preceded the calamitous subprime mortgage and housing crises of 2007-2009; why, then, is BAPCPA’s effect on credit card debt and delinquency worthy of additional investigation? Simkovic (2009) explored the effect of BAPCPA on the credit card industry’s prices and profits, examining credit card interest rates and fees, as well as

the profits of the industry in the two years after BAPCPA took effect. The author investigated four purported benefits that proponents of BAPCPA specifically claimed the Act would promote: the paper “tests whether BAPCPA: (1) reduced the number of bankruptcies; (2) reduced credit card company losses; (3) lowered the costs to consumers of credit card debt; and (4) increased credit card company profits” (Simkovic 2009, 1). Simkovic found that BAPCPA reduced personal bankruptcies as well as credit card company losses associated with default and delinquency, while incongruously increasing the costs of credit card debt borne by consumers and driving credit card industry profits to record levels; in conclusion, he editorialized that “BAPCPA benefited credit card companies and hurt their customers” (Simkovic 2009, 22). The author’s analysis and results demonstrate the importance of including credit card debt in any comprehensive examination of the Act’s impact on consumers; the marked benefits of the Act conferred on credit card companies indicate that the industry and market were greatly impacted by BAPCPA, and while Simkovic’s study focused primarily on the Act’s effect on industry dynamics, consumer outcomes represent a worthy area of additional investigation. To not consider credit card debt when assessing BAPCPA’s effects would be to ignore a major consumer debt market profoundly impacted by the Act. This paper will add to Simkovic’s work by extending the analysis to BAPCPA’s impact on credit card delinquency rates and examining, in greater depth, the ways in which the Act and its changes to individual bankruptcy law impacted consumers.

### **III. Political History and Background**

BAPCPA was born out of over a decade of legislative research, review, drafting, and debate. Congressional hearings were convened as early as 1998 to discuss potential bankruptcy reform measures, with a particular emphasis on means-testing as a method of curtailing Chapter 7 filings and directing more filers towards Chapter 13. According to a government-commissioned study conducted by the accounting firm Ernst & Young, a means-testing program applied to personal bankruptcy would result in at least 15% of Chapter 7 filers being recategorized under Chapter 13, with these filers able to pay back, on average, 64% of their unsecured debts (such as credit card debt) over a 5-year period (Jensen 2005, 503). By 1999, Congress had drafted a bankruptcy reform bill that included rigorous Chapter 7 means-testing policies. While supporters of the bill argued that the means-testing measures would prevent abuse of Chapter 7's generous forgiveness conditions and promote accountability and personal responsibility in the bankruptcy system, critics faulted such policies for their stringency and rigidity; Representative Henry Hyde, the Chairman of the House Judiciary Committee tasked with preparing the bill, critiqued the reforms as "truly tilted towards the creditors" and called for greater "flexibility for living standards for people who are bankrupt" (145 Cong. Rec. 1999, H2723). The 1999 bankruptcy reform bill, lacking support from the President, ultimately failed to become law; the bankruptcy reform debate, however, continued.

Over the course of several years in the early 2000s, Congress debated and drafted various versions of a bankruptcy reform bill. In the midst of this legislative process, organized special-interest groups conducted extensive lobbying campaigns in support of bankruptcy reform; BAPCPA and its predecessor bills enjoyed strong support from the banking, consumer finance, and credit card industries, as the proposed restrictions on Chapter 7 filings would allow creditors,

and unsecured creditors in particular, to recoup more from bankrupt debtors. These industries made considerable efforts to further bankruptcy reform, with extensive lobbying and public opinion campaigns aimed at steering more bankruptcy filers towards Chapter 13. By way of example, the National Consumer Bankruptcy Coalition, a political action committee including the American Bankers Association, the American Financial Services Association, Visa Inc., and Mastercard International, made \$5.1 million in political contributions in the 2000 election cycle; other non-Coalition finance and credit card companies made an additional \$9.17 million in contributions (Nunez and Rosenthal 2004, 535). As Congress continued to progress towards viable bankruptcy reform bill, Nunez & Rosenthal observed the prominent role of special-interest lobbying throughout the legislative process; in an empirical political science paper that analyzed Congress members' voting patterns and political contribution receipts, the authors found "clear evidence of the effects of money (i.e., interest group pressures)" on bankruptcy reform bill proceedings (Nunez and Rosenthal, 2004, 553). According to Nunez and Rosenthal, special-interest lobbying "shifted the House and the Senate, as legislative bodies, in a procreditor direction" (2004, 535). While the effect of corporate influence on political decision-making is well outside the scope of this paper, the fact that bankruptcy reform and BAPCPA were at least partially driven by industries, such as the credit card industry, that stood to benefit from the Act provides additional reason to consider and analyze the potentially unintended effects the Act had on consumers, credit card debt, and bankruptcy.

In February of 2003, a preliminary version of BAPCPA was introduced in the House of Representatives; after five years of debate, discussion, and six failed bankruptcy reform bills, BAPCPA enjoyed considerable bipartisan support (Jensen 2005, 560); the Bush Administration commended the bill's "common sense reforms... [to] curb abuses of bankruptcy protections"

(Bush, 2003). It was not until two years later, however, in April of 2005, that BAPCPA would be made law; on signing the Act, President Bush expressed his favorable view of the new law's reforms to the bankruptcy system:

...bankruptcy should always be a last resort in our legal system. If someone does not pay his or her debts, the rest of society ends up paying them. In recent years, too many people have abused the bankruptcy laws. They've walked away from debts even when they had the ability to repay them... This practical reform will help ensure that debtors make a good-faith effort to repay as much as they can afford. This new law will help make credit more affordable, because when bankruptcy is less common, credit can be extended to more people at better rates. (2005, ¶ 5-6)

After over eight years of review, debate, drafting, and lobbying, BAPCPA took effect in October of 2005. The Act is considered the most sweeping overhaul of the U.S. bankruptcy system since 1978, and remains a topic of legal and economic study to this day. With the Act's lengthy and controversial history as context, this paper aims to add to the existing analysis by ascertaining BAPCPA's unintended effects on credit card delinquency rates.

#### IV. Methodology

This paper uses debt levels and delinquency rates for the fourth quarter of 2004, before BAPCPA took effect, and the fourth quarters of 2006 and 2008, after BAPCPA took effect, as the data is only available for the fourth quarter of every year. This allows for a difference-in-differences method to estimate the effect of BAPCPA on delinquency rates, where treatment is represented by how “binding” the Act was in a given state, as represented by the amount of the exemptions available; this is the same method that was used by Morgan, Iverson, and Botsch (2012) with respect to mortgage foreclosure rates. The primary regression estimates:

$$Y_{it} = \beta_0 + \beta_1 T^{2006} + \beta_2 T^{2008} + \beta_3 Exempt_i + \beta_4 (T^{2006} \times Exempt_i) \\ + \beta_5 (T^{2008} \times Exempt_i) + \beta_6 X_i + u_i$$

where  $Y_{it}$  is the delinquency rate,  $T^{2006}$  and  $T^{2008}$  are dummy variables for the years 2006 and 2008, respectively,  $Exempt_i$  is a dummy variable for whether the state is a high- or low-exemption state, and  $X_i$  is a vector of 51 state dummy variables (the 50 U.S. states, plus Washington D.C.) to control for state fixed effects.

In interpreting the regression results,  $\beta_0$  represents the credit card delinquency rate in low-exemption states (in a sense, the control group, where BAPCPA was less binding) in 2004, before the passage of the Act;  $(\beta_0 + \beta_1)$  is the delinquency rate in low-exemption states in 2006, after BAPCPA;  $(\beta_0 + \beta_2)$  is the delinquency rate in low-exemption states in 2008, after BAPCPA;  $(\beta_0 + \beta_3)$  is the delinquency rate in high-exemption states in 2004, before BAPCPA;  $(\beta_0 + \beta_1 + \beta_3 + \beta_4)$  is the delinquency rate in high-exemption states in 2006, after BAPCPA; and  $(\beta_0 + \beta_2 + \beta_3 + \beta_5)$  is the delinquency rate in high-exemption states in 2008, after BAPCPA. Taking the difference between the pre- and post-passage high-exemption delinquency rates yields  $\beta_4$  as the difference in the effect of BAPCPA on low-exemption and high-exemption

state delinquency rates in 2006, and  $\beta_5$  as the difference in the effect of BAPCPA on low-exemption and high-exemption state delinquency rates in 2008.

In determining  $Exempt_i$ , whether a state is high- or low-exemption, this study sums the exemptions in 2005 for homesteads, motor vehicles, personal property and personal belongings, and “wildcard” exemptions, which can be applied to any property, within certain limits (e.g., in many states wildcard exemptions cannot be applied to the value of a home on top of the homestead exemption). Because these categories of exemptions constitute the overwhelming majority of the total value of exemptions available in any given state, this definition will standardize exemptions across states and eliminate issues regarding how to compare states’ varying approaches to categorizing exemptions. While a number of states have additional bankruptcy exemption categories beyond the ones listed above, they are often small in relation to the other exemptions, and frequently difficult to apply or rarely exercised. (Some states, for example, have exemptions of approximately \$500 for burial plots, vestiges of bankruptcy laws of the distant past that have remained in the states’ codes.) Additionally, the year 2005 is used for calculating the total bankruptcy exemption values simply because it is the year that BAPCPA went into effect; because bankruptcy exemption values exhibit very little variation over years, beyond small adjustments for inflation (which are, moreover, not made annually), it is reasonable to use only the bankruptcy exemption values for the year 2005 for the purpose of this study.

After calculating the value of bankruptcy exemptions available for each state, this study divides each exemption value by the state’s real price parity index for the year 2005 in order to adjust the exemption value for differences in state price levels; the bankruptcy exemptions available in a state with a high price level, for example, would be less valuable to a bankruptcy filer than the same set of exemptions in a state with a low price level. Indexing the nominal

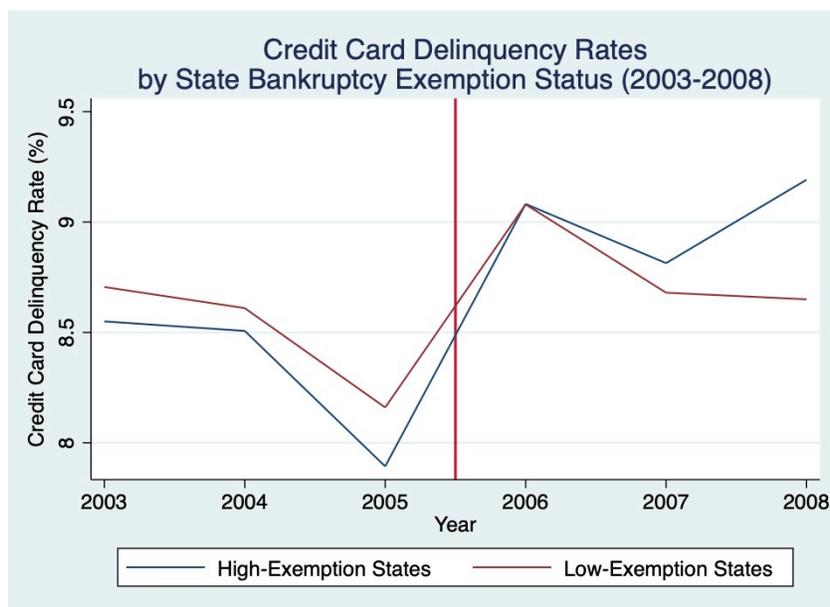
bankruptcy exemption value for the states' relative price level allows for clearer comparisons to be drawn based on the real value of the exemptions available. States are then sorted by the resulting indexed bankruptcy exemption value for the year 2005; the highest twenty-five indexed exemption states are defined as high-exemption states and the bottom twenty-six indexed exemption states are defined as low-exemption states for the purpose of this paper. Sorting by the 2005 indexed bankruptcy exemption value, as opposed to different rankings for different years, is again sufficient because of the low level of variation in both bankruptcy exemption values and relative real price parity indices across the years 2004-2008; sorting based on 2004, 2006, or 2008's indexed bankruptcy exemption value would not fundamentally change the categorization of the states as high- or low-exemption, and thus has little to no effect on the results of the analysis.

$Exempt_i$  is functional as a treatment variable for how "binding" BAPCPA was in a given state because it compares the exemptions available in 2005 (as defined above) against the relative price level in each state. If a state is high-exemption, BAPCPA was more binding because it eliminated access to a previously very generous Chapter 7 bankruptcy regime; conversely, if a state is low-exemption, BAPCPA was less binding because the protections available were not as significant and expansive in the first place. Bankruptcy filers in high-exemption states that previously enjoyed access to greater protection under Chapter 7 may no longer have had this option after the passage of BAPCPA; filers in low-exemption states, conversely, never had access to such generous Chapter 7 exemptions, and thus were less affected by the passage of BAPCPA. In essence, the availability of Chapter 7 was more meaningful in states that had high exemptions to protect a filer's assets and property, meaning that BAPCPA's

stringent limitation on access to Chapter 7 would have had a greater effect in those high-exemption states.

Differences-in-differences is an appropriate technique for assessing BAPCPA's causal effect on credit card delinquency rates because the Act had different effects on high- and low-exemption states; because, as described above, BAPCPA was more binding in high-exemption states, high-exemption states can be interpreted as a treatment group, while low-exemption states are categorized as a control group. Difference-in-differences works in this case, moreover, because a state's status as high- or low-exemption, and thus placement in "treatment" or "control" groups, is effectively random; on average, there are no fundamental differences between high- and low-exemption states that would affect either group's credit card delinquency rates. For the purposes of this study, we can safely assume that the high- and low-exemption groups satisfy the parallel trend assumption of difference-in-differences; Figure II below illustrates that there is, in fact, substantial stability in credit card delinquency rates across states in 2003, 2004, and 2005, the years before BAPCPA took effect (with the Act's implementation represented by the vertical red line). Tables I, II, and III of Section IV.A below further substantiate that the parallel trends assumption is satisfied. While a more in-depth analysis of difference-in-differences and its assumptions would be necessary to more robustly demonstrate this paper's validity, there is sufficient reason to believe that the approach will prove functional to proceed.

Figure II: Credit Card Delinquency Rates by State Bankruptcy Exemption Status, 2003-2008



*Notes:* Data used to determine exemption status gathered from state court website archives and reputable databases of state laws. Credit card delinquency rate data obtained from the Federal Reserve Bank of New York Center for Microeconomic Data.

Two different years, 2006 and 2008, are used to represent the post-BAPCPA periods for several reasons. Though the Act was signed into law in April of 2005, it did not take effect until mid-October of 2005, part of the way through the fourth quarter, when the data on credit card delinquency rates is collected; including the year 2005 would thus provide an unclear picture of the Act's effect. Moreover, the Act had a distortionary effect on bankruptcy filings as well as defaults and delinquencies of all forms of debt in 2005, as many financially distressed consumers opted to file for bankruptcy before the Act took effect in order to access Chapter 7 bankruptcy. Because 2006 was the first full year after the Act took effect, it is useful for an analysis of the immediate impact BAPCPA had on credit card delinquency rates; any statistically significant difference in the increase of credit card delinquency rates across high- and low-exemption states would provide evidence that BAPCPA had a prompt effect on such delinquencies. With historical and financial context, however, it is clear that data from just 2006 may not accurately

reveal any effect that BAPCPA had— 2006, like the years preceding it, was a period of remarkable stability and general economic prosperity in the United States, marked by rising housing values, declining unemployment, and easy access to inexpensive credit for consumers. The majority of 2007 exhibited similar economic conditions, with the global financial crisis not taking hold until early 2008. By including the year 2008 in the analysis, this study aims to determine the effect BAPCPA had on delinquency rates in a time of financial crisis. Millions were laid off and became unable to meet their financial obligations and service their debts; if high-exemption states had a statistically significantly greater increase in credit card delinquency rates than low-exemption states in this period, the analysis will have shown that the Act did in fact contribute to the growth of credit card delinquencies in a time of financial distress.

#### **IV.A. Data**

Data on credit card delinquency rates is obtained from the Federal Reserve Bank of New York's Center for Microeconomic Data, which publishes quarterly reports on household debt, credit, and spending, as well as delinquency and default rates, among other data. The data is state-level, and runs from the fourth quarter of 2003 through the present; state-level statistics are based on aggregate data compiled from the Federal Reserve Bank of New York's consumer credit panel survey and the credit bureau Equifax.

Tables I, II, and III provide summary statistics on credit card delinquency rates, credit card debt per capita, and total debt per capita, respectively, for high- and low-exemption states in 2004:

Table I: Credit Card Delinquency Rates (2004) by State Exemption Status

State Exemption Status	Observations	Mean	Std. Dev.	Min	Max
High-Exemption States	25	8.51%	2.12%	5.68%	13.00%
Low-Exemption States	26	8.61%	1.39%	6.35%	11.33%

Table II: Credit Card Debt Per Capita (2004) by State Exemption Status

State Exemption Status	Observations	Mean	Std. Dev.	Min	Max
High-Exemption States	25	\$3,054	\$457	\$2,170	\$4,430
Low-Exemption States	26	\$2,962	\$314	\$2,340	\$3,570

Table III: Total Debt Per Capita (2004) by State Exemption Status

State Exemption Status	Observations	Mean	Std. Dev.	Min	Max
High-Exemption States	25	\$36,270	\$10,786	\$19,980	\$57,710
Low-Exemption States	26	\$33,849	\$7,955	\$18,890	\$49,400

*Notes:* Data for Tables I, II, and III obtained from the Federal Reserve Bank of New York Center for Microeconomic Data.

A cursory view of the 2004 summary statistics suggests that the difference-in-differences parallel trend assumption, discussed in Section IV, is satisfied; simple t-tests comparing the high- and low-exemption states' data further verifies that there is no statistically significant difference between the two groups. While additional data dating back several years prior to 2004 is necessary to strictly and completely rule out pre-trends and satisfy the parallel trends assumption, it can be safely assumed such trends do not exist for the purposes of this paper.

Complete historical data for state bankruptcy exemptions is obtained from individual state court websites and online archives, when applicable, and reputable databases of past state laws. In order to standardize across states, historical price levels for each state will be obtained

from the Bureau of Economic Analysis, which publishes statistics every year on regional price parities, an index in which 100 represents the national mean price level; states above 100 have a price level above the national average, while states below 100 have a price level below the national average. Tables IV and V provide summary statistics on total bankruptcy exemption values and indexed bankruptcy exemption values, respectively, for high- and low-exemption states in 2005:

Table IV: Bankruptcy Exemption Values by State Exemption Status

State Exemption Status	Observations	Mean	Std. Dev.	Min	Max
High-Exemption States	25	\$163,825	\$123,405	\$56,000	\$533,225
Low-Exemption States	26	\$28,358	\$14,585	\$3,000	\$66,975

Table V: Indexed Bankruptcy Exemption Values (2005) by State Exemption Status

State Exemption Status	Observations	Mean	Std. Dev.	Min	Max
High-Exemption States	25	1645.84	1130.56	602.15	4923.59
Low-Exemption States	26	292.16	130.90	26.57	595.12

*Notes:* Data for Table IV obtained from state court website archives and reputable databases of state laws. Historical real price parity indices used for calculating indexed bankruptcy exemption values in Table V obtained from the Bureau for Economic Analysis, 2005.

#### IV.B. Expected Results

This study hypothesizes that the results will show BAPCPA effectively increased credit card delinquency rates, particularly in states with high bankruptcy exemption values, as individuals in these states would have borne the greatest force of the Act's restrictions on bankruptcy filers. Unable to seek protection under Chapter 7 and have their debts forgiven, bankruptcy filers were likely forced into additional financial hardship and, ultimately, a position

in which they were unable to service their debts. Moreover, it is likely that by making it more difficult to file for bankruptcy in the first place, BAPCPA discouraged many individuals from making official filings and seeking a legal solution, thus exposing them to a further decline towards delinquency. This study expects that  $\beta_1$  (the effect of BAPCPA on low-exemption states in 2006) will be positive, but relatively small, as the Act had less of an effect on credit card delinquency rates where it is less binding;  $\beta_2$  (the effect of BAPCPA on low-exemption states in 2008) is expected to be positive and larger than  $\beta_1$ , though likely not statistically significant, as the global financial crisis forced more individuals into bankruptcy with minimal forgiveness.  $(\beta_1 + \beta_4)$  (the effect of BAPCPA on high-exemption states in 2006) is also expected to be positive, and larger than  $\beta_1$ ;  $(\beta_2 + \beta_5)$  (the effect of BAPCPA on high-exemption states in 2008) is expected to be positive and much larger than  $\beta_2$ , as BAPCPA's constraints on Chapter 7 bankruptcy, which are most binding in high-exemption states, had the largest effect in times of financial distress. In summary, it is expected that  $\beta_4$  (the difference in the effect of BAPCPA on low-exemption and high-exemption state delinquency rates in 2006) will be positive, though perhaps not large in magnitude, while  $\beta_5$  (the difference in the effect of BAPCPA on low-exemption and high-exemption state delinquency rates in 2008) will be large and positive.

## V. Results

Regression results are included below in Table VI. The first column shows the results of regressing credit card delinquency rates on the 2006 time dummy and the state dummies; the second column presents the results of difference-in-differences regression of credit card delinquency rates on the 2006 time dummy, the exemption status dummy, the interaction between time and exemption status, and the state dummies; the third column shows the results of regressing credit card delinquency rates on the 2008 time dummy and the state dummies; the fourth column displays the results of the difference-in-differences regression of credit card delinquency rates on the 2008 time dummy, the exemption status dummy, the interaction between time and exemption status, and the state dummies; the fifth column shows the results of regressing credit card delinquency rates on both the 2006 and 2008 time dummies, and the state dummies; and, finally, the sixth column reports the results of the full primary regression of credit card delinquency rates on both the 2006 and 2008 time dummies, the exemption status dummy, both interactions between time and exemption status, and the state dummies (estimating  $Y_{it} = \beta_0 + \beta_1 T^{2006} + \beta_2 T^{2008} + \beta_3 Exempt_i + \beta_4 (T^{2006} \times Exempt_i) + \beta_5 (T^{2008} \times Exempt_i) + \beta_6 X_i + u_i$ ).

Table VI: Results of Regression Credit Card Delinquency Rates on Time Variables, State Exemption Status, Interaction Terms, and State Fixed-Effect Variables

Variables	(1)	(2)	(3)	(4)	(5)	(6)
$T^{2006}$	0.622*** (0.0798)	0.672*** (0.111)			0.611*** (0.143)	0.672*** (0.192)
$T^{2006} \times Exempt_i$		-0.104 (0.161)				-0.134 (0.277)
$T^{2008}$			0.354** (0.159)	0.0358 (0.216)	0.354** (0.142)	0.0358 (0.192)
$T^{2008} \times Exempt_i$				0.649** (0.309)		0.649** (0.274)
State Dummies		No	No	No	No	Yes
Constant	8.561*** (0.0567)	8.561*** (0.0567)	8.560*** (0.113)	8.560*** (0.109)	8.564*** (0.101)	8.566*** (0.0971)
Observations	102	102	102	102	153	153
Adjusted R-Squared	0.954	0.954	0.8	0.813	0.8497	0.86
Within R-Squared	0.558	0.558	0.0898	0.165	0.157	0.230

Robust standard errors in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In the above results,  $Exempt_i$  is dropped due to collinearity with the state dummies; this removal does not affect the interpretation of the difference-in-differences estimators.

Two R-squared values are reported in the regression results of Table VI. The adjusted R-squared value represents the traditionally-reported statistic, computed by adjusting the ratio of the explained sum of squared residuals to total sum of squared residuals for the number of regressors. Because the regressions used in this analysis include a large number of fixed-effect regressors relative to the number of regressors of interest (51 fixed-effect regressors for, at most, four regressors of interest), the adjusted R-squared value will be largely driven by the fixed-effect regressors. To account for this, the within R-squared is also included in the results. Within R-squared is another version of the adjusted R-squared that calculates the adjusted R-squared of the regression in which the regressors of interest have been demeaned with respect to the fixed-effect regressors. The within R-squared is thus a better measure of the ratio of the explained

delinquency rate variance to the total delinquency rate variance, and will be the primary coefficient of determination used for evaluating goodness-of-fit in this analysis.

Columns 1 and 2 of the table show regressions that focus on 2006 as the post-BAPCPA period of analysis. The results show that the coefficient on the 2006 time variable  $T^{2006}$  is positive, relatively large, and statistically significant at the 1% level for both regressions in columns 1 and 2. This result indicates that the passage of time from 2004 to 2006 had a positive effect on credit card delinquency rates, independent of whether a state was high- or low-exemption. While this finding contradicts the expected outcome, which anticipated that the coefficient on  $T^{2006}$  would be positive yet small, it is not inexplicable; indeed, it shows that across all states, credit card delinquency rates rose significantly between 2004 and 2006, suggesting that BAPCPA potentially impacted delinquency rates without regard for whether a state was high- or low-exemption. While the difference-in-differences methodology of this study does not permit such a broad conclusion, it is nonetheless intuitively understandable that such a result would arise.

In column 2, the coefficient on the 2006 interaction variable ( $T^{2006} \times Exempt_i$ ) is negative, indicating that BAPCPA actually had a negative effect on credit card delinquency rates in high-exemption states relative to low-exemption states between 2004 and 2006, a finding that runs counter to the expected outcome. The coefficient on this interaction term is estimated to be  $-0.104$ , suggesting that BAPCPA decreased credit card delinquency rates by 0.104% in high-exemption states relative to low-exemption states; while this result is not particularly meaningful, as the coefficient is small and statistically insignificant, it nonetheless runs distinctly counter to the expected outcome, which predicted that high-exemption states would see higher delinquency rates than low-exemption states in 2006.

The within R-squared of both the first and second regressions is 0.558, suggesting that the model explains a significant proportion of the variation in the credit card delinquency rates; this is not particularly surprising, however, as the delinquency rate data is aggregate, and thus subject to relatively little variation over time. Moreover, credit card delinquency rates are unlikely to vary much over a short period of time (2 years, between 2004 and 2006), particularly in a stable macroeconomic climate, leading to a low total variation in delinquency rates, which in turn contributes to a higher within R-squared. The fact that both the first and second regressions have a within R-squared of 0.558 indicates, surprisingly, that the inclusion of the  $Exempt_i$  and  $(T^{2006} \times Exempt_i)$  regressors has no effect on the model's goodness of fit, suggesting that a state's status as high- or low-exemption does not contribute in explaining changes in credit card delinquency rates between 2004 and 2006. This result certainly runs counter to the hypothesis of this study, which is based on the conjecture that exemption status, and, by proxy, how binding BAPCPA is in a given state, had a significant positive effect on credit card delinquency rates.

The results of the third and fourth regressions, displayed in columns 3 and 4, do support the expected outcome of the study; in the regression of column 4, the coefficient on the  $(T^{2008} \times Exempt_i)$  interaction term is positive and statistically significant at the 5% level. According to these results, which compare the pre-Act period of 2004 to the post-Act period of 2008, BAPCPA had a positive effect in 2008 on credit card delinquency rates in high-exemption states relative to low-exemption states. The estimated coefficient of 0.649 suggests that credit card delinquency rates increased by 0.649% more in high-exemption states than in low-exemption states between 2008 and 2004 as a result of the Act. Moreover, the addition of the  $(T^{2008} \times Exempt_i)$  interaction term between columns 3 and 4 has a stark impact on the estimated coefficient on the 2008 time variable  $T^{2008}$ ; without the interaction term, the

coefficient on  $T^{2008}$  is positive and statistically significant at the 5% level (shown in column 3). When the  $(T^{2008} \times Exempt_i)$  interaction term is included as a regressor, however, the estimated coefficient on  $T^{2008}$  drops to near zero and is statistically insignificant, indicating that the interaction term, which accounts for whether a state is high- or low-exemption, is much more effective at explaining the increase in delinquency rates between 2004 and 2008. This outcome reflects the importance of a states' status as high- or low-exemption, and in turn whether BAPCPA was more or less binding, to delinquency rates; high-exemption states saw statistically significant increases in delinquency rates between 2004 and 2008, while low-exemption states see virtually no such increase, suggesting that the level at which BAPCPA was binding in a state had a consequential effect on the states' delinquency rates.

Interestingly, the within R-squared of the regression in column 4 is only 0.165, indicating the model explains relatively little of the variance in credit card delinquency rates. This result is unsurprising, however, as 2008 was a time of incredible economic and financial turmoil; there are countless variables not included in this study's model that likely impacted credit card delinquency rates to a significant degree. The within R-squared of this regression is, however, approximately twice as large as the within R-squared of the regression that did not include the interaction term  $(T^{2008} \times Exempt_i)$ , displayed in column 3. The marked difference in within R-squared values indicates that a state's status as high- or low-exemption is significant in explaining the variation in credit card delinquency rates; by including the interaction term in the regression, the model is able to capture twice as much of the variation in the credit card delinquency data indicating that, at least in 2008, BAPCPA had a significant effect on credit card delinquency rates.

The results of the primary difference-in-differences regression of this study are presented in column 6. The results of this regression, which includes both the 2006 and 2008 post-BAPCPA periods, partially support the expected outcome of the analysis. While the results are virtually identical to the first and fourth columns with respect to the time variables and the interaction terms, this is to be expected, as the complete regression equation is essentially just a combination of the two separated regressions. Like the previous regressions displayed in Table VI, these results indicate that the passage of time from 2004 to 2006, represented by the  $T^{2006}$  dummy variable, had a positive effect on credit card delinquency rates that is statistically significant at the 1% level. The coefficient on the  $(T^{2006} \times Exempt_i)$  interaction term is again negative, though not statistically significant, implying that the effect of BAPCPA on high-exemption states was no different than the Act's effect on low-exemption states; as described above, this result contradicts the expected outcome. In the post-BAPCPA period of 2008, however, the coefficient on the  $(T^{2008} \times Exempt_i)$  interaction term is both positive and statistically significant at the 5% level, suggesting that, in this period, BAPCPA caused credit card delinquency rates to increase by more in high-exemption states than in low-exemption states. This finding is consistent with the expected results. Moreover, the difference in within R-squared values between columns 5 and 6 again indicates that a state's status as high- or low-exemption explained a sizeable proportion of the variation in credit card delinquency rates, as discussed above, further suggesting that BAPCPA did in fact have a positive effect on credit card delinquency rates.

Table VII below considers the results of a second set of regressions. This set of regressions deviates from the strict difference-in-differences framework by defining 2006 as the base year and regressing credit card delinquency rates on the 2008 time dummy  $T^{2008}$  and the

2008 interaction term ( $T^{2008} \times Exempt_i$ ); because BAPCPA was passed in 2005, before both of the time periods analyzed in these regressions, these results should not be interpreted as reflecting a true difference-in-differences regression. They are included, however, to analyze the difference in changes in credit card delinquency rates between high- and low-exemption states.

Table VII: Results of Regressing Credit Card Delinquency Rates on the 2008 Time Variable, State Exemption Status, and the 2008 Interaction Term

Variables	(1)	(2)
$T^{2008}$	-0.246 (0.171)	-0.636*** (0.226)
$T^{2008} \times Exempt_i$		0.813** (0.326)
State Dummies	No	No
Constant	9.172*** (0.121)	9.168*** (0.109)
Observations	102	102
Adjusted R-Squared	0.7904	0.811
Within R-Squared	0.0403	0.150
Robust standard errors in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		

As in earlier regressions,  $Exempt_i$  is dropped due to collinearity with the state fixed effects.

The first column shows the results of regressing credit card delinquency rates on the 2008 time variable  $T^{2008}$ ; the second column expands the regression to include both  $T^{2008}$  and the interaction term ( $T^{2008} \times Exempt_i$ ). As aforementioned, 2006 is used as the base year in these regressions. Thus, in the second column, the coefficient on ( $T^{2008} \times Exempt_i$ ) can be interpreted as the difference between high- and low-exemption states' change in credit card delinquency rates between 2006 and 2008; the coefficient of 0.813, statistically significant at the 5% level, suggests that credit card delinquency rates increased 0.813% more in high-exemption

states than in low-exemption states between 2006 and 2008. The within R-squared values indicate that the inclusion of the interaction term ( $T^{2008} \times Exempt_i$ ) leads to the model explaining nearly four times as much of the variance in delinquency rates as without the term. Again, as above, this result indicates that a state's status as high- or low-exemption—and, in turn, how binding BAPCPA is in that state—is significant in explaining credit card delinquency rates in the 2008 period.

## VI. Discussion

To summarize the results interpreted in Section V, the analysis showed that BAPCPA did not have a statistically significant effect on credit card delinquency rates in high-exemption states versus low-exemption states in 2006; the Act did, however, have a positive and statistically significant effect on delinquency rates in high- versus low-exemption states in 2008. Moreover, the analysis of the 2006 to 2008 period, while not a true difference-in-differences model, showed that high-exemption states saw a statistically significantly larger increase in credit card delinquency rates than low-exemption states. Overall, then, the results are somewhat mixed. The results of the 2004-2006 regression suggest that the level to which BAPCPA was binding in a state had virtually no effect on credit card delinquency rates; the results of the 2004-2008 and 2006-2008 analyses, however, indicate that how binding the Act was in a given state played a significant role in driving up credit card delinquency rates. While these results do not entirely agree with the hypotheses of this study, they are not incongruous; it is a reasonable interpretation that the Act and the level to which it was binding in a given state did not have an effect on credit card delinquency rates until financial distress occurred. Indeed, in times of economic stability and prosperity, bankruptcy, delinquency, and default are less common, implying that BAPCPA and its restrictions on Chapter 7 bankruptcy did not become truly relevant until the financial crisis, when many consumers were forced to file for bankruptcy. Moreover, it is likely that by making it more difficult to file for bankruptcy of all chapters, BAPCPA discouraged many individuals from making official filings and seeking a legal solution, exposing them to further financial decline towards delinquency. Thus, only once consumers suffered financial hardship did the unintended consequences of the Act appear. This interpretation is reconcilable with the outcomes of the analysis and its seemingly contradictory results.

The results of this study are largely consistent with the existing literature on BAPCPA and its effects, described in greater detail in Section II. Li, White, and Zhu (2011) and Morgan, Iverson, and Botsch (2012) both found that in high-exemption states, where BAPCPA was most binding, both prime and subprime mortgage foreclosure rates increased more than in low-exemption states in 2008. While the analysis of this study considers credit card delinquency rates, the same logic applies across all three investigations: limiting consumers' access to Chapter 7 bankruptcy relief led to greater financial hardship for those in economic distress, which in turn caused foreclosure, delinquency, and default to increase, with the effect most pronounced in those states where the Act was most binding. Simkovic (2009) found, however, that BAPCPA led to reduced losses for credit card companies as a result of fewer bankruptcy-related delinquencies and defaults; while this conclusion seems to contradict the results of the study at hand, Simkovic's analysis focused on the 2006-2007 period, and thus failed to capture the Act's effect during the financial crisis. An extension of Simkovic's investigation to 2008 and beyond might reveal that BAPCPA was ultimately detrimental to the credit card industry during a period of financial distress in which consumers found themselves unable to service their credit card and other debts, reflected by the increases in credit card delinquency rates.

The results of this study are certainly limited, however. Because the data used in this analysis is only at the aggregate state level, the number of "individuals" and observations is inherently constrained, limiting the robustness of the conclusions that can be drawn. Using consumer-level data with a large number of observations of individuals' state of residence, debt levels, whether they defaulted on credit card debt, and whether they filed for bankruptcy would greatly strengthen the analysis and allow for more conclusive results. Moreover, the data on credit card delinquency rates used was relatively sparse; data was only available for the fourth

quarter of every year, and only dated back to 2003. Credit card delinquency data for every quarter, as well as data for before 2003, would allow for a more thorough investigation of potential pre-trends, as well as a more specific analysis of the post-BAPCPA period. Beyond limitations of the data, the study runs into potential issues characteristic of any economic analysis of the global financial crisis; the crisis and its far-reaching effects led to higher rates of debt delinquency across the board, complicating the study's attempt to isolate the effects of BAPCPA. There are, to be sure, countless variables not included in this study's model that likely impacted credit card delinquency rates to a significant degree. While the difference-in-differences methodology and its selection of high- and low-exemption states, as well as the inclusion of state fixed effect dummy variables, does account for the widespread phenomena associated with the global financial crisis, it is nonetheless a complicating factor in the analysis that constrains the strength of the conclusions that can be drawn from the results.

This study is fundamentally built on the unacknowledged assumption that consumers are informed and rational actors. In assuming that BAPCPA is most binding in states with a large bankruptcy exemption value, this study has taken for granted that individuals were, at least implicitly, conscious of their states' bankruptcy exemptions and that they acted with this information in mind. If, prior to BAPCPA, individuals in aggregate were unaware of their state bankruptcy exemptions, then there is no reason to believe that the implementation of BAPCPA would have been more binding in high-exemption states than in low-exemption states. This study requires that individuals were internalizing the bankruptcy exemptions available before BAPCPA was enacted; if they were not, then they have not "lost" anything with the passage of the Act, and the framework on which this study's difference-in-differences methodology is based is invalid. While the results of this analysis and several existing studies point to the conclusion

that individuals were implicitly aware of and acting on the bankruptcy exemptions available to them, it is nonetheless a critical assumption that, if violated, would render this study's approach inoperable.

## VII. Conclusion

While BAPCPA has been the subject of extensive research and scrutiny since its passage, the existing literature has not examined the Act's effect on credit card debt. This study has sought to rectify that omission by analyzing the Act in relation to credit card delinquency rates, a principal indicator of consumer financial health. The investigation used a difference-in-differences approach in which states with high bankruptcy exemption values were considered the "treated" group, and states with low bankruptcy exemption values the "control" group. The results reveal that BAPCPA had no effect on credit card delinquency rates in 2006, but did have a positive and statistically significant effect on credit card delinquency rates in 2008, as delinquency rates were statistically significantly higher in high-exemption states, where BAPCPA was most binding, than in low-exemption states.

The results of this study suggest that BAPCPA had unintended negative consequences for consumers, as its limitations on Chapter 7 bankruptcy's generous debt forgiveness and discharge provisions led to greater financial hardship for those individuals already in economic distress. Where bankruptcy filers could previously turn to Chapter 7 for financial relief, BAPCPA forced them into Chapter 13 under the expectation that many filers were capable of repaying a significant proportion of their debts. This study does not dispute that assumption, nor does it suggest that BAPCPA did not have beneficial effects; this study does, however, reveal that BAPCPA likely left those in financial distress with few options for absolving or alleviating their debt burdens, leading to higher credit card delinquency rates than would otherwise have occurred.

This study makes no attempt to determine whether BAPCPA was ultimately beneficial or detrimental to the American consumer and economy; it merely strives to illuminate the

unintended and perhaps unforeseen impact of an incredibly consequential piece of legislation. The U.S. bankruptcy system under BAPCPA is certainly more creditor-friendly, at least explicitly, than it has been in the past; this study has revealed that such a change comes at a cost during times of financial distress, as a greater proportion of consumers fail to service their debts. Further study on the relationship between the bankruptcy options available to consumers and those consumers' economic outcomes is necessary to better understand the effects bankruptcy law has on individuals. The interactions between bankruptcy law and student loan debt, for example, is one such area for future study that is likely to become of great significance in years to come. While BAPCPA is perhaps no longer relevant for research, as consumers have had 15 years to react to and internalize the laws' changes, this study has revealed that any future changes to the bankruptcy system, if not carefully designed, are likely to have extensive unintended consequences.

## References

- Alabama Code. 2005. Section 6, Chapter 10.
- Alaska Statutes. 2005. Title 09, Chapter 09.38.
- Administrative Office of U.S. Courts. 2002-2008. Statistics & Reports. “F-2.” Accessed April 19, 2020. <https://www.uscourts.gov/statistics-reports>.
- Arizona Revised Statutes. 2005. Title 33, Chapter 8.
- Bankruptcy Abuse Prevention and Consumer Protection Act of 2005. 2005. Public Law 109-8. <https://www.congress.gov/109/plaws/publ8/PLAW-109publ8.pdf>.
- Bureau of Economic Analysis. 2004-2008. Regional Price Parities by State and Metro Area. United States Bureau of Economic Analysis. Accessed March 18, 2020. <https://www.bea.gov/data/prices-inflation/regional-price-parities-state-and-metro-area>.
- Bush, George W. 2003. “Statement of Administration Policy: H.R. 975— Bankruptcy Abuse Prevention and Consumer Protection Act of 2003.” The American Presidency of the University of California, Santa Barbara. Accessed May 6, 2020. <https://www.presidency.ucsb.edu/documents/hr-975-bankruptcy-abuse-prevention-and-consumer-protection-act-2003>.
- Bush, George W. 2005. *President Signs Bankruptcy Abuse Prevention, Consumer Protection Act*. The White House Archives. <https://georgewbush-whitehouse.archives.gov/news/releases/2005/04/print/20050420-5.html#>
- California Code of Civil Procedure. 2005. Title II, §9, Subchapter 4.
- Connecticut Code of Civil Procedure. 2005. Volume 13, Title 52.
- Delaware Code. 2005. Chapter 49, Subchapter1, §4914.
- Illinois Compiled Statutes. 2005. Chapter 735, Section 5-12.

- Jensen, Susan. 2005. "A Legislative History of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005." *The American Bankruptcy Law Journal* 79 (3): 485-570.  
<https://search-proquest-com.ezproxy.princeton.edu/docview/202782121?accountid=13314>.
- Justia Law. n.d. "U.S. Laws, Codes & Statutes." Justia.com. Accessed March 10, 2020.  
<https://law.justia.com/codes/>.
- Li, Wenli, White, Michelle, and Zhu, Ning. 2011. "Did Bankruptcy Reform Cause Mortgage Defaults to Rise?" *American Economic Journal: Economic Policy* 3 (4): 123-147.  
[www.jstor.org/stable/41330444](http://www.jstor.org/stable/41330444).
- Massachusetts General Laws. 2005. Part III, Title II, Section 34.
- Missouri Revised Statutes. 2005. §513.427-525.
- Montana Code Annotated. 2005. Title 31, Chapter 2, Part 106.
- Morgan, David, Iverson, Benjamin, and Botsch, Matthew. 2012. "Subprime Foreclosures and the 2005 Bankruptcy Reform." *Federal Reserve Bank of New York Economic Policy Review* 18 (1): 47-57. <https://www.newyorkfed.org/medialibrary/media/research/epr/12v18n1/1203morg.pdf>.
- New York Consolidated Laws. 2005. §5205-5206.
- North Carolina General Statutes. 2005. Chapter 1C, Article 16, §1.
- Nunez, Stephen, & Rosenthal, Howard. 2004. "Bankruptcy "Reform" in Congress: Creditors, Committees, Ideology, and Floor Voting in the Legislative Process." *Journal of Law, Economics, & Organization* 20 (2): 527-557. [www.jstor.org/stable/3555029](http://www.jstor.org/stable/3555029).
- Revised Code of Washington. 2005. Title 6, Chapters 6. §13-15.
- Rhode Island General Laws. 2005. Chapter 9, §26.

Simkovic, Michael. 2009. "The Effect of BAPCPA on Credit Card Industry Profits and Prices." *The American Bankruptcy Law Journal* 83 (1): 1-26.

<https://search.proquest.com/docview/202783557?accountid=13314>.

Texas Property Code. 2005. Title V, §41, Subchapter A.

The 106<sup>th</sup> United States Congress. 1999. *Congressional Record—House*. Congress.gov.

Accessed May 4, 2020. <https://www.congress.gov/crec/1999/05/05/CREC-1999-05-05-pt1-PgH2655-2.pdf>.

The 2005 Florida Statutes. 2005. Title XV, §22.

The Federal Reserve Bank of New York Center for Microeconomic Data. 2003-2008. "Quarterly Report on Household Debt and Credit: Household Debt Statistics by State." The United States Federal Reserve Bank. Accessed March 17, 2020.

<https://www.newyorkfed.org/microeconomics/databank.html>.

Weller, Christian, Morzuch, Bernard, and Logan, Amanda. 2010. "Estimating the Effect of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 on the Bankruptcy Rate." *The American Bankruptcy Law Journal* 84 (3): 327-360.

<https://search.proquest.com/docview/761336437?accountid=13314>.

West Virginia Code. 2005. §38, Article 10-4.