The Consumer and Social Welfare Benefits and Costs of Payday Loans: A Review of the Evidence

Robert Shapiro

March 2011

SONECON

The Consumer and Social Welfare Benefits and Costs of Payday Loans: A Review of the Evidence[1]

Robert Shapiro

I. Introduction and Summary

In recent years, regulators and researchers have focused considerable attention on "payday loans," small, single-payment loans carrying substantial fees. These loans are advanced to people with steady incomes against a post-dated check which the lender can cash on the borrower's next payday. A heated debate has ensued over the consumer welfare effects of these loans. Supporters and some researchers argue that payday loans represent a normal market response to demand for short-term liquidity from borrowers with jobs but little access to other sources of funds. Further, they find that payday loans often help those borrowers manage acute financial pressures and thereby avoid serious adverse consequences and more costly debts. Critics and other researchers reject this characterization and claim that in many cases, the loans are predatory arrangements in which payday lenders take advantage of the behavioral or cognitive infirmities of borrowers. They further find that the short-term credit provided by these lenders often creates a "cycle of debt" which leaves many payday-loan borrowers even more deeply indebted at substantial cost. We have reviewed the existing research and analysis. While economic theory, the structure of the loans, and some empirical evidence provide substantial credence to the analysis of payday-loan supporters, other empirical evidence may support some of the critics' claims. Virtually all of the studies, however, have significant methodological or data limitations which ultimately leave unresolved the central question of the net consumer effects of these loans. A definitive resolution to this debate will require additional, more carefully designed research.

The basic question is whether payday loans, on balance, enhance or diminish consumer and social welfare. Does access to these loans help people better manage financial distress, which would enhance both their welfare and the welfare of the society at large, or at least not worsen their distress? Alternatively, do payday loans with their high fees worsen the financial distress of those who use them, reducing their welfare and that of the society by, for example, increasing the likelihood of home foreclosures or interfering with their ability to hold down jobs?

These questions often are cast in terms of the relationship, if any, between the use of payday loans and increased rates of personal bankruptcies which can impose direct consumer costs on payday loan borrowers and indirect social welfare costs for others. There is evidence, for example, that significant numbers of borrowers take out successive payday loans which, over time, accrete large finance charges which cumulatively may exceed the size of the initial loan. Critics argue that this "cycle of debt" dynamic can lead to personal bankruptcies which impose both consumer and social welfare costs, and some studies have found higher rates of personal

[1] The author wishes to acknowledge the research support of Jiwon Vellucci and financial support for that research provided by the U.S. Hispanic Chamber of Commerce. The views and analysis expressed here are solely those of the author.

bankruptcy among payday-loan borrowers. However, there is also evidence that these loans may enhance consumer welfare by providing short-term funds to people with no access to conventional bank loans, funds which they need to avoid adverse, high-cost events such as personal bankruptcies, repossession of their automobiles, or home foreclosures. On balance, the issue remains unresolved. One prominent study which purports to have found a link between personal bankruptcies and payday loans ultimately fails to settle the question, because the analysis was limited to a select sub-sample of payday borrowers who were just barely approved or just barely rejected for the loans. Moreover, the claimed link for even this limited group is problematic, because the researchers also found that the outstanding payday loans and fees of those bankruptcy filers accounted for less than four percent of their total debts.[2] The most recent study that examined possible links between payday loans and bankruptcies could not find statistically significant evidence of lower personal bankruptcy in states which banned payday loans.[3] More generally, we find that most of the evidence of adverse consumer and social effects associated with payday loans – along with some of the evidence of positive consumer and social effects – has been based on studies with significant methodological limitations.

The data do show that some borrowers use payday loans to help manage large, on-going debts rather than short-term shortfalls. Payday lenders normally would be unaware of this practice: They typically provide the loans without foreknowledge or reference to a borrower's financial difficulties, apart from whether he or she carries other payday loans. Payday lenders can offer access to cash advances without such information, because the loans are provided on terms which help ensure their repayment: The borrower can receive the loan by giving the lender a personal check or scheduled ACH transfer postdated to his or her next payday, for the full amount of the loan plus the finance charge. The loans are provided pursuant to a loan agreement containing the truth-in-lending (TILA) and other disclosures required by law, and no research has found that payday loan borrowers are less financially sophisticated than other Americans.

The fees for these loans are high as a percentage of the loans, but the short term of the loans limits the absolute size of those fees. Traditional banks provide longer-term credit at lower fees and interest rates; but banks also would reject most payday loan borrowers for low credit scores, little collateral and limited income relative to the size of their debts. Based on the current body of research, there is evidence that many payday loan borrowers do carry debts that are large relative to their assets and incomes. However, there is no hard evidence as yet that the arrangements for payday loans induce borrowers to assume debts which they cannot manage. Instead, the data suggest that borrowers subsequently forced to file for bankruptcy faced unmanageable debts before they obtained their payday loans, and very recent research suggests that the interest rates charged on payday loans do not affect the likelihood of borrowers taking out serial payday loans.[4]

This debate is sometimes clouded by understandable sympathy for moderate-income working Americans who find themselves unable to manage their debts in a period of limited economic opportunity and rising inequality. These natural feelings, clearly evident in the work of some researchers, do not change the economic principles or evidence which have been

[2] Skiba and Tobacman (2010).
[3] Morgan, Strain and Seblani (Forthcoming).
[4] Fusaro and Cirillo (2011).

brought to bear on these questions thus far. With the current state of evidence, research and analysis, there are no certain or confident grounds to conclude that payday loans diminish or increase consumer or social welfare. Additional research should be conducted to provide more definitive answers, hopefully before regulators bar or sharply limit access to short-term credit for working people unable to qualify for conventional credit from larger financial institutions.

II. The Terms of Payday Loans

A typical payday loan averages ranges from $100 to $500 and averages about $300, with a maturity term of 14 days or the period until the borrower's next paycheck.[5] These loans are unsecured by other assets and usually are provided without complete credit checks. However, the borrowers must have a steady source of income, they must have a checking account and, in many cases, they may not already carry other payday loans.[6] Many payday lenders use the Teletrack service of CoreLogic, Inc., an independent credit bureau that will check a potential borrower's past record of repayment with other payday lenders and confirm that the applicant does not have another outstanding payday loan with a prior claim on the borrower's next paycheck.[7] An estimated 20 percent of those who apply for payday loans are denied on this basis; and the default rate of those receiving the loans, net of recoveries, is believed to run between 2 percent and 3 percent.[8] The fees charged for these loans average about $18 per $100 loaned for two weeks, although fees as high as $30 per $100 for two weeks are not uncommon.[9] A fee of $18 per $100 borrowed for two weeks is equivalent to an annual interest rate of 468 percent, but this calculation is less meaningful economically for loans structured to terminate after two weeks.[10]

One common argument for strict regulation of these loans or even a ban on them rests on a view that the fees are so high that they force borrowers to take out successive and ever-larger payday loans. On its face, this argument appears to conflate the payday loan fee with the burden of the loan combined with the borrower's existing debts. With regard to the level of the fees, the payday loan industry is generally viewed as a competitive business with very low barriers to entry. In theory, therefore, its fees should reflect the actual costs of providing small unsecured loans, which are substantially greater than the relative costs of providing larger, secured loans. A lender's fixed operating expenses, including the costs of attracting customers and collecting and processing their payments, do not vary much based on a loan's size and maturity. Relative to a loan's size and duration, therefore, these fixed costs for lenders are much higher for small, short-maturity loans than for large, longer-term loans. In addition, the costs of defaults for payday lenders may be higher than those associated with conventional bank loans, because payday loans do not require assets that can be held as collateral.[11] Payday lenders bear the risk that the borrower's checking account will not cover the amount of the check, and they have no legal priority to repayment before other creditors.

---

[5] Elliehausen (2009).
[6] Wilson *et al* (2010).
[7] Stoianovici and Maloney (2008); Hawkins (2011, forthcoming).
[8] Stoianovici and Maloney (2008).
[9] Zinman (2009).
[10] Skiba and Tobacman (2010).
[11] Edmiston (2011).

A number of studies have confirmed the competitive level of the fees for payday loans by examining the costs and profitability of payday lenders. One study from the Center for Financial Research of the Federal Deposit Insurance Corporation (FDIC) found that the fixed operating costs and loan loss rates of payday loan lenders account for most of the high finance charges, so that most payday lenders' profitability depends on their volume.[12] Another analysis of financial data publicly reported by seven payday lenders found that their losses from defaults were equivalent to 21 percent to 25 percent of their operating expenses and about 5 percent of their total lending, offsetting about 25 percent of their interest income.[13] The FDIC study also found that payday loan renewals and loans by frequent borrowers were no more profitable than other payday loans and, after controlling for loan volume, that the income and ethnic characteristics of the area where payday lenders operate do not significantly affect their profitability.[14] These findings appear to contradict the view of some critics that payday loan lenders target low-income people who are most likely to take out successive loans.

The FDIC analysis broke down the expenses of payday lenders and compared them to the finance charges.[15] Operating expenses averaged between $19.08 and $26.94 per-loan, and default losses and loan collection expenses added another $6.02 to $9.17 per-loan, for total operating costs of $25.10 to $36.10 per-loan. This amounts to average costs of around $14 per $100 lent, before the recognition of the lender's allocated general and administrative expenses, compared to finance charges of $17 to $18 per $100 lent. On balance, this study and others have found that the average operating profits of payday lenders are close to the typical returns of other financial companies,[16] locating the payday loan business within the broad parameters of American finance.

There is evidence that the ease of obtaining these loans, including their unsecured nature and the absence of credit checks beyond a borrower's payday loan history, leads some people to take out successive payday loans which, as noted above, may produce large cumulative charges over time. However, the terms of the loans mean that these fees do not compound, since each loan is liquidated after two weeks by the lender's cashing the borrower's previously delivered check. Moreover, the loans are provided to employed adults, and research has found that they are generally aware of and accept the terms, including the fees. One study argues that payday loans are designed to take advantage of customers who unrealistically expect to be able to fully pay off their loans on time and then find themselves unable to do so.[17] This claim is based on behavioral theories derived or adduced from laboratory experiments, but there is no empirical basis for applying it to actual borrowers. The authors of the study also failed to examine the urgency of the borrowers' need for cash, and consequently cannot speak to whether their payday loans helped them avoid higher costs such as home foreclosures or automobile repossessions, or even whether such payday borrowers actually expect to pay off their loans at maturity when they apply for them. Moreover, such behavior is not limited to those using payday loans. Many credit-card borrowers, for example, incur balances which they know they cannot repay for an

[12] Flannery and Samolyk (2005).
[13] Flannery and Samolyk (2005); and Skiba and Tobacman (2007).
[14] Flannery and Samolyk (2005).
[15] *Ibid.*
[16] Skiba and Tobacman (2007); Elliehausen (2009).
[17] Bar-Gill and Warren (2008).

extended period. Similarly, other economic researchers have found that some payday borrowers are overconfident or unrealistic about their ability to quickly repay their loans and misjudge their future income prospects and likely expenses.[18] But these findings also apply to borrowers with conventional loans and to many consumers generally.[19] Moreover, the fees associated with payday loans do not appear to contribute to these dynamics: One recent experiment found that payday loan borrowers who received an interest-free loan were as likely to take out successive loans as those who paid the normal interest and fees.[20]

The rapid expansion of the payday loan business does provide evidence of strong demand for short-term emergency loans by otherwise credit-constrained Americans. Since the industry's beginnings in the early 1990s, an estimated five percent to seven percent of all American households have used payday loans; and its potential market is estimated at 10 percent of households.[21] In response to this demand, more than 15,000 payday loan offices were operating in 2006, extending some $25 billion in loans that year.[22] Since that time, thousands of new payday loan operations have been established on the Internet. The rapid growth of payday lending appears to reflect a combination of strong demand and the meager alternatives available to many borrowers with few assets and/or problematic credit histories. As noted earlier, payday loans provide quick and easy access to small amounts of cash, especially compared to the complicated and extended process required by conventional banks. In addition, defaults on payday loans are not reported to credit-reporting agencies except Teletrack, removing a potential cost to a borrower's credit status.[23]

While most banks will not lend small amounts, or often any amount, to credit- and asset-constrained borrowers, payday loan borrowers often do have alternatives. One recent study found that two-thirds of nearly 4,600 payday loan applicants surveyed had more than $1,000 in available liquidity, suggesting that they chose payday loans over drawing on those resources.[24] Another option for some payday loan borrowers could be credit card loans. However, researchers have found that nearly two-thirds of payday loan borrowers do not have access to credit cards,[25] and many of those who do carry the cards have reached their credit limits.[26] Credit card loans for people with few resources and problematic credit histories also are expensive, sometimes more costly than payday loans. A two-week credit card loan typically carries interest charges at an annual rate of 129 percent to 155 percent, but those charges can reach 1,000 percent if the borrower exceeds his or her credit limit.[27] Some surveys also report that many payday-loan users are wary of increasing their credit card balances out of concerns that they lack the financial discipline to pay down those balances.[28] In this respect, the terms of payday loans may seem particularly attractive, since they commit borrowers to repay the loans,

[18] Lawrence and Ellihausen (2008).
[19] For example, Nisan (1972), Koriat, Lichtenstein, and Fischhoff (1980): Buehler, Griffin and Ross (1994).
[20] Fusaro and Cirillo (2011)
[21] Zinman (2009).
[22] Lawrence and Elliehausen (2008).
[23] Edmiston (2011).
[24] Agarwal, Skiba and Tobacman (2009).
[25] Lawrence and Elliehausen (2008).
[26] Wilson *et. al.* (2010).
[27] Edmiston (2011).
[28] Lawrence and Elliehausen (2008).

including fees and principal, by pledging their next paychecks to the lenders. In principle, payday-loan borrowers also can obtain short-term financing by writing checks which they know cannot be covered by their accounts. However, typical overdraft fees of $25 to $35 or bounced-check fees which average more than $30 nationwide are greater than the fees for many two-week payday loans.[29] In addition, repeated overdrafts and bounced checks can lower the check writer's credit score and may even lead to criminal charges.[30] In fact, one survey of 125 payday loan borrowers found that more than three-quarters had paid at least one overdraft fee within the preceding year, and more than half of them had paid three or more such fees.[31] Finally, pawnshop loans may substitute for payday loans for some borrowers, although pawnshop loans require collateral, their average size is smaller than the typical payday loan, and the fees are often comparable.[32]

Given the available alternatives, the use of payday loans by credit- and asset-constrained working households facing emergency cash demands does not appear to be economically unreasonable. The outstanding issue is whether, on balance, access to these loans relieves, exacerbates or leaves unaffected the financial distress of those who use them. If there is a distribution of such results, as seems likely, the outstanding issue becomes what characteristics and conditions affect that distribution.

There is one other issue about which no evidence or analysis yet exists: As noted earlier, thousands of new, "virtual" payday lending operations have been established on the Internet in recent years. Unlike the brick-and-mortar operations that still dominate the industry, online payday lending is regulated much more lightly. As yet, there is no published research on possible differences between how online and storefront payday lenders operate, whether their customers are similar or different, and how the outcomes of payday borrowing may vary based on the two venues. For now, our analysis must be limited to the operations and outcomes of traditional, brick-and-mortar payday lenders.

III. The Literature on the Consumer and Social Costs and Benefits of Payday Loans

The basic question for most researchers in this area is whether the fees and short-term repayment periods for payday loans help borrowers manage their financial pressures or lead them into even worse long-term financial difficulties. Some researchers have concluded that the high costs from repeatedly renewing payday loans or using credit card loans to offset those costs increase the financial distress of many borrowers. Under those conditions, they claim, cumulative payday loan fees can exceed the original amount borrowed and increase the likelihood of personal bankruptcies. Some critics also charge that payday lenders target naïve and financially-vulnerable people who are likely to take on unmanageable loans, again increasing the incidence of personal bankruptcies. By these views, the provision of payday loans, on balance, reduces consumer welfare by inducing or creating the conditions for individuals to declare bankruptcy when they otherwise might avoid it. Such otherwise avoidable personal bankruptcies also would reduce social welfare by, for example, inducing home foreclosures by

[29] Edmiston (2011); Fusaro (2008).
[30] Zinman (2009).
[31] Shevlin (2011) (Aite Group report).
[32] Avery (2011).

homeowners forced into unnecessary bankruptcy, undermining their work efficiency, and increasing interest rates for other borrowers to offset losses from the unnecessary bankruptcies.

Other researchers have concluded that payday loans enhance consumer and social welfare by providing simple and quick access to credit for borrowers with short-term financial constraints, or who find themselves short of cash when they face unanticipated emergencies. These researchers note that many payday loan borrowers have little or no precautionary savings to draw on for emergencies and lack access to the conventional sources of credit that more prosperous people use to relieve temporary financial pressures. They further note that the simple terms of the loans should preclude misunderstanding by even naïve borrowers, even if financial pressures and their lack of alternatives might induce them to accept almost any terms. Considering these factors and the potential consequences of failing to obtain short-term funding – including personal bankruptcies, home foreclosures or automobile repossessions, greater inefficiency at work, or even the loss of jobs for lack of transportation or from complications from becoming homeless, all of which would entail consumer and social welfare costs – they reason that the benefits of payday loans outweigh their costs. Put another way, these analysts point to the potential consumer and social welfare benefits of these loans, including the avoidance of potentially large, adverse personal and social effects associated with an inability to obtain short-term, emergency financing.

The economics literature on these and related questions is fairly extensive. One series of studies focuses on the characteristics of payday loan borrowers: Who uses payday loans; why do they choose them; do they understand the loan's fees and other features; and are their experiences with these loans generally positive or negative. Two recent surveys analyzed the responses by customers of payday lenders affiliated with the Community Financial Services Association of America (CFSA), an industry trade organization whose members cover a majority of payday loan offices in the United States.[33] These surveys found that the borrowers typically are employed and usually are young, with children, and come from moderate-income households with few liquid assets. They generally also are renters with no access to home equity lines of credit. More than half of the respondents also report they had no alternatives to payday loans, partly because they did not have credit cards or already had reached their credit card limits.

Data collected in 2007 and 2009 by the Census Bureau's Current Population Surveys of "unbanked or under-banked" households similarly found that the average payday loan borrower is a young person with children under the age of 18, an income and education that are not notably lower or higher than other Americans, hold fewer assets than the average household, are often members of an ethnic or racial minority, and are more likely to have been denied conventional bank loans.[34] And a telephone survey of 1,500 North Carolina families with incomes of less than $30,000 found that those households most likely to use payday loans, especially African-American households, were credit constrained and had a high likelihood of becoming frequent borrowers.[35] Most of these payday loan customers also lacked access to revolving lines of credit such as credit cards and home equity lines, or to other sources of credit. They also said they were aware of the fees, which they considered finance charges rather than

[33] Lawrence and Elliehausen (2008) and Elliehausen (2009).
[34] Avery (2011).
[35] Stegman and Faris (2003).

interest rates set at high levels, and were attracted by the relative ease of securing the loans. Finally, the respondents reported being generally satisfied with their payday loans, with few users citing dissatisfaction arising from difficulties getting out of debt.

Despite this general satisfaction, the surveys also found that a majority of the payday loan users polled believed that payday loan lenders make it difficult for some customers to liquidate their debts. Yet, the same surveys also found that payday loan borrowers who extend their loans typically do so by using different payday loan lenders. Unfortunately, the analysis failed to compare the multiple payday loan users to others with similar socioeconomic characteristics and credit profiles. Therefore, the research cannot establish whether payday loan users are more likely to be chronic borrowers than others who use credit card lines of credit or more informal loan arrangements. Nor did the analysis examine the fundamental issue of whether access to payday loans, on balance, enhanced or reduced the financial well-being of the borrowers.

Other research has focused on whether payday lenders take advantage of borrowers who suffer from "cognitive limitations" or biases that lead them to ignore the actual costs of the loans and the potentially adverse financial consequences of taking out successive payday loans. The authors of one such study cited by some critics of payday loans concede that the loans may be priced fairly, and that many payday loan users are fully informed, capable, and simply "face a pressing need for cash at a moment when they lack access to other, cheaper forms of financing."[36] However, they also reported that others payday borrowers turned to the loans because, in effect, they didn't know any better. Yet, in an experiment with the customers of 100 outlets of one large payday lending chain, these researchers found that their borrowing behavior was unaffected by receiving more detailed information on the annual interest rate implied by their finance charges or by information about how many times an average payday borrower refinances his or her original loan. In support of their conclusions about the "cognitive limitations" of payday loan borrowers, they also reported that those who were told how much it would cost in dollars to renew their payday loans for three months – a total of six loans in succession – were about 10 percent less likely to renew the loans that brought them into the survey compared to a control group. The researchers concluded that this information bridged a "cognitive gap" common to payday loan borrowers and urged policymakers to post such warnings at payday loan sites.

The study may accurately portray the limited financial sophistication of many payday borrowers, although the authors did not ask or investigate whether most Americans have similarly limited financial understandings. However, there is reason to question their interpretation of their results. They report, for example, that the typical borrower in their experiment already had used payday loans nine times previously, which suggests that those borrowers already knew the costs of successive loans. This may also explain why most of their respondents were unaffected by the initial informational interventions of the researchers. Moreover, while these results may be intriguing as psychology, they have no clear bearing on the question of whether payday loans enhance d the welfare of those who use them or the society at large. The authors did not attempt to examine whether the borrowers were better off or not generally or, more specifically, whether those who received the information and did not renew

[36] Bertrand and Morse (2009).

their payday loans were better off as a result than either the control group or those who received the information and did not alter their behavior.

The view that payday loan lenders take advantage of unsophisticated borrowers is also related to claims that those lenders target minorities. While many of the issues surrounding payday lending cannot be easily settled, there is clear evidence that this particular charge is incorrect. Some studies have found that payday loan offices are more likely to be located in neighborhoods with higher-than-average African-American or Hispanic populations, but those studies do not establish whether African-American or Hispanic people use payday loans more frequently than other ethnic or racial groups. Most of the evidence suggests that after controlling for income, the locations of payday loan offices are *not* correlated with the racial or ethnic composition of neighborhoods.[37] In fact, recent research reported by the New York Federal Reserve Bank found that after controlling for income and debt, minorities are no more likely to use payday loans than Caucasians. In short, African-Americans and Hispanics may be more likely to use payday loans, but only because they are more likely to have fewer economic resources.[38] Put another way, payday loan users are more likely to have lower incomes and fewer assets than average, regardless of race or ethnicity – although an estimated 25 percent of earn more than $50,000 per-year.[39] Payday loan borrowers are also more likely to be young, female, and to have finished high school, but less likely to have finished college.[40] Finally, these borrowers actually carry less debt than average Americans, probably because they have less access to conventional bank loans.

As noted earlier, a number of researchers have tried to answer the basic question of the net consumer and social welfare of payday lending by focusing on a possible relationship between payday loans and personal bankruptcies. The logic behind these studies is that if the use of payday loans tends to increase the long-term financial problems of those borrowers, access to the loans should be associated with higher personal bankruptcy rates. Unfortunately, these analyses do not provide definitive answers, and the evidence remains inconclusive.

One study examined data from bankruptcy petitions in counties where payday lending is relatively unregulated and compared the bankruptcy rates of those with and without histories of using payday loans.[41] This analysis found that payday loan borrowers declared bankruptcy more quickly. However, the meaning and significance of this finding are problematic. The research also found, for example, that the payday-loan borrowers had lower debt-to-income ratios than non-payday loan users who also declared bankruptcy, suggesting that the payday loan users either chose not to delay their bankruptcies by accumulating more debt or were unable to do so. The finding that payday loan users declared bankruptcy sooner also could mean that bankrupt payday loan users had less debt to be written off, which could be evidence of enhanced consumer and social welfare if they would have declared bankruptcy in any case. Further, the analysis failed to establish whether the use of payday loans increased the likelihood of bankruptcy compared to others with the same financial problems. In the end, the research does not establish

[37] Bhutta (2011a).
[38] Morgan and Pan (2012).
[39] *Ibid.*
[40] *Ibid.*
[41] Mayer (2004).

whether the tendency of payday loan borrowers to declare bankruptcy more quickly than other borrowers who also declared bankruptcy was evidence of enhanced or reduced consumer or social welfare.

The study includes other ambiguous or contradictory findings. The author found that easy access to payday loans enabled some borrowers to manage emergencies and avoid bankruptcy, at least at that time. However, he also found that payday loan borrowers who declared bankruptcy often had taken out two or more payday loans at once, and that their total payday loan debts were equal to or greater than their monthly paychecks. Further, borrowers who took out more than one payday loan and then used the additional loans to pay off older debts had higher bankruptcy rates. However, the author also reported that the fees charged for those payday loans were *not* a determinant factor in the results.

In the end, the author concluded that additional regulation should focus on limiting the number of payday loans available to a borrower over a short period. Yet, the findings do not clearly support this conclusion, because the author did not compare his results with data on bankruptcies in counties where payday loans are unavailable or strictly limited. Therefore, we do not know whether the same borrowers, without access to payday loans, might have secured lower-cost credit and avoided bankruptcy, or would have replaced their payday loans with other credit at comparable costs and declared bankruptcy at the same rates, or would have turned to higher-cost credit and declared bankruptcy even sooner, with higher debts or at higher rates.

Other researchers used data from one large payday lender to investigate the same question of whether access to payday loans increases personal bankruptcy rates.[42] The lender that provided the data used a credit-score threshold as a criterion for approving a potential borrower, a practice not generally followed by other payday lenders; and the study compared the outcomes of applicants who just barely passed that threshold and received payday loans with applicants who just barely missed the threshold and did not receive the loans. Since both groups arguably had similar socioeconomic and debt characteristics, the authors reasoned that differences in bankruptcy rates could be attributed to access to payday loans or the lack of it.

These authors found higher bankruptcy rates among those who took out payday loans from the lender studied, but once again the results are ambiguous. Access to payday loans from this lender was associated with higher rates of chapter 13 bankruptcies, where debtors reschedule their debts, but not with chapter 7 bankruptcies where a person's debts are written off. Moreover, the finding that access to payday loans from this lender was associated with higher rates of chapter 13 bankruptcies may be misleading. The period covered by this study, 2000 to 2006, preceded the effective date of the Bankruptcy Reform Act; and in those years, debtors with equity in their homes almost invariably chose chapter 13 over chapter 7 because those filing chapter 7 could be forced to surrender that equity. This choice, therefore, might enhance their consumer welfare.

In fact, the authors concede that the social welfare costs of chapter 13 proceedings are ambiguous and "difficult to measure." Since the chapter 13 process involves rescheduling a person's debts, social costs should be relatively modest. Those costs would be limited to the

[42] Skiba and Tobacman (2010).

expense of carrying out the process (the transaction costs) and possible spillover effects if higher bankruptcy rates among payday loan users lead providers of other unsecured loans to raise their interest rates. In principal, this spillover effect could occur, but there is no evidence that payday loans are associated with any such effect.

Furthermore, while the authors found a statistical correlation between the use of payday loans and higher levels of chapter 13 bankruptcy, they did not try to establish a causal relationship. The study's data suggest that such a demonstration would be very difficult. Among payday loan borrowers filing for bankruptcy protection in this study, the average outstanding payday loan balance, including both unpaid principal and fees, was $1,323 or less than 4 percent of their total average unsecured debt of $34,000. The authors suggest that the fees from successive payday loans over preceding months might have contributed to the bankruptcy, but they offer no evidence for this relationship. Here, as in other studies which report that payday loan borrowers often find themselves bearing unmanageable debts, the authors do not examine whether those unmanageable debts existed before the borrowers incurred any payday loans.[43] Moreover, among those who took out payday loans and subsequently filed for bankruptcy, the fee or interest burden associated with their payday loans averaged $300, or only 6 percent of their average total interest burden and less than 1 percent of their average total debts. The authors provide an econometric exercise which found that this increment was statistically significant, but that finding was not robust: The exercise produced opposite results if the specifications for the interest or other terms in the econometric equation were altered modestly.

Furthermore, as the study's authors acknowledge, the significance of their results was limited by their reliance on data from potential borrowers clustered close to the credit-score threshold used by the lender. As a result, they could not establish whether the difference they found in chapter 13 bankruptcy rates associated with access to payday loans would hold for the vast majority of potential and actual payday loan borrowers who had higher or lower credit scores. They also concede that their reliance on data from one lender introduced other possible distortions, since those who failed to obtain loans from that lender and consequently became part of the "control group" of those without the burden of payday loans might have obtained payday loans elsewhere, from a more typical lender that did not use credit scores. On balance, the study cannot demonstrate a meaningful statistical correlation, much less a causal relationship, between payday loans and higher bankruptcy rates.

Other research has similarly failed to find hard, empirical evidence linking payday loans and higher bankruptcy filings.[44] For example, the authors of another study measured the "intensity" of payday lending in states using as their proxy the number of payday loan outlets, and then tried to correlate the results with bankruptcy filings over the period from 1990 to 2006. After controlling for state restrictions on payday lending, two alternative econometric tests failed to find a statistically significant relationship between the use of payday loans and bankruptcies that might indicate that the loans damage consumer or social welfare. In addition, this study also has serious methodological limitations. The number of payday loan outlets in a state may or may not reflect the intensity of the actual use of payday loans, and the socioeconomic characteristics of payday-loan borrowers which play a role in bankruptcy rates may differ from state to state.

[43] Hawkins (2011, forthcoming).
[44] Stoianovici and Maloney (2008).

Another, more recent study examined bankruptcy rates before and after eight states had banned payday loans, and before and after 11 other states had passed legislation permitting payday loans. This study found higher bankruptcy rates in the eight states that banned the loans, after those bans took effect, but these results as well were not robust: The results held up only when the analysis ignored state-specific economic conditions. They also found that bans on payday loans correlated with increased use of bank overdrafts and increased complaints about bill collectors, suggesting that the bans did not improve people's economic conditions. Finally, the study examined correlations between legal access to payday loans and bankruptcies or those other financial events, by states, without exploring the effects of the actual use of payday loans by individuals.

Other studies have tried to measure the consumer and social welfare effects of payday loans by comparing people's financial status and difficulties before and after the loans were banned or sharply restricted by certain states. One study found that such restrictions or bans may produce social welfare costs, although once again the results were not definitive. The analysis found that after Georgia and North Carolina banned payday loans, rates of chapter 7 bankruptcies where debts are written off increased, as did the incidence of bounced checks and complaints to the Federal Trade Commission about lenders and debt collectors.[45] But the authors did not establish whether those effects could be traced to individuals who otherwise would have taken out payday loans.

Moreover, yet another study produced different results from examining the impact of new restrictions on payday loans in Oregon, which forced most payday lenders to leave the state. The author compared the borrowing patterns and rates of financial difficulties in Oregon five months after the new restrictions took effect, with borrowing patterns and financial difficulties in neighboring Washington State where payday lending remained relatively unrestricted.[46] As expected, overall payday lending declined in Oregon compared to Washington; and part of the newly unmet demand for short-term credit in Oregon was met by increased rates of bank overdrafts and late-bill payments. However, the increased use of these alternatives did not fully offset the decline in payday lending in Oregon. The study also found that Oregon's new restrictions increased the likelihood of other, adverse economic events, such the loss of a job and a notable deterioration in a person's financial circumstances. The author characterized these results, which might suggest that access to payday loans has positive consumer and social welfare effects, as "ambiguous." This hesitation may reflect one of the shortcomings of the study's research design: The analysis was limited to effects evident within five months of the new restrictions in Oregon, perhaps before lenders and borrowers could adjust fully to the change; and the study failed to explore other factors which may have influenced the outcomes.

Like the research just described, most studies of the consumer and social welfare effects of access to payday loans rely on indirect analytic approaches. A more direct method would

---

[45] Morgan and Strain (2008). The authors claim that chapter 7 bankruptcy filing is more relevant measure to payday lending customers than chapter 13 bankruptcy filing. chapter 13 is to revise the debtor's future payment schedule in exchange for keeping the current assets and chapter 7 is to hand over any non-exempt assets and be free of any future debt payment. Therefore, chapter 13 is for filers with substantial assets to protect and chapter 7 is preferred by filers with little assets such as most payday loan customers.

[46] Zinman (2009).

involve measuring the marginal cost of credit to consumers when payday loans are restricted, with controls over other variables. In settings such as Georgia, North Carolina and Oregon which could provide natural experiments, the analysis still requires detailed, individual-level data that can connect payday loan borrowing with other variables. Since those data are not readily available, researchers have to make various assumptions about financial distress and access to other forms of credit, which in turn weaken their findings.

These limitations apply to other studies on both sides of the current debate. One recent analysis, for example, compared the availability of credit, debt levels and loan delinquency rates for households across states which differed in the access they provide to payday loans.[47] The author's hypothesis was straightforward: If payday lending reduces consumer welfare, economically vulnerable households in states with access to payday loans should have higher debt levels and greater repayment problems than comparably vulnerable households in states that ban or sharply restrict the loans. The analysis found that access to payday loans reduced those debts and difficulties, and so presumably enhanced consumer welfare. Contrary to the view of payday lenders as predatory, this research also found that less-educated and lower-income households in states with higher limits on payday loans were less or equally likely to be delinquent in repaying the loans. The study further found, as one should expect, a negative correlation between the number of payday lenders in a state and the fees they charged for the loans, suggesting that competition drives down fees in the industry. However, much like studies on the other side of this debate, this analysis did not control for other economic and demographic variables which may have affected households in different ways in the different states.

One study issued last year (2011) found evidence associating access to payday loans with other adverse effects. Comparing outcomes across states that provide varying access to payday loans, the author found that low- to middle-income households in states with access to payday loans were more likely to experience difficulties such as skipped meals, delayed medical care, loss of phone service, and being forced out of their homes.[48] In addition to the usual limitations from failing to take account of other economic and demographic factors that may differ from state to state, the study equates access to payday lending with actual borrowing from those lenders. Without individual-level data on a household's use of payday loans, the researcher relied instead on a household's proximity to payday lenders as his proxy for the use of payday loans. In the end, the study could not provide any evidence that those households who experienced deteriorating financial conditions in states that provide access to payday loans actually used payday loans.

The author of another recent study examined the impact of access to payday lending on consumers' credit standings and their use of other, non-traditional forms of credit.[49] Using consumer credit data at a county level, the author found that households in counties that restrict payday lending are more likely to have low credit scores and turn to non-traditional forms of credit than households in counties with fewer restrictions. From these findings, the researcher concluded that restrictions on payday lending reduce consumer and social welfare and limit the

[47] Morgan (2007).
[48] Melzer (2011).
[49] Edmiston (2011).

ability of financially vulnerable households to obtain credit. Yet, the study also lacked any data on the actual use of payday loans by those with low credit scores. The author also used data on the low use of traditional forms of credit as a proxy for the high use of non-traditional forms of credit, an assumption untested in the analysis.

Similarly, yet another recent study used a large dataset of consumer credit records to explore whether access to payday loans affects people's general financial health as measured by their credit scores.[50] This time, the study found no evidence that access to payday loans affects people's financial health positively or adversely, since there were no discernible effects on credit scores, the likelihood of a large decline in those scores, or how long it took to recover from low scores. This analysis, too, has serious methodological limitations: The author looked for correlations between credit scores by zip code and concentrations of payday loan lenders by zip code, without examining the actual use of the loans. Moreover, the use of credit scores to measure financial health is highly problematic: A person's reliance on payday loans, the frequency of that reliance, the size of the loans and any delinquencies in repaying them are all data which are not reported to credit bureaus. Therefore, any effect picked up in this study would have to be based on how access to payday loans affects a person's ability to meet other financial obligations which are reported.

Other researchers approach these issues by focusing on the use of payday loans under unusual conditions. One such analysis investigated whether access to payday loans mitigated the economic effects of natural disasters in certain California communities.[51] The author found, as expected, that home foreclosures and larcenies increase after a natural disaster, but less so in communities with easy access to payday loans. This analysis provides a reasonable argument for the consumer and social utility of payday loans to help people deal with emergencies. Once again, however, the evidence was indirect, since the author could not connect the actual use of payday loans with the lower rates of foreclosures and larcenies, or measure the effects of payday loans on those who made repeated use of them.

Another study with a special focus tried to estimate the effect of access to payday loans on the performance of Air Force personnel.[52] Here, the authors found correlations between payday loan access near Air Force bases and declining job performance, retention rates and job readiness as measured by eligibility for reenlistment, compared to personnel assigned to bases in areas of the same states with less access to payday loans. Once again, the study's research design was flawed in a number of ways, since its authors did not measure the effect of other variables on job performance, retention rates and job readiness, nor did they have the data to track the actual use of the payday loans by those whose performance was said to decline. The analysis also ignored the possibility that Air Force personnel assigned to places where payday lending is restricted could drive to a nearby county where the lending was less restricted.

This study has other significant shortcomings. The authors do not consider the (consumer) "welfare implications for military members," which they characterize as "less clear cut." In short, they ignore the effects of access to payday loans on the borrowers themselves. For

[50] Bhutta (2011a).
[51] Morse (2009).
[52] Carrell and Zinman (2008).

example, if the higher rates of failure-to-reenlist were associated with access to the loans – which their methodology cannot establish – those rates could reflect decisions to move to better-paying civilian jobs. More generally, the analysis measured only outcomes which the authors characterized as negative – that is, negative from the vantage of their employers – and ignored potentially positive effects. Access to payday loans, for example, may enhance the welfare of airmen and airwomen who are not at risk of being ineligible for reenlistment or unfavorable personnel actions. The authors' logic also has an unacknowledged circularity, since the Air Force views a failure to repay a loan as *per se* negative behavior that may justify an ineligibility to reenlist or an unfavorable mention in a person's record. Therefore, the rules in the military regarding loan defaults create a relationship between access to payday loans, which often involve some incidence of default, and statistical evidence for increased ineligibility for reenlistment and unfavorable data in a person's record, the adverse outcomes which the authors purport to track independently.

A few studies attempt to address the methodological shortcomings of most payday lending analyses by creating a kind of laboratory environment in which they try to better control for other variables. In one such study, the authors recruited volunteers for an experiment in which each subject was told that he or she had the same resources, expenditures and financial shocks, and then randomly informed half of the participants that they could access payday loans while telling the other half of the participants that they did not have such access. The results provide support for both sides of this debate. A larger share of the participants with hypothetical access to payday loans survived financially, but some of those who made repeated use of the loans ended up in worse financial shape than those denied access to the loans. If one assumes that people respond in real life in the same way they do under such hypothetical conditions, the study would suggest that access to payday loans improves the consumer welfare of the majority of households, and with it social welfare, while reducing the consumer welfare of a minority of heavy users of the loans.

This experiment also highlights the question of the degree to which some people overuse payday loans. Here, again, the research has not produced a reliable consensus. One survey found that the average payday loan borrower took out 12.5 payday loans per year.[53] Another survey reported that nearly half of payday loans were renewals or rollovers,[54] and the Commissioner of Banks for North Carolina reported that 52 percent of payday loan users in that state took out more than six such loans per year.[55] However, the significance of these findings for consumer or social welfare is unclear: Since the typical payday loan is $300 for a term of two weeks, even 12.5 loans per year suggests that these borrowers maintained payday loan debt of about $350 – the $300 principal, plus fees of $17-$18 per $100 borrowed for two weeks – for less than six months per year. The survey also did not examine how many of those who took out successive loans ended up bankrupt, in absolute terms or compared to those who borrowed against their paychecks less frequently. In any case, yet another survey conducted by the Federal

[53] Graves and Peterson (2005).
[54] Flannery and Samolyk (2005), cited in Bar-Gill and Warren (2008).
[55] Cited in Flannery and Samolyk (2005).

Deposit Insurance Corporation found that the average payday loan borrower takes out only one to two loans per year.[56]

Moreover, a recent experiment suggests that the incidence of serial payday loans and repayment rates are unaffected by payday loan fees.[57] For this study, the authors arranged for a random sample of 837 borrowers accessing 47 payday loan stores in 15 cities to receive their initial loan interest-free. To evaluate the impact of the normal fees, the researchers compared this sample with other payday loan borrowers with regard to repayment rates and the use of additional payday loans. The results varied both across states, based on differences in payday loan regulation, and by age and income. Contrary to claims that payday loan fees impose such heavy burdens that borrowers are forced to borrow again, the study found that in every subsample, borrowers who paid the normal fees were no more likely to take out additional payday loans than those who received interest-free loans. The interest rate also did not appear to affect delinquency rates or the duration of the loans. In short, the study suggests that demand for payday loan is "price inelastic," at least for people with little or no access to conventional borrowing. As a result, the authors conclude that "lowering interest rates does not reduce the cycle of debt, and it also does not reduce borrowing."[58] To be sure, this study, too, has data limitations, since the lenders could not all provide complete or compatible data, which forced the researchers to use multiple subsamples. However, the fact that none of the subsamples produced results consistent with the "cycle of debt" theory casts serious doubts on that view.

Another, related issue involves the incidence of multiple payday loans by a single borrower at the same time. If this practice is common and if the payday loan industry encourages or facilitates it, it could suggest that payday loans can reduce consumer or social welfare through the costs associated with multiple borrowings. However, there are no hard data on this practice. Many states bar or limit multiple payday loans to a single borrower. Moreover, in states that do not forbid the practice, it is doubtful that payday lenders would encourage it: Payday lenders depend upon the security of postdated checks to reduce the risks of lending to people already in financial distress, so the practice would seem to undermine the industry's basic economics. As noted earlier, those economics are manifest in the industry's use of the independent credit bureau, Teletrack, with many (although not all) payday lenders reporting their loans to Teletrack and checking its database to confirm that a potential customer has not already committed his or her next paycheck to another lender. Therefore, while there are no reliable data to settle this issue, payday lenders have both an incentive not to facilitate multiple, simultaneous loans and the means to avoid doing so.

As noted earlier, the basic terms of payday loans also should limit their potential adverse effects on borrowers in financial distress. The fees for payday loans are high as a percentage of the principal of those loans, but the loans themselves are small. Moreover, the provision and mechanism for repaying payday loans, which protect lenders from large losses, also should protect borrowers from compounding fees. By contrast, credit card loans provide no such protections. While all of the charges for payday loans are disclosed and the total payments for any single loan are set, revolving credit card arrangements involve charges that vary based on

[56] Federal Deposit Insurance Corporation (2009).
[57] Fusaro and Cirillo (2011).
[58] *Ibid.*

behavior, including late-payment fees and escalating interest rates as well as additional fees for exceeding credit limits. These various fees and charges can mount up quickly and make the actual cost of the original credit much greater than the initially disclosed costs. The credit card industry reports that among households with credit cards in May 2011, the average household held three cards with a combined outstanding balance of $15,000.[59] Further, the average interest rate on those balances was about 15 percent, rising to an average of 25 percent for those with impaired credit.[60] Households, including many already in financial distress, can accumulate such high levels of credit card debt relatively painlessly, until they reach a credit limit that averages $5,000 per card. At the levels reported by the credit card industry, the interest charges on these high levels of debt compound quickly, suggesting significant consumer welfare costs.

The consumer and social welfare costs of unmanageable debt cannot be dismissed. People in serious financial distress may lose their homes, automobiles and even their livelihoods; and their own health and wellbeing, as well as that of their spouses and children, may suffer. From a societal point of view, people with unmanageable debts also are often less productive; and when they default on those debts, lenders are forced to raise interest rates for everyone.

Yet, the consumer and social welfare costs and benefits of payday lending remain unresolved, despite the extensive research in this area. A recent survey of this research by staff at the Federal Reserve Board concluded that while many studies have found various adverse outcomes common among the populations that use payday loans, those adverse outcomes do not appear to be related to the availability of those loans.[61] Or, a another recent analysis concluded, "[d]espite a dozen studies [sic], the question of how payday credit affects its users remains unanswered."[62] This conclusion should serve as a caution to states which sharply restrict or ban payday lending today, as well as for those calling for new federal restrictions based on assumptions that these loans impose serious consumer and social welfare costs. States and the federal government should undertake additional regulation or deregulation only after more definitive research has been conducted.

IV. A Research Agenda to Advance the Debate

Our review of the current research and analysis regarding payday loans has established, in our judgment, that additional research and analysis would be required to settle questions about the consumer and social utility of payday loans. Most studies have drawn on existing data bases assembled for other reasons and then tried to reconceptualize and reformat those data in order to adduce proxies for the actual issues being investigated. The results are uniformly inadequate.

Researchers have found that payday loans enable many moderate-income working households to obtain short-term credit otherwise unavailable from traditional financial institutions, and these loans may enable those households to weather emergencies and periods of acute financial distress.[63] In economic terms, these loans may allow households to smooth their

[59] Woolsey and Schulz (2011).
[60] *Ibid.*
[61] Bhutta (2011b).
[62] Morgan, Strain and Seblani (Forthcoming).
[63] See, for example, Elliehausen (2009).

incomes and consumption in the face of financial or economic shocks. However, recent research has been unable to determine the dimensions, extent and significance of certain observed adverse effects, including whether the fees for successive payday loans strain or hobble borrowers already experiencing serious financial distress and thereby contribute to higher rates of personal bankruptcy. The current body of research cannot even establish in a definitive way whether those adverse effects are real. Additional research is needed to settle the basic question of whether payday loans produce net consumer and social welfare benefits or costs.

First, researchers need to know much more about the socioeconomic and demographic characteristics of payday loan borrowers. Survey data has found that the average payday loan borrower is a relatively young working person with some college education, moderate income and few assets. These characteristics also describe many millions of people who do not use payday loans. Surveys also have established that many payday borrowers have been refused credit by traditional banks and have reached their credit-card limits.[64] Additional investigation should be conducted to collect other pertinent data, such as the levels of payday loan borrowers' other unsecured debts, and the assets, incomes and debts of other members of their households.[65] Additional surveys also should be conducted to collect detailed information on how payday loan borrowers use their loans, a critical issue for evaluating the consumer and social welfare effects of those loans. In additions, all of these data should portray the heterogeneity of payday loan customers as well as their average values.

Additional data also are needed on the outcomes for payday loan borrowers, especially for repeat users of the loans. Some studies have suggested that some repeat borrowers fall into a debt trap, while others require several payday loans over several months to stabilize or resolve their financial problems. None of these studies has tracked the outcomes for repeat borrowers at an individual level to establish the actual distribution of those outcomes and their relationship to demographic and socioeconomic measures. In this regard, longitudinal studies of payday-loan borrowers with ethnographic information would usefully complement the additional survey data.[66] These studies can establish the actual income and expenditure histories of payday loan borrowers and their outcomes over a considerable time horizon, since the costs and benefits of smoothing a household's income and consumption occur over time.

Third, and most important, research must be conducted using individual-level data to track the outcomes of payday-loan borrowers compared to individual-level data on the outcomes of non-payday loan users with comparable individual and household incomes, assets and debts. Such research and studies, although difficult to conduct, would contribute greatly to establishing the consumer and social welfare effects of payday loans in a definitive way.

V. Conclusion

In many states, the payday loan industry has become a focus of intensive legislative and regulatory restrictions, including legal bans on payday loans in jurisdictions such as Georgia and the District of Columbia, and limits on fees which effectively end payday loans in states such as

[64] Wilson et al (2010).
[65] Caskey (2010).
[66] Caskey (2010).

Oregon and Virginia.[67] Other states such as Indiana regulate these fees in ways that do not drive payday loan lenders out of the states.[68] Further, many states do not permit lenders and borrowers to roll over one payday loan into second and third payday loans in ways which would multiply the burden of the fees, as commonly occurs with credit card lines of credit.[69]

There also have been calls for strict federal regulation of payday loans by the new Consumer Financial Protection Bureau, and often in ways which would not affect other forms of lending. Much of the current and proposed restrictions on payday lending rest on a characterization of widespread abuses and a common pattern in which payday loans compound the financial distress of borrowers. A careful review of the existing research does not support this characterization. The current state of that research cannot even establish whether the use of payday loans, on balance, increases or decreases consumer or social welfare. Much of this uncertainty reflects the flawed research designs of many existing studies, often dictated by the paucity of individual-level data on payday-loan borrowers and others with similar socioeconomic and demographic characteristics. It seems likely that some borrowers derive welfare benefits from payday loans and others do not, but we do not the characteristics or conditions which affect their different outcomes or their distribution. Legislators and regulators, therefore, cannot know whether existing or additional restrictions on the industry would be beneficial or harmful to households in financial distress and for American society at large. If such restrictions have detrimental effects, they could harm one of the most vulnerable segments of the American population, moderate-income working households already in financial distress.

Past efforts to regulate payday-loan activity have often applied arbitrary limits on the finance charges, effectively banning the loans, or equally arbitrary limits on rollovers or repeated use of the loans. As yet, researchers have been unable to produce the evidence and analysis required to determine the appropriate limits on the charges, rollovers or repeated use of payday loans, either generally or for different groups of borrowers. Policymakers should support the additional research and studies required to resolve these issues. On this basis, they could tailor their efforts in ways that would divert those who cannot be helped by payday loans to other solutions while preserving access to the loans for those who may benefit or who can make informed choices that end up neither helping nor harming them. Finally, new research is required to understand the differences between the practices of payday lenders in regulated storefront operations and those who offer payday loans over the Internet, including whether different kinds of borrowers access these loans through these two venues and whether there are any significant differences in outcomes. Informed and effective regulation of the industry may need to distinguish the two venues and take steps to level the playing field for all payday loan lenders.

[67] National Conference of State Legislatures (2011).
[68] *Ibid.*
[69] Elliehausen (2009).

References

Agarwal, Sumit, Paige Skiba and Jeremy Tobacman (2009) "Payday Loans and Credit Cards: New Liquidity and Credit Scoring Puzzles?" *American Economic Review*, Vol. 99, No. 2, pp. 412-417.

Avery, Robert B. and Katherine A. Samolyk (2011) "Payday Loans versus Pawnshops: The Effects of Loan Fee Limits on Household Use," Federal Reserve System Research Conference, Arlington, Virginia.

Bar-Gill, Oren, and Elizabeth Warren (2008) "Making Credit Safer." *University of Pennsylvania Law Review.* Vol. 157, pp 100-201.

Bertrand, Marianne, and Adair Morse (2009) "Information Disclosure, Cognitive Biases and Payday Borrowing," Initiative on Global Markets, The University of Chicago, Booth School of Business, Working Paper No. 48.

Bhutta, Neil (2011a) "The effect of access to payday loans on consumers' financial health: evidence from consumer credit record data," October 2011.

Bhutta, Neil (2011b) "The Impact of Access to Payday Loans on Household Balance Sheets," Federal Reserve Board of Governors Presentation.

Buehler, Roger, Dale Griffin and Michael Ross (1994) "Exploring the 'planning fallacy": Why people underestimate their task completion times." *Journal of Personality and Social Psychology*. Vol. 67(3), pp 366-381.

Caskey, John P. (2010) "Payday Lending: New Research and the Big Question," Working Paper No. 10-32, Federal Reserve Bank of Philadelphia.

Carrell, Scott and Jonathan Zinman (2008) "In Harm's Way? Payday Loan Access and Military Personnel Performance," Working Paper No. 08-18, Federal Reserve Bank of Philadelphia.

Edmiston, Kelly (2011) "Could Restrictions on Payday lending Hurt Consumers?" *Economic Review*, First Quarter, Federal Reserve Bank of Kansas City.

Elliehausen Gregory (2009) "An Analysis of Consumers' Use of Payday Loans," Financial Services Research Program Monograph No. 41, Board of Governors of the Federal Reserve System.

Federal Deposit Insurance Corporation (2009) "FDIC National Survey of Unbanked and Underbanked Households," pp. 31, http://www.fdic.gov/householdsurvey/full_report.pdf

Flannery, Mark and Katherine Samolyk (2005) "Payday Lending: Do the Costs Justify the Price?" FDIC Center for Financial Research, Working Paper No. 2005-09.

Fusaro, Marc Anthony (2008) "Hidden Consumer Loans: An Analysis of Implicit Interest Rates on Bounced Checks," *Journal of Family and Economic Issues*, Vol. 29, pp.251-263.

Fusaro, Marc Anthony and Patricia J. Cirillo (2011) "Do Payday Loans Trap Consumers in a Cycle of Debt?"

Graves, Steven M., and Christopher Peterson (2005) "Predatory Lending and the Military: The Law and Geography of "Payday" Loans in Military Towns," 66 *Ohio State Law Journal* pp. 653.

Hawkins, Jim (2011) "Regulation on the Fringe: Reexamining the Link Between Fringe Banking and Financial Distress," *Indiana Law Journal*, Forthcoming

Koriat, Asher, Sarah Lichtenstein and Baruch Fischhoff (1980) "Reasons for confidence." *Journal of Experimental Psychology: Human Learning & Memory,* Vol. 6, No. 2, pp 107-118.

Lawrence, Edward and Gregory Elliehausen (2008) "A Comparative Analysis of Payday Loan Customers," *Contemporary Economic Policy,* Vol. 26, No. 2, pp. 299-316.

Mayer, Robert (2004) "Payday Lending and Personal Bankruptcy," *Consumer Interest Annual*, Vol. 50, pp. 76-82.

Melzer, Brian (2011) "The Real Costs of Credit Access: Evidence from the Payday Lending Market," *Quarterly Journal of Economics,* Vol. 126, pp. 517-55.

Morgan, Donald (2007) "Defining and Detecting Predatory Lending," Staff Report No. 273, Federal Reserve Bank of New York.

Morgan, Donald and Kevin J. Pan (February 08, 2012) "Do Payday Lenders Target Minorities?" NY Fed Blog, http://libertystreeteconomics.newyorkfed.org/2012/02/do-payday-lenders-target-minorities.html.

Morgan, Donald and Michael Strain (2008) "Payday Holiday: How Households Fare after Payday Credit Bans," Staff Report, No. 309, Federal Reserve Bank of New York.

Morgan, Donald, Michael Strain and Ihab Seblani (Forthcoming) "Payday Credit Access, Overdrafts, and Other Outcomes," *Journal of Money, Credit, and Banking*.

Morse, Adair (2009) "Payday Lenders: Heroes or Villains?" *Journal of Financial Economics,* In Press, Corrected Proof.

National Conference of State Legislatures (2011) "Payday Lending State Statutes," Available at http://www.ncsl.org/default.aspx?tabid=12473.

Nisan, Mordecai (1972) "Dimension of Time in Relation to Choice Behavior and Achievement Orientation." *Journal of Personality and Social Psychology,* Vol. 21, No.2, pp 175-182.

Shevlin, Ron (2011) "The Borrowing Habits of Alternative Financial Services Customers." Aite Group.

Skiba, Paige and Jeremy Tobacman (2007) "The Profitability of Payday Loans. *Journal of Economic Lierature.*

Skiba, Paige and Jeremy Tobacman (2010) "Do Payday Loans Cause Bankruptcy?"

Stegman, Michael and Robert Faris (2003) "Payday Lending: A Business Model That Encourages Chronic Borrowing," *Economic Development Quarterly*, Vol. 17 No. 1, pp.8-32.

Stoianovici, Petru S., Michael T. Maloney (2008) "Restrictions on Credit: A Public Policy Analysis of Payday Lending," The Brattle Group and Clemson University.

Wilson, Bart, David Findlay, James Meehan Jr., Charissa Wellford, and Karl Schurter (2010) "An Experimental Analysis of the Demand for Payday Loans," *The B.E. (Berkeley Electronic) Journal of Economic Analysis and Policy*, Vol.10, Issue 1.

Woolsey, Ben and Matt Schulz (2011) "Credit card statistics, industry facts, debt statistics," Creditcards.com, www.creditcards.com/credit-card-news/credit-card-industry-facts-personal-debt-statistics-1276.php

Zinman, Jonathan (2009) "Restricting Consumer Credit Access: Household Survey Evidence on Effects Around the Oregon Rate Cap," *Journal of Banking and Finance*, Vol. 34, pp. 546–556.

About the Author

Robert J. Shapiro is the chairman and co-founder of Sonecon, LLC, a private firm that provides advice and analysis to senior executives and officials of U.S. and foreign businesses, governments, and non-profit organizations. He is an internationally known economist who has advised, among others, President Bill Clinton, Vice President Al Gore, Jr., British Prime Ministers Tony Blair and Gordon Brown, and U.S. Senators Barack Obama and Hillary Clinton. Currently, he is also a Senior Policy Fellow of the Georgetown University McDonough School of Business, advisor to the International Monetary Fund, chairman of the U.S. Climate Task Force, director of the Globalization Initiative at NDN, and co-chair of American Task Force Argentina. Before establishing Sonecon, Dr. Shapiro was Under Secretary of Commerce for Economic Affairs from 1997 to 2001. Prior to that, he was co-founder and Vice President of the Progressive Policy Institute and the Progressive Foundation. He was the principal economic advisor to Bill Clinton in his 1991-1992 campaign and a senior economic advisor to Vice President Gore and Senator John Kerry in their presidential campaigns. In the 2008 presidential campaign, he advised the campaign and transition of Barack Obama. Dr. Shapiro also served as Legislative Director and Economic Counsel for Senator Daniel Patrick Moynihan, and Associate Editor of *U.S. News & World Report.* He has been a Fellow of Harvard University, the Brookings Institution, and the National Bureau of Economic Research; and he holds a Ph.D. and M.A. from Harvard University, a M.Sc. from the London School of Economics, and an A.B. from the University of Chicago