The Effect of BAPCPA on Credit Card Industry Profits and Prices

by

Michael Simkovic*

The United States Bankruptcy code changed dramatically with the passage of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 ("BAPCPA").1 This statute increased the costs and decreased the benefits of bankruptcy to consumers. Supporters of the law claimed that it would benefit consumers as well as creditors, because reducing the losses faced by creditors would lower the cost of credit to consumers. Critics of the law depicted it as special interest legislation designed to profit credit card companies. This study tests whether BAPCPA: (1) reduced the number of bankruptcies; (2) reduced credit card company losses; (3) lowered the cost to consumers of credit card debt; and (4) increased credit card company profits. The data suggests that although bankruptcies and credit card company losses decreased, and although credit card companies achieved record profits, the cost to consumers of credit card debt actually increased. In other words, BAPCPA profited credit card companies at consumers’ expense.

This study values data over assumptions. It does not assume on faith that markets are competitive and transparent; that consumers are rational and well informed; that transactional costs are minimal; or that regulations are always inefficient. Nor does this study assume that markets are oligopolistic or monopolistic; that there are significant information asymmetries; that consumers have limited information and rationality; that large corporations manipulate consumers; or that the interests of large corporations and consumers are necessarily at odds. Instead, this study analyzes data to determine the effect of a legal change on the credit card market. The data will reveal whether the legal change benefited consumers, which will reveal whether the credit card market is price-competitive. This data-driven, ide-

*Michael Simkovic is a 2007 graduate of Harvard Law School and a former Olin Fellow. He gives his deepest thanks to Elizabeth Berney, Elizabeth Warren, and Russell Franklin for providing comments and insight on short notice, and for helping this paper reach its intended audience. He thanks Adam Levitin for generously sharing his credit card industry data and Todd Zywicki for making reprints of his work available. The views expressed in this paper are those of Michael Simkovic and do not necessarily reflect the views of Harvard Law School, the Olin Center, or any other person or organization.

logically neutral approach will, it is hoped, inform future debate about regulation of consumer credit and optimal bankruptcy policy.

I. BACKGROUND ON BANKRUPTCY REFORM

President George W. Bush signed BAPCPA into law on April 20, 2005, and most of its provisions came into effect 180 days later, on October 17, 2005. With regard to consumers, the statute made it more difficult to discharge debt. In particular, BAPCPA broadened the categories of debt that are non-dischargeable and adopted a “means testing” requirement that limits access to Chapter 7 and thereby forces debtors to file for Chapter 13 instead. The statute also imposed other filing barriers, including higher filing fees, a lengthening of the period between permitted filings, and an increase in the costs and risks faced by professionals who assist consumers filing for bankruptcy.

Unsecured creditors, including credit card issuers, were the most likely beneficiaries of BAPCPA. Whereas secured creditors, such as mortgage or auto lenders, are protected under Chapter 7 by their security interests in the debtor’s house or car, unsecured creditors often receive little or nothing in a Chapter 7 bankruptcy. Pushing filers into Chapter 13 would increase recovery for these unsecured creditors. Furthermore, delaying bankruptcy allows unsecured credit card lenders to increase their claims through accrual of interest at high pre-petition contractual rates, and to collect more from debtors who are not yet shielded by the automatic stay.

A key justification for BAPCPA was that it would make credit more affordable to consumers. President Bush explained that he signed the law “because when bankruptcy is less common, credit can be extended to more people at better rates.” (Bush 2005). Similarly, the House of Representatives Report approvingly cited the Senate Judiciary Committee testimony of Professor Todd Zywicki as excerpted below:

[W]hen creditors are unable to collect debts because of bankruptcy, some of those losses are inevitably passed on to responsible Americans who live up to their financial obliga-

---

3Chapter 7 is preferable to Chapter 13 for many financially distressed consumers because Chapter 7 results in a discharge of many debts, leaving future income relatively unencumbered, while Chapter 13 requires debtors to repay their debts from future income. Id. at 380.
4Id. at 377.
5Id. at 379-80.
6Id. at 392-93.
tions. . . . We all pay for bankruptcy abuse in higher down payments, higher interest rates, and higher costs for goods and services.\(^8\)

In his full testimony, Professor Zywicki argued that bankruptcy increases the price that consumers pay for credit card debt across multiple price points and that BAPCPA would reduce these costs to consumers.

This bankruptcy "tax" takes many forms. It is obviously reflected in higher interest rates. . . . It is [also] reflected in shorter grace periods for paying bills and higher penalty fees and late-charges for those who miss payments . . . [R]educing the number of strategic bankruptcies will reduce the bankruptcy tax paid by every American family . . . . These reforms will make the bankruptcy system more fair, equitable, and efficient, not only for bankruptcy debtors and creditors, but for all Americans.\(^9\)

This promise of cost savings to the average American family was critical to the passage of BAPCPA. As Professor Elizabeth Warren explained in 2004:

[I]t is hard to persuade Congress to vote for something that could easily be characterized as a bill to squeeze hard-working families down on their luck in order to improve profits for a few big corporate lenders. [Claims of cost savings to the average family are] a way to appear to align the interests of ordinary families with billion-dollar multi-national lenders . . . [A] promise of $400 to each hard-working family in America will give politicians plenty of political cover for their votes [in favor of BAPCPA].\(^10\)

With the promise that any gains from BAPCPA would not be captured by lenders, but would be shared widely with the voting public, advocates of the statute garnered more widespread support for the law.

Supporters and critics of BAPCPA both agreed that the new law would benefit credit card companies. However, critics were skeptical that benefits would be passed on to consumers for two reasons. First, advocates of BAPCPA maintained financial ties to the credit industry that suggested that

\(^9\)Todd J. Zywicki, Statement to Senate Judiciary Committee (Feb. 10, 2005), 2005 W.L. 319924.
\(^10\)Elizabeth Warren, The Phantom $400, 13 J. BANKR. L. & Prac. 2, Art. 4 (2004). The $400 is an estimate of the cost of bankruptcy to each American family. According to Professor Warren, the $400 estimate was devised by lobbyists working for the credit industry using dubious analytical methods, then spread as a "fact" through an aggressive, well-funded lobbying and public relations campaign. Id.
they might be more interested in increasing credit card company profits than in benefiting consumers. Second, the history of the credit card industry suggested a tenuous link between bankruptcy rates and credit card pricing.

Critics like Professor Elizabeth Warren,11 Professor Ronald Mann,12 and Senator Edward Kennedy13 have noted the extensive role played by the credit card industry in drafting BAPCPA, in advocating for its passage, and in funding the campaigns of politicians who voted in favor of it. They argued that the role of credit card companies indicated that the bill was contrary to the interests of consumers. This argument is only persuasive if one believes that there is an inherent conflict of interest between credit card companies and their customers. Although the credit card industry clearly believed that it would profit from BAPCPA, this alone does not establish that consumers would not benefit as well.

Critics pointed to data suggesting a tenuous link between bankruptcy rates and credit card prices. Historically, bankruptcy rates have not correlated with either interest rates on consumer credit cards, or with the spread between consumer credit card interest rates and the risk free rate.14 Critics did not claim that consumers would never benefit, but argued that there was at least good reason to be skeptical that consumer benefits would materialize.

II. METHODS AND DATA

Professor Todd Zywicki and other advocates of BAPCPA suggested that customers would see savings in the costs of both credit card debt and other credit products. This paper focuses only on credit card debt for three reasons. First, credit card companies are likely beneficiaries of the new law.15 Second, prior to enactment of BAPCPA, it was unknown whether credit card companies would pass on the benefits of the statute to consumers. Third, it is relatively easy to measure whether credit card companies benefited from BAPCPA and whether those benefits were passed on to consumers.

If the supporters of BAPCPA were right, then the statute should have reduced the number of personal bankruptcies, reduced credit card company losses, and reduced the cost of credit to users of credit cards. Any such costs savings could manifest across credit cards' multiple price points, including (1) late fees, (2) over-limit fees, (3) annual fees, (4) interest rates and (5) grace periods. The present study tests whether BAPCPA led to these effects by

---

1See id. at 87.
12Mann, supra note 2, at 376.
13See id.
15This is because credit card lenders are unsecured creditors. See supra text accompanying note 5.
comparing absolute levels and trends – in personal bankruptcies, credit card lenders' charge-offs, late fees, over-limit fees, interest rates, and grace periods – before and after the effective date of the statute.

To control for other factors that might have caused higher or lower costs of consumer credit, the present study considered changes to the risk free interest rate. The risk free interest rate reflects broad macroeconomic factors that affect economy-wide costs of credit. The spread between the risk free rate and the annual percentage rates ("APRs") charged on credit card balances reflects the risk-adjusted price of credit card debt. The present study uses the yield on five-year treasury notes as the risk free rate to match the duration of credit extended to the typical household carrying a credit card balance. This study also controls for inflation and population growth.

The present study discusses, but does not formally control for changes in macroeconomic variables like unemployment, real GDP growth, and household leverage as measured by the household debt service ratio (DSR) and financial obligation ratios (FOR). The decision not to control for these macroeconomic variables results from the small sample size of observations – at most 8 observations from the first quarter of 2006 to the fourth quarter of 2007. The maximum sample size is 8 because these variables are reported on a quarterly basis. BAPCPA went into effect during the fourth quarter of 2005, and this study does not consider data after the fourth quarter of 2007, in order to avoid the affect of the financial crisis and tightening of credit markets that began with the collapse of Bear Stearns in March 2008. With such a small sample size, statistical power is low. By contrast, interest rates and fees are reported on a monthly basis and therefore have over three times as many observations. This study also tests other possible outcomes of BAPCPA – such as an increase in credit card industry profits — and considers factors that might explain such an outcome, including the level of credit card industry concentration, price competition, and price transparency.

The average household carrying a credit card balance has been carrying it for over 3.5 years, and families with larger balances tend to carry their debt for longer than those with smaller balances. Center for Responsible Lending, The Plastic Safety Net: The Reality behind Debt in America, 8 (2005), http://www.demos.org/pubs/PNS_low.pdf. This suggests that the average length of time it takes a borrower who carries a balance to repay credit card debt – or default on it through bankruptcy – is somewhat longer than 3.5 years. Results do not differ significantly with other reasonable risk free rates (i.e., the 10 year treasury).

The household DSR is an estimate of the ratio of debt payments to disposable personal income. Debt payments consist of the estimated required payments on outstanding mortgages and consumer debt. The DSR is available from the Federal Reserve at http://www.federalreserve.gov/releases/housedebt/default.htm.

The FOR is similar to the DSR, but adds automobile lease payments, rental payments on tenant-occupied property, homeowners' insurance, and property tax payments to the DSR. The FOR is also available from the Federal Reserve at http://www.federalreserve.gov/releases/housedebt/default.htm.
Data sources include CardWeb CardData\(^{19}\) (for credit card interest rates, fees, grace periods, and industry profits), the FDIC Quarterly Banking Profile\(^{20}\) (for credit card lenders' charge-offs), reports from the Administrative Offices of the United States Courts\(^{21}\) (for personal bankruptcy filings), Bloomberg Professional Service\(^{22}\) (for risk free interest rates), the Nilson Report\(^{23}\) (for credit card industry concentration), the Federal Reserve Statistical Release G.19\(^{24}\) for debt service ratios and financial obligation ratios), the Bureau of Economic Analysis\(^{25}\) (for Gross Domestic Product), the Bureau of Labor Statistics\(^{26}\) (for inflation and unemployment), the Economist Intelligence Unit\(^{27}\) (for number of US households), and Moody's Economy.com\(^{28}\)

\(^{19}\)CardWeb is a provider of subscription based information services about the payment card industry. Its services include industry news (CardFlash), a library of marketing materials (CardWatch), biographies of industry executives (CardExecs) and detailed industry information (CardData). CardData is a comprehensive online database of payment card industry information. Data ranges from aggregate/individual market share, performance benchmarks to analysis of market segments. More information is available at http://www.cardweb.com/carddata/.


\(^{21}\)Quarterly bankruptcy filing statistics (business and non-business) are available from the U.S. Courts system at http://www.uscourts.gov/bankruptcystats/bankruptcystats.htm. This article considers non-business bankruptcy filings.\(^{22}\)Bloomberg Professional Service [hereinafter “Bloomberg”] is a subscription based real time and historical financial data and information service commonly used by finance professionals at investment institutions and banks, as well as by some government agencies, corporations and law firms. Bloomberg is ideally accessed through a specialized dual screen “Bloomberg Terminal” with a custom keyboard, but may be accessed through a standard computer with an internet connection via the “Bloomberg Anywhere” service. More information about Bloomberg’s service is available at http://about.bloomberg.com/. Terminals are available at many business school libraries, or a subscription may be obtained by contacting Bloomberg at http://www.bloomberg.com/apps/fbk?site=sales.

\(^{23}\)The Nilson Report is a subscription based bi-monthly newsletter and provider of proprietary statistics about the payments industry (credit cards, debit cards, and electronic payment services). Its subscribers include payments industry professionals, analysts, and consultants to the payments industry. More information is available at http://www.nilsonreport.com. The Nilson Report may also be contacted at The Nilson Report, 1110 Eugenia Place, Suite 100, Carpinteria, CA 93013-9921, Phone: (805) 684-8800, Fax: (805) 684-8825.


\(^{25}\)The Bureau of Economic Analysis [hereinafter “BEA”] is an agency of the U.S. Department of Commerce. Along with the Census Bureau and STAT-USA, BEA is part of the Department’s Economics and Statistics Administration. The cornerstone of BEA’s statistics is the national income and product accounts (NIPAs), which feature the estimates of gross domestic product (GDP) and related measures. BEA data is available at http://www.bea.gov/national/index.htm.

\(^{26}\)The U.S. Bureau of Labor Statistics [hereinafter “BLS”] is the principal fact-finding agency for the Federal Government in the broad field of labor economics and statistics. The BLS is an independent national statistical agency that collects, processes, analyzes, and disseminates essential statistical data to the American public, the U.S. Congress, other Federal agencies, State and local governments, business, and labor. The BLS also serves as a statistical resource to the Department of Labor. BLS data on inflation and unemployment may be downloaded at http://www.bls.gov/data/.

\(^{27}\)The Economist Intelligence Unit is a subscription based provider of data, analysis and forecasts on countries, industries, and management strategies. Its subscribers include large international companies,
(for accessing some government and private data in easier to use form). All data used in this study is on file with the author and with the American Bankruptcy Law Journal, and is available to researchers upon request.

The present study uses CardData for credit card interest rates because it is more comprehensive than the other leading data source, the Federal Reserve G.19. Whereas CardData is gathered through a regular direct survey of 150 issuers, representing 97% of the market, G.19 data is based on a survey of the 50 largest card issuers and a limited sampling of others.29

III. RESULTS: THE EFFECTS OF BANKRUPTCY REFORM ON THE CREDIT CARD INDUSTRY

A. BANKRUPTCIES AND CREDIT CARD COMPANY LOSSES FELL SHARPLY

After BAPCPA went into effect, both personal bankruptcy filings and credit card company losses declined sharply. This is reflected in Figure 1 below,30 which also demonstrates the historical correlation between personal financial institutions, universities and government agencies. Additional information is available at http://www.eiu.com/.

29Moody’s Economy.com is a division of Moody’s analytics, a private provider of economic analysis, data, forecasting, and credit risk services. Its clients include financial institutions, large companies, and governments. More information is available at http://www.economy.com/home/products/data_services.asp.

29CardData has another advantage over Federal Reserve G.19 data: CardData more accurately reflects the long term trend in interest rates. CardData excludes “teaser rates” (defined as temporary rates lasting 1 year or less). Teaser rates can introduce substantial variability in nominal interest rates without significantly reducing borrowers’ actual cost of borrowing. The average household carrying a balance on its credit card has been carrying it for over 3.5 years, and families with larger balances tend to carry their debt for longer than those with smaller balances. Center for Responsible Lending, The Plastic Safety Net: The Reality behind Debt in America, 8 (2005), http://www.demos.org/pubs/PNS_low.pdf. Although families carry balances for significantly longer than the 3 to 12 month term of a teaser rate, they generally fail to switch to a lower interest card when the teaser rate expires. Haiyan, Shui & Lawrence M. Ausubel, Time Inconsistency in the Credit Market, 9 (May 3, 2004) (unpublished manuscript), available at http://ssrn.com/abstract=586622. This enables credit card companies to acquire customers who are likely to carry balances by offering a low introductory rate, and then profit by charging them a much higher rate for several years.

30The bars represent quarterly personal bankruptcy filings, in thousands. The line represents credit card company charge-offs as a percent of average loans and leases. The chart appeared in the FDIC’s Quarterly Banking Profile, but has been modified for this paper to indicate the timing of bankruptcy reform. The timing of bankruptcy reform is represented by the large grey vertical rectangle, pointed out by the large down arrow. BAPCPA was enacted at the left most portion of the rectangle, and its key provisions went into effect at the right most portion of the rectangle. This convention for representing the timing of BAPCPA is used for all charts in this paper. The data for this chart appears in the appendix, in Table 1. The FDIC calculates charge-offs based on regulatory filings known as Call Reports and Thrift Financial Reports. Every National Bank, State Member Bank and insured Nonmember Bank is required by the Federal Financial Institution Examination Council to file consolidated Reports of Condition and Income (Call Report) on a quarterly basis. Every federally insured savings institution regulated by the Office of Thrift Supervision (OTS) files a Thrift Financial Report (TFR) on a quarterly basis. More information on these filings is available at http://www2.fdic.gov/Call_TFR_Rpts/index.asp.
bankruptcy filings and credit card company loss rates.

Figure 1: Credit Card Loss Rates and Personal Bankruptcy Filings 1984-2007

Figure 1 illustrates a spike in bankruptcy filings between the enactment of BAPCPA and its effective date, as consumers scrambled to file under the old, more debtor-friendly rules. The sharp drop in bankruptcy filings in 2006 may be due in part to households on the verge of bankruptcy in 2005, who would have filed in 2006 but for their decision to seek the protection of the
pre-BAPCPA statute. Nonetheless, at least some of the reduction in bankruptcy filing rates and credit card company losses appears to be permanent. Although bankruptcy filings and loss rates increased in 2007 compared to 2006, 2007 rates remained significantly below recent pre-BAPCPA rates (2002-2004). In 2006, losses as a percent of loans were 25% lower than in 2005.\textsuperscript{31} In 2007, losses as a percent of loans were 15% lower than in 2005.\textsuperscript{32} These results are reflected in Figure 2 below, which shows annual credit card loss rates before, during, and after BAPCPA.

The value of this decrease in credit card loss rates is difficult to estimate, but may be as high as $8.6 billion in 2006 and $5.9 billion in 2007.\textsuperscript{33} The true value is likely slightly lower because this estimate is based on revolving credit, which is primarily but not exclusively credit card debt,\textsuperscript{34} and because some of the decrease in charge-offs may be due to factors other than BAPCPA, such as improved information technology or collections techniques.

**B. CREDIT CARD LATE FEES AND OVER-LIMIT FEES INCREASED WHILE GRACE PERIODS DECREASED**

Credit card fees have been climbing and have become less transparent over the years\textsuperscript{35} and there is no evidence that BAPCPA reversed this trend.

\textsuperscript{31}Loan losses fell from 4.64% to 3.48%.

\textsuperscript{32}Loan losses fell from 4.64% to 3.95%.

\textsuperscript{33}The value can be estimated as follows: First calculate the total decrease in charge-offs by multiplying the average revolving credit balance for the year (which roughly approximates credit card debt, but also includes other forms of debt) by the decrease in loss rates between pre- and post-bankruptcy reform years. Then calculate the gain from the decrease in charge-offs by subtracting the price at which credit card companies can sell recently charged-off debt to collection agencies - typically 8 cents on the dollar. See Liz P. Weston, *Zombie Debt is Hard to Kill*, MSN Money, http://articles.moneycentral.msn.com/SavingandDebt/ManageDebt/ZombieDebtisHardToKill.aspx. In 2006, revolving credit - mostly credit card debt - averaged roughly $850 billion (Federal Reserve G.19, at http://www.federalreserve.gov/releases/g19/hist/cc_hist_r.html) (monthly revolving credit figures averaged, then rounded to nearest $10 billion). Loss rates fell from roughly 4.6% in 2005 to roughly 3.5% in 2006 (FDIC Quarterly Banking Profile, at http://www4.fdic.gov/QBP/grtable.asp?rptdate=2007dec&selgr=QNTCBKQB) (annual numbers calculated as average of quarterly figures, 2005 calculated excluding fourth quarter of 2005 but including fourth quarter of 2004; 2006 calculated as average of first three quarters of 2006). 4.6% - 3.5% = 1.1%. $850 billion x 1.1% = $9.35 billion. $9.35 billion - (8% x $9.35 billion) = $8.6 billion. In 2007, revolving credit averaged roughly $910 billion (Federal Reserve G.19, at http://www.federalreserve.gov/releases/g19/hist/cc_hist_r.html) (monthly revolving credit figures averaged, then rounded to nearest $10 billion). Loss rates fell from roughly 4.6% in 2005 to roughly 3.9% in 2007 (FDIC Quarterly Banking Profile, at http://www4.fdic.gov/QBP/grtable.asp?rptdate=2007dec&selgr=QNTCBKQB) (2007 numbers calculated excluding fourth quarter of 2007 but including fourth quarter of 2006). 4.6% - 3.9% = 0.7%. $910 billion x 0.7% = $6.37 billion. $6.37 billion - (8% x $6.37 billion) = $5.9 billion.


\textsuperscript{35}In 2000, Professor Zywicki wrote that rather than increase interest rates, credit card companies instead increased late fees and over-limit fees, "so called 'hidden fees.'" Todd Zywicki, *The Economics of...*
Figure 2: Credit card lenders' charge-offs declined in 2006, but climbed in 2007.

Net Charge-offs of credit card lenders as a percent of average loans and leases.

Source: FDIC Quarterly Banking Profile, December 2007 report.
Figure 3 below shows that late fees and over-limit fees have been climbing since well before bankruptcy reform, and that this trend continued after BAPCPA. Average late fees increased 5% from April 2005 to December 2007. During the same period, over-limit fees increased 17%. At the same time, however, annual fees - which as an upfront flat fee, are the most transparent and easiest for consumers to understand and comparison shop - have been falling since well before BAPCPA and have continued to fall afterward.

A substantial proportion of credit card users pay late fees and over-limit fees. In 2005, issuers reporting to the Government Accountability Office charged late fees to 35% of their active U.S. accounts and over-limit fees to 13% of their active U.S. accounts. The likelihood of incurring a late fee has increased over time as credit card companies reduced grace periods. This trend continued after BAPCPA, as shown in Figure 4 below. Indeed, from 2005 to 2007, grace periods fell 1.5%.

C. CREDIT CARD INTEREST RATES AND THE SPREAD ABOVE THE RISK FREE RATE BOTH INCREASED

The interest rates charged by credit card companies have increased after BAPCPA. Figure 5 below shows that the annual percentage rate (APR) on standard, gold, and platinum cards have all increased.

Credit Cards, 3 CHAP. L. REV. 79, 103 (2000). According to the Government Accountability Office, many consumers do not fully appreciate these fees because of faulty disclosure by credit card companies. Furthermore, the portion of credit card company revenues attributable to penalty fees has been climbing. U.S. GOVERNMENT ACCOUNTABILITY OFFICE, CREDIT CARDS: INCREASED COMPLEXITY IN RATES AND FEES HEIGHTENS NEED FOR MORE EFFECTIVE DISCLOSURES TO CONSUMERS 67 (2006), http://www.gao.gov/new.items/d06929.pdf (last visited February 6, 2009). At the same time, credit card companies reduced or eliminated more transparent annual fees because of "hostility of consumers ... evidenced by the fact that when annual fees were first imposed, consumers canceled over nine million bank cards in 1980, amounting to some 8% of the outstanding total." Todd Zywicki. The Economics of Credit Cards, 3 CHAP. L. REV. 79, 118 (2000). Average late fees among credit card companies with portfolios larger than $100 million climbed from under $13 in December 1994 to over $35 in December 2007 (CardWeb CardData). During the same period, over-limit fees climbed from less than $11 to more than $26 while annual fees on standard credit cards fell from $17 to $13 (CardWeb CardData).

CardWeb CardData. Fees are for portfolios greater than $100 million. Fees for portfolios less than $100 million showed a similar pattern. The Government Accountability Office estimates that 10% of credit card company revenues come from penalty fees. U.S. GOVERNMENT ACCOUNTABILITY OFFICE, supra note 35, at 67.

As early as 2000, Professor Zywicki reported "the virtual elimination of annual fees" and that remaining annual fees were generally tied to particular services, such as frequent flyer miles, not plain vanilla cards offering only payment and credit services. Todd Zywicki. The Economics of Credit Cards, 3 CHAP. L. REV. 79, 118 (2000).

U.S. GOVERNMENT ACCOUNTABILITY OFFICE, supra note 35, at 5.

CardWeb CardData.
Figure 3: Late payment and over-limit fees have increased

Source: CardWeb CardData
Figure 4: Grace periods have shrunk

Source: CardWeb CardData
Figure 5: Credit card interest rates continued to climb after BAPCPA

APRs on standard credit cards increased 8% from April 2005 to December 2007. The Government Accountability Office estimates that 70% of credit card company revenues come from interest charges.

As credit card interest rates have increased, so too has the spread between APRs (standard), APR (Gold), and APR (Platinum).

Source: CardWeb CardData

---

40APRs increased from 17.7% to 19.1%. The 8% increase refers to the percent increase above the 17.7% APR in April 2005 (19.1%/17.7% - 1).
41U.S. GOVERNMENT ACCOUNTABILITY OFFICE, supra note 35, at 67.
tween those rates and the risk free rate. Figure 6 below shows that after BAPCPA, the risk free rate leveled off and then declined.

The risk free rate declined 12% from April 2005 to December 2007 as the yield on the 5 year T-note fell from 3.9% in April 2005 to 3.5% in December 2007. If the spread between the risk free rate and credit card interest rates had remained flat, credit card interest rates would have dropped from 17.7% in April 2005 to 17.3% in December 2007. Instead, credit card interest rates actually increased to 19.1% in December 2007. As the risk free rate declined, credit card interest rates continued to rise, thereby increasing the spread by 14%.

Figure 7 below shows the dramatic increase in the spread between credit card interest rates and risk free rates after BAPCPA went into effect.

Even if the spread had remained the same, customers would have suffered harm, because credit would be no less expensive, and customers would have lost the protection afforded them under the pre-BAPCPA statute. The widening of the spread highlights the fact that credit card companies benefited at consumers' expense.

D. RESULTS SUBSTANTIALLY THE SAME WITH ADDITIONAL CONTROLS

Applying additional controls does not substantially change the results described above. The following additional controls are included in the data presented in Table 2 of the Appendix: Credit card fees are adjusted for inflation by deflating them to 2000 dollars; the number of bankruptcies is adjusted for population growth by calculating the bankruptcy rate, or annualized personal bankruptcy filings per U.S. household; the period between the adoption of BAPCPA and when it went into effect is excluded; and the quarter immediately after the effective date of BAPCPA is excluded (on the assumption that bankruptcy rates were abnormally low following the spike just before BAPCPA went into effect).

The “Before” column on Table 2 is the average from the third quarter of 2003 through the first quarter of 2005. The “After” column is the average from the second quarter of 2006 through the fourth quarter of 2007. Both “Before” and “After” include 7 quarters of data. This data still show a large decrease in bankruptcies and charge-offs. The data still show an increase in credit card interest rates and interest rate spreads, as well as a moderate increase in over-limit and late fees and a decrease in annual fees.

The economic outlook after BAPCPA was mixed. Although unemployment fell – suggesting a strengthening economy – the growth of real gross

---

42Bloomberg, supra note 22.
43The spread increased from 13.8% to 15.7%.
domestic product slowed, suggesting a weakening economy. Household leverage moderately increased. Lower unemployment might partially explain the observed decrease in bankruptcies and charge-offs, but lower gross domestic product growth and higher household leverage are normally associated
with an increase in bankruptcies and charge-offs. The lack of a clear macroeconomic explanation for the sharp and sudden decrease in charge-offs and bankruptcies after BAPCPA went into effect suggests that the statute contributed to these phenomena.

E. CREDIT CARD COMPANIES ACHIEVED RECORD PROFITS

Even though credit card companies saved billions because of reduced loan loss rates after BAPCPA, the cost to credit card customers increased 5% to 17%. This combination of lower costs and higher prices drove record profits, as shown below in Figure 8.

IV. DISCUSSION: A MARKET WITH MINIMAL PRICE COMPETITION

What could explain the lack of benefit to consumers, in spite of the clear benefit to credit card companies? Credit card companies can retain the benefit of fewer bankruptcies rather than share it with their customers if credit card companies can avoid competing with one another on price.

Several factors enable credit card companies to avoid price competition. One is industry consolidation. Figure 9 below shows the trend toward consolidation, which had been going on for some time and has continued after the enactment of BAPCPA.

In 2005, the top 10 issuers controlled 87% of the market. 10 years earlier, the top 10 controlled only 56%. With fewer companies controlling a larger share of the market, it has become easier to avoid "price wars" (the real-world equivalent of the competitive markets described by economics textbooks) that benefit consumers but harm all of the producers in an industry.

Credit card companies may also be able to avoid price competition because switching costs are high for the most profitable customers. The most

---

44From 1996 through the first quarter of 2005, unemployment and charge-offs were positively correlated at about 0.58. Unemployment and bankruptcy rates were correlated at 0.47. FORs and charge-offs were positively correlated at 0.5. FORs and bankruptcy were positively correlated at 0.59. GDP growth and charge-offs were negatively correlated at -0.13. GDP growth and bankruptcy were slightly negatively correlated at -0.07.

45See supra Section 3A.

46Nominal prices increased, except for annual fees, which were in decline long before bankruptcy reform. See supra Section 3A. Controlling for inflation and other factors, as described in supra Section 3D, and excluding annual fees, real prices increased between 1% and 13%.

47Nilson Report, supra note 23.

48It also has become easier for credit card companies to organize and coordinate mutually beneficial activity, such as lobbying Congress to change the bankruptcy laws.

profitable customers are those that are financially distressed, because they are the most likely to incur interest charges and fees. However, these financially distressed customers can suddenly cease to be profitable when they become unable to repay their debts or when they discharge their debts through bankruptcy. A customer's existing credit card company has a great deal of propri-
Figure 8: Credit card companies had record profits in 2006 and 2007 after a downturn in 2005.
Figure 9: The industry is highly concentrated and continuing to consolidate

Source: Nilson Report
etary information—what the customer buys, when the customer began falling behind on his or her debts, how far behind he or she is, the monthly payment he or she makes, etc.—that improves the lender’s ability to predict when the customer will cease to be profitable. Would-be competitors lack this information. It is therefore very risky and costly for a competitor to try to poach financially distressed customers from their existing card company. This results in an environment in which price competition is limited, and in which cost savings are more likely to be retained by the credit card companies than passed on to customers.

The credit card industry might also be able to avoid price competition because of complex, multi-tiered pricing that can make it difficult for customers to comparison shop. Pricing can include multiple variables—annual fees, late fees, over-limit fees, currency conversion fees, cash-advance fees, standard interest rates, cash-advance interest rates, introductory interest rates, penalty interest rates, etc. These fees and interest rates—complex in their own right—are presented in a form that is difficult to understand. Customers faced with such complex pricing systematically miscalculate and underestimate the cost of credit card debt.

The empirical record on consumers’ ability to comparison shop points toward a market that is far from price-competitive. Studies have shown that most consumers will irrationally choose a card with a low introductory interest rate over a less expensive card with a higher introductory rate. After the introductory rate expires, these consumers generally fail to switch to a lower interest card. According to the General Accountability Office, many consumers do not fully appreciate—and therefore cannot comparison shop—late fees and penalty interest rates because of faulty disclosures by credit card companies. Studies suggest that although customers who were assessed late fees in the recent past can learn to avoid fees in the short-term future, the learning is at best temporary. Finally, although over half of consumers can rationally choose between a lower interest rate card with an annual fee and a

[50]Levitin, supra note 34, at 18.
[51]U.S. GOVERNMENT ACCOUNTABILITY OFFICE, supra note 35, at 67. Professor Elizabeth Warren recently testified before the Senate about several techniques used by credit card companies that make credit card agreements and prices difficult to understand. Credit Card Practices: Hearing Before the Senate Committee on Banking, Housing and Urban Affairs, 110th Cong. (2007), 2007 WL 184875 (F.D.C.H.) (statement of Elizabeth Warren). According to Professor Warren, these “tricks” reduce transparency and contribute to a market that is not price-competitive.
[52]Levitin, supra note 34, at 24-25.
[54]U.S. GOVERNMENT ACCOUNTABILITY OFFICE, supra note 35, at 77-79. See also Credit Card Practices, supra note 52.
higher interest rate with no annual fee, a substantial minority (40%) will initially make the wrong choice.\textsuperscript{56} Whatever the underlying reason, rising prices in the face of falling risks and costs demonstrate that the credit card industry is not price-competitive.

In 2000, Professor Todd Zywicki published an article defending credit card companies against charges that the industry was not competitive and that regulations could squeeze their profit margins without harming consumers. Professor Zywicki wrote: "[I]f the credit card market is largely competitive, then bankruptcy losses will [be passed on] to consumers, rather than being primarily a wealth transfer from credit card issuers to consumers in the form of reductions in these profits."\textsuperscript{57} Zywicki asserted that the industry was competitive, even though credit card interest rates did not respond to rising bankruptcy losses, because credit card companies passed those costs on to consumers in other ways: through "increased fees and penalties for late payments and [over-limit fees] . . . [T]he increase in these fees by card issuers is a direct response to the increased default rate in recent years,"\textsuperscript{58} and through "the steady erosion in the length of the non-interest grace period."\textsuperscript{59}

After BAPCPA, interest rates and fees continued to rise and grace periods continued to fall, even though credit card companies reaped tremendous gains from declining bankruptcy losses. This demonstrates - under the very criteria set forth by Professor Zywicki - that the credit card market is not price-competitive. This lack of price competition explains why the benefits of bankruptcy reform accrued exclusively to credit card lenders and were not shared with the average American family, and why - by Professor Zywicki's own criteria - BAPCPA was a failure.

V. CONCLUSION: LEGISLATIVE INTENT AND COMPETITIVE MARKETS

The data is unambiguous: BAPCPA benefited credit card companies and hurt their customers. While bankruptcy protection became increasingly unavailable, credit card companies increased prices by 5% to 17%. This contributed to a 25% increase in credit card industry annual profits from 2005 to 2007. Profits for 2006 were $7 billion higher than 2005, and 2007 profits were $10 billion higher than the profits for 2006.\textsuperscript{60}

The legislative history of BAPCPA does not indicate any Congressional
2009) BAPCPA'S EFFECT ON CREDIT CARD INDUSTRY 23

intent to hurt consumers in order to help credit card companies.\footnote{The bill. S.256, was voted on along party lines. Every Republican in the Senate voted for the bill, as did all but three Republicans in the House of Representatives (the three other Republicans abstained). A majority of Democrats in both the House and Senate voted against the bill. Even so, a significant minority of Democrats (roughly one third of Democratic House members and 40% of Democratic Senators) voted in favor of the bill. A roll call for the Senate is available at 151 CONG. REC. S2474. A roll call for the House is available at 151 CONG. REC. H2076 – H2077.}

Perhaps members of Congress made an honest mistake that they will now correct by changing the law. But it is also possible that legislators merely wished a positive impact on credit card profits. How members of Congress react to the data will reveal at least as much about their intentions as the Congressional Record.

During debates over BAPCPA, advocates of the statute insisted that bankrupt consumers were imposing costs on middle class American families:

[T]hose who pay their Bills inevitably have to pay more to make up for those who do not. Like all other business expenses, when creditors are unable to collect debts because of bankruptcy, some of those losses are inevitably passed on to responsible Americans who live up to their financial obligations. Every phone bill, electric bill, mortgage, furniture purchase, medical bill, and car loan contains an implicit bankruptcy "tax" that the rest of us pay to subsidize those who do not pay their bills. Exactly how much of these bankruptcy losses is passed on from lenders to consumer borrowers is unclear, but economics tells us that at least some of it is.\footnote{Todd J. Zywicki, Statement to Senate Judiciary Committee (Feb. 10, 2005), 2005 W.L. 319924.}

If there were a bankruptcy “tax,” then presumably there would have been a bankruptcy “tax rebate” upon the passage of BAPCPA.\footnote{Indeed, the credit industry essentially claimed as much with its advertisements of the $400 bankruptcy tax.} At least with respect to credit cards, there has not been one. In fact, prices have increased.

In fairness to Professor Zywicki, predicting the future is always perilous, and his predictions would have been reasonable if the credit card market were transparent and price-competitive. The data demonstrate that the credit card market simply is not. Professor Zywicki should have given real consideration to the possibility that the industry might not be price-competitive, instead of dismissing that possibility as “facially implausible and empirically doubtful.”\footnote{Todd Zywicki. The Economics of Credit Cards, 3 CHAP. L. REV. 79, 112 (2000).}

Although Zywicki pointed to some indicators of a dynamic market - shifting market share, entrants and exists, a large number of small label credit cards, were $30.6 billion in 2005, $37.5 billion in 2006, and $40.3 billion in 2007. ($40-30) + ($37-30) = $17.

\footnote{The bill. S.256, was voted on along party lines. Every Republican in the Senate voted for the bill, as did all but three Republicans in the House of Representatives (the three other Republicans abstained). A majority of Democrats in both the House and Senate voted against the bill. Even so, a significant minority of Democrats (roughly one third of Democratic House members and 40% of Democratic Senators) voted in favor of the bill. A roll call for the Senate is available at 151 CONG. REC. S2474. A roll call for the House is available at 151 CONG. REC. H2076 – H2077.}
players—he ignored key signs that the industry was not price-competitive—complex, misleading pricing structures and prices that did not respond to changes in costs. These features of the credit card market had been pointed out by researchers such as Lawrence Ausubel as early as 1997.65 Nevertheless, Professor Zywicki went so far as to conclude that “the credit card industry appears to be as close a representation to a perfectly competitive market as one could imagine.”66

This paper demonstrates why scholars who wish to predict the impact of regulatory change must not assume that markets are price-competitive and instead must analyze each industry individually. Uncompetitive markets are more profitable for producing firms than competitive markets. The creation of such highly profitable, uncompetitive environments (without running afoul of regulators) is therefore often the goal of corporate strategy and of sales, marketing, and legal departments. Failure to consider the implications of uncompetitive markets is a severe analytical flaw. It calls into question both the predictive value of theoretical economic analysis and the purported objectivity with which it is conducted. On the other hand, robust empirical analysis, independent of any ideological assumptions, can lead to better scholarship and better policy.

66Todd Zywicki. The Economics of Credit Cards, 3 Chap. L. Rev. 79, 129 (2000).
# APPENDIX

Table 1: Credit Card Loss Rates and Personal Bankruptcy Filings

<table>
<thead>
<tr>
<th>Report Date</th>
<th>Net credit card charge-off rates, %</th>
<th>Personal Bankruptcy Filing, Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-Mar-01</td>
<td>4.44</td>
<td>357</td>
</tr>
<tr>
<td>30-Jun-01</td>
<td>5.09</td>
<td>390</td>
</tr>
<tr>
<td>30-Sep-01</td>
<td>5.17</td>
<td>350</td>
</tr>
<tr>
<td>31-Dec-01</td>
<td>6.42</td>
<td>355</td>
</tr>
<tr>
<td>31-Mar-02</td>
<td>7.69</td>
<td>369</td>
</tr>
<tr>
<td>30-Jun-02</td>
<td>6.07</td>
<td>391</td>
</tr>
<tr>
<td>30-Sep-02</td>
<td>5.77</td>
<td>392</td>
</tr>
<tr>
<td>31-Dec-02</td>
<td>5.44</td>
<td>386</td>
</tr>
<tr>
<td>31-Mar-03</td>
<td>5.75</td>
<td>404</td>
</tr>
<tr>
<td>30-Jun-03</td>
<td>6.03</td>
<td>431</td>
</tr>
<tr>
<td>30-Sep-03</td>
<td>5.46</td>
<td>405</td>
</tr>
<tr>
<td>31-Dec-03</td>
<td>5.75</td>
<td>385</td>
</tr>
<tr>
<td>31-Mar-04</td>
<td>5.60</td>
<td>397</td>
</tr>
<tr>
<td>30-Jun-04</td>
<td>5.68</td>
<td>413</td>
</tr>
<tr>
<td>30-Sep-04</td>
<td>4.67</td>
<td>389</td>
</tr>
<tr>
<td>31-Dec-04</td>
<td>4.88</td>
<td>364</td>
</tr>
<tr>
<td>31-Mar-05</td>
<td>4.57</td>
<td>393</td>
</tr>
<tr>
<td>30-Jun-05</td>
<td>4.39</td>
<td>459</td>
</tr>
<tr>
<td>30-Sep-05</td>
<td>4.37</td>
<td>533</td>
</tr>
<tr>
<td>31-Dec-05</td>
<td>6.04</td>
<td>635</td>
</tr>
<tr>
<td>31-Mar-06</td>
<td>3.09</td>
<td>113</td>
</tr>
<tr>
<td>30-Jun-06</td>
<td>3.54</td>
<td>151</td>
</tr>
<tr>
<td>30-Sep-06</td>
<td>4.00</td>
<td>166</td>
</tr>
<tr>
<td>31-Dec-06</td>
<td>3.23</td>
<td>172</td>
</tr>
<tr>
<td>31-Mar-07</td>
<td>4.07</td>
<td>187</td>
</tr>
<tr>
<td>30-Jun-07</td>
<td>4.03</td>
<td>204</td>
</tr>
<tr>
<td>30-Sep-07</td>
<td>4.29</td>
<td>212</td>
</tr>
<tr>
<td>31-Dec-07</td>
<td>4.08</td>
<td>218</td>
</tr>
</tbody>
</table>

Source: FDIC Quarterly Banking Profile, Administrative Offices of the United States Courts
Table 2: Difference of Means Before and After BAPCPA

<table>
<thead>
<tr>
<th>Bankruptcies and Credit Card Company Losses</th>
<th>Before*</th>
<th>After**</th>
<th>Percent Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bankruptcy Rate (% of Households Filing for Bankruptcy Annually)</td>
<td>1.41%</td>
<td>0.66%</td>
<td>-53%</td>
</tr>
<tr>
<td>Net Credit Card Charge-Off Rates, %</td>
<td>5.23%</td>
<td>3.89%</td>
<td>-26%</td>
</tr>
<tr>
<td><strong>Credit Card Prices: Interest Rates and Fees</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APR (Standard Card)</td>
<td>16.97%</td>
<td>19.18%</td>
<td>13%</td>
</tr>
<tr>
<td>Spread Standard Card vs. 5 year T-note</td>
<td>13.50%</td>
<td>14.66%</td>
<td>9%</td>
</tr>
<tr>
<td>Real Late Payment Fees (2000 $)</td>
<td>$29.62</td>
<td>$30.01</td>
<td>1%</td>
</tr>
<tr>
<td>Real Over-limit Fees (2000 $)</td>
<td>$27.55</td>
<td>$29.44</td>
<td>7%</td>
</tr>
<tr>
<td>Real Annual Fee (standard) (2000 $)</td>
<td>$16.48</td>
<td>$11.96</td>
<td>-27%</td>
</tr>
<tr>
<td><strong>Macroeconomic Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Debt Service Ratio (Household Debt Service Payments as a Percent of Disposable Personal Income)</td>
<td>13.59%</td>
<td>14.37%</td>
<td>6%</td>
</tr>
<tr>
<td>Financial Obligations Ratio, Not Seasonally Adjusted</td>
<td>18.58%</td>
<td>19.43%</td>
<td>5%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>5.63%</td>
<td>4.61%</td>
<td>-18%</td>
</tr>
<tr>
<td>Real GDP Growth (Change from Previous Quarter Annualized)</td>
<td>3.58%</td>
<td>2.01%</td>
<td>-44%</td>
</tr>
</tbody>
</table>

* Before includes the seven quarters before BAPCPA was signed (Q3 2003 through Q1 2005)

** After includes the seven quarters after BAPCPA went into effect, excluding Q1 2006 (Q2 2006 through Q4 2007)

Sources:
FDIC Quarterly Banking Profile; Administrative Offices of the United States Courts; CardWeb CardData; Federal Reserve; Economist Intelligence Unit; Bureau of Labor Statistics; Bureau of Economic Analysis; Moody’s Economy.com