

**Public Policies to Alter the Use of Alternative Financial Services
Among Low-Income households.**

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March 2008

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Written for the Federal Reserve Board Academic Consultants Meeting on Non-traditional
Financial Services, April 16, 2008.

A substantial number of low-income individuals make use of services within the alternative financial sector (AFS), particularly pay-day lenders and check cashing outlets. Pay-day lending has grown over the past 20 years, as has the use of Refund Anticipation Loans (RALs). Although the number of households without a checking account has fallen, currently about 12 million households do not have a checking account, and must rely on check-cashing services. Fellowes and Mabanta (2008) indicate that non-bank establishments collected \$8.5 billion in fees in a recent year. The high cost of these services has led many observers to seek policies that would reduce the use of informal financial services among lower income households.¹ This paper briefly reviews the reasons why individuals utilize AFS outlets, then discusses the policy options that could affect these decisions.

I. Why do low-income households use alternative financial services?

Before turning to a discussion of policies that would reduce reliance on informal financial services, it is important to understand why individuals utilize AFS providers rather than banks or other formal financial institutions. There are five primary reasons typically discussed.

A. Formal financial institutions provide services that are ill-fitted to the financial needs of low-income households. About 40 percent of payday loan recipients have bank accounts, suggesting that their payday loan provides a service that is not available from their bank (Elliehausen and Lawrence, 2001). About half of payday loan recipients claim to have considered a bank loan; many of these said that the payday loan involved

¹ For instance, see the many reports on this topic by the Center for Responsible Lending.

an easier process; some also cited the convenient location of payday providers. Short-term loans to lower-income customers are simply not available through many local banks.

High-minimum-balance checking accounts with multiple fees may be very expensive for low-income individuals who experience frequent penalties for lower balances or for overdrafts. About half of the non-banked say either they don't have enough money to start an account or the costs of an account are too high (Berry, 2005). About half of payday loan customers say their payday loan is cheaper than the cost of returned check fees (Elliehausen and Lawrence, 2001). Caskey (2005) argues that check-cashing outlets provide much more comprehensive services than banks (including money orders), while Berry (2005) indicates that 77 percent of those using check-cashing services say they are more convenient. A significant number of low-income households use *both* formal and informal financial providers for their transactions (Barr, forthcoming.)

B. Mistrust or misunderstanding on the part of lower-income households. Not all persons use AFS providers because they provide better services. Lower-income persons may mistrust banks or misunderstand the comparative costs of informal financial services. Low-income consumers may not understand the difference in interest rates or the compounding problems in roll-over payday loans. A survey of payday loan users found that almost all of them were aware of the dollar charges on their most recent payday loan, but few knew how these translated into an annual percentage rate that would let them compare rates across providers (Elliehausen and Lawrence, 2001). Persons may be unaware of bank-based alternatives, particularly if few people within their network

regularly utilize bank services. In short, some low-income consumers may not understand the high price of many services or may not know about lower-cost options.

Some subset of lower-income persons actively mistrust banks or perceive using them as an unpleasant experience. They may feel unable to ask questions or be intimidated by tellers or bank staff who treat them brusquely. They may worry about incurring penalties or limitations on bank accounts that they don't understand or that they perceive as arbitrary and unreasonable. Berry (2005) indicates that 6 percent of the unbanked indicate they don't like dealing with banks for various 'perception' reasons.

C. Past credit problems that limit access to formal financial institutions. Past unpaid debts or past problems with overdrafts will prevent some low-income persons from qualifying for banking accounts or for bank loans. In Berry's (2005) data, 18 percent indicate they have histories that would prevent them from qualifying for an account. This could be a particular problem for immigrants (legal and illegal) who may face difficulties providing the financial documentation needed by banks. In this case, the simpler requirements of payday lenders make them the only viable source of credit.

D. Short-term time horizons or inadequate self-discipline. Many argue that one reason some people take out very high short-term loans, or pay high rates for immediate check-cashing, is that they have very short-term time horizons. If the value of a dollar today is worth far more than a dollar tomorrow to a low-income individual, he/she should be willing to pay a high price to avoid waiting. Future costs are also discounted at a high rate, making high interest rates acceptable.² A closely-related hypothesis focuses not on high discount rates, but on lack of self-control (which in turn produces high discount

² One can view predatory lending as a way to prey upon those with hyperbolic discount rates. See Della Vigna and Malmendier (2004).

rates.) If lower-income consumers seek immediate gratification, they will ignore future costs. Although much-discussed as a reason for high credit demand by low-income individuals, there is remarkably little evidence documenting differences in discount rates by income level.

A growing body of work in behavioral economics indicates that many people demonstrate time inconsistencies when making decisions. People (both low and high income) say they want to save, but then spent their money when they receive it. Shafir and Mullainathan (forthcoming) argue that the cost of these common human fallibilities may be greater for low-income persons, who live more marginal economic lives.

E. Unstable incomes. Finally, all of these issues may be exacerbated by the fact that the need for small amounts of short-term credit is quite high among lower-income individuals due to unstable incomes. Lower income or less-educated households experience greater income volatility (Bania and Leete, 2007; Hoynes, 2001). In part, this reflects the nature of their jobs. Work hours on low-wage jobs often vary substantially from week to week, especially in the service sector. Jobs may also be unstable. Hoynes (2001) indicates that less educated workers experience more employment cyclicalities.

Household composition is also more unstable in lower-income families. Marriage is less common and cohabitators come and go with greater frequency.³ Residential instability is more common, and is often linked with job changes. The annual rate of residential moves among poor families was 24 percent in 2002, versus 13 percent among non-poor families (U.S. Census Bureau, 2004). This type of household instability feeds into earnings and income volatility.

³ Seefeldt and Smock (2004) provide evidence that children in lower-income families experience more frequent parental relationship transitions.

Families can deal with instability in household income in three ways. First, they can reduce expenditures when income falls. Expenditure reductions may be quite difficult for lower-income families, however, since a higher share of expenditures in low-income households goes to necessities, such as rent or food. The 2005 Consumer Expenditure Survey indicates that households in the bottom quintile of the income distribution spend 55 percent of their income on food and housing; families in the top quintile spend only 42 percent of their income on these items.

Second, households can utilize savings to help smooth expenditures. For many reasons (not the least of which is their low income relative to needs) low-income households are far less likely to have savings than higher-income households, so this mechanism may be unavailable to them.

This leaves the third option, borrowing to smooth spending in the face of income fluctuations. Although expensive, a short-term high-interest payday loan may be a better choice than having one's phone or electricity turned off. If the marginal value of the next dollar of expenditure is higher for low-income families, their use of frequent short-term credit to help smooth expenditures may not be a surprising choice.

In summary, the need for short-term income smoothing among lower-income families may be greater than among higher-income populations. High-income families are likely to have more stable jobs, more stable household composition, greater savings, and a lower marginal value for the next dollar of spending.

This quick review suggests that there are multiple reasons why low-income individuals utilize informal financial services; this implies that there are a variety of

policy approaches that would reduce AFS usage. In the next three sections, I discuss three different policy approaches, looking at ways to attract more persons into formal financial institutions; ways to avoid high-cost and unpredictable fluctuations in expenditures among lower-income houses; and looking at policies that stabilize incomes.

II. Policies designed to encourage greater use of formal financial institutions by low-income households

The most direct way to reduce the utilization of informal financial services is to expand and market competitive services through formal financial institutions. This includes no-minimum-balance debit accounts that do not allow overdrafts; short-term loans that may mimic payday loans in some respects; or low-cost check-cashing facilities inside banks for non-customers. A key question is whether these activities can be profitable or whether they require public subsidies to persuade banks to engage in them.

A. Voluntary private sector action, perhaps in partnership with the public sector.

In a variety of communities, individual financial institutions have taken leadership in providing banking services to low-income communities or low-income households. ShoreBank in Chicago is perhaps best-known for its efforts to provide banking services to low income families, but other institutions around the country are experimenting with ways to serve low income customers profitably. In the Bank on San Francisco project, the city is providing free marketing to banks and credit unions that offer products aimed at low-income customers, with the goal of opening bank accounts for 20 percent of the unbanked. Bair (2005) provides a number of examples of local credit unions or banks that offer short-term loans, explicitly designed to compete with payday lenders, for much

lower fees than found among AFS providers. Caskey (2005) describes “Starter” Bank accounts that he recommends banks offer for low-income customers.

In addition, private and public sector employers can also help increase bank account usage. Employers (particularly larger employers) can require direct deposit, arranging for banks to provide debit accounts to unbanked employees, or can help employees open bank accounts.

B. Public sector policies and programs, aimed at incentivizing financial institutions to serve to low-income households. There are a variety of public sector actions that can increase the services provided by formal financial institutions, and the utilization of these services.

First, banks can be incentivized to offer accounts designed to serve low-income persons, with low minimum balances and overdraft protection. Barr (2004) proposes First Accounts tax credit to banks, based on the number of accounts opened for low-income persons. Demonstration projects have tested tax credits and indicate they increase banking services to the unbanked. Regular CRA evaluations of banks could include an evaluation of the services they provide to lower-income customers.

Second, public assistance benefits can be provided through bank debit accounts. Benefit programs, such as cash welfare or Food Stamps, typically provide monthly income support through an electronic benefit card. Most states utilize a contractor who issues these debit cards, allowing states the ‘float’ on these dollars until they are spent. The alternative is to provide these benefits through a bank debit card, giving families a relationship with a local bank. (Such accounts should be retainable by families when they leave public assistance and move into work.) This is likely to be more expensive

than using a single contractor, but provides an opportunity for recipients to establish a banking relationship. It may also open up opportunities for financial education and counseling, as part of the receipt of the bank debit card.

Third, there may be ways for the public sector to support banking services in underserved areas. For instance, the First Accounts demonstration program helped defray the costs of expanded services (such as ATMs) in low-income neighborhoods (Barr, 2004). Parish, et al, (2006) discuss the utilization of Community Development Financial Institutions in communities where no other financial services are available, such as Native American reservations.

Fourth, the IRS can expand the ability of taxpayers to receive tax refunds in electronic debit accounts, especially important for EITC recipients. Beverly, et al, (2005) describes a demonstration project by ShoreBank, which indicated that over half of the unbanked participants whose refunds were placed in accounts went on to use these accounts for other purposes. The IRS may want to partner with tax preparers, such as H&R Block, who serve many low-income clients, to encourage low-cost electronically based bank accounts for refunds (Barr, 2007). Smeeding (2005) proposes ways to link EITC refund accounts with savings plans.

Fifth, a growing body of evidence suggests that low-income families can save and that certain policies can increase savings (Sherraden and Barr, 2004; Tufano and Schneider, forthcoming). This includes employer-based savings plans, government matched-savings plans, or national development or savings accounts. Savings plans help smooth expenditures without the need for short-term credit and create connections with formal financial institutions.

Sixth, there are a variety of ways to regulate and limit AFS providers. Some states have made it impossible for payday lenders to operate, limit rollovers, or limit the size of payday loans. Research on the effects of this, however, are somewhat mixed. Morgan (2007) finds that low-income households in states with higher payday loan limits do not have higher delinquency rates, although they do have marginally higher debt levels. Morgan and Strain (2007) find that households bounced more checks and filed for bankruptcy at a higher rate after North Carolina and Georgia eliminated payday lending. Morse (2007) finds that areas with payday lenders recover more quickly following a natural disaster, with fewer foreclosures. On the other side, Skiba and Tobacman (2008) and Caskey (2005) indicate that the average payday loan recipient uses multiple loans and runs up quite large debt, which suggests these individuals are not using payday loans occasionally for unexpected expenditures.

While there is clear evidence that an uncomfortably high share of people roll over payday loans frequently and pay enormous interest rates, it may not make sense to ban payday lenders without a strong effort to provide short-term loans and access to low-cost financial services through the formal financial sector. In fact, there is clear evidence that greater competition appears to bring down the cost of AFS services (Flannery and Samolyk, 2005; Morgan, 2007), so that regulating the number of AFS providers may be counterproductive. *My own reading of the evidence is that strict regulations on AFS providers will not reduce the demand for short-term credit (and may even make the costs higher), unless such an effort is closely linked with efforts to provide the affordable credit and banking services low-income households through formal financial institutions.*

III. Policies to reduce high-cost expenditures among lower income households.

While providing credit through formal financial institutions may lower the debt-related costs borne by low-income households, one may also want to reduce the need for such credit. When low-income persons face large lump-sum payments this creates a need for credit and increases their use of AFS providers (as well as creating potential problems in their interactions with formal financial institutions.) Let me highlight three policies that might reduce big-ticket expenditure needs.

First, many analysts believe there is a need for more financial education programs aimed at effective money management and financial planning. The need to borrow in order to purchase consumer goods or to pay bills is sometimes the result of poor financial management. One of the key goals of many financial education programs is to encourage participants to avoid splurge spending, to shop effectively for lower-cost items and to prepare for future large-cost expenditures (such as a car) through savings and financial planning.

Unfortunately, our knowledge of how to run effective financial education programs is limited. Caskey (2006) critiques the existing work and suggests there is at best limited information that financial literacy courses may help increase savings or improve credit records. This is an area where well-evaluated demonstration programs would greatly advance our knowledge of best practices around financial education.

Second, health care expenditures remain an ongoing problem for many lower income families who have inadequate or no health insurance. Providing better health care coverage for low-income families would reduce high-cost medical debt. With very

low levels of private health insurance, and limited Medicaid eligibility⁴, families often pay cash for dental or eye care. Emergency room care or community clinics may provide short-term uncompensated care, but will rarely help cover expenses for major health problems that require multiple doctor visits. Uninsured families that face health crises for family members typically run up large bills. Better health insurance coverage for low-wage families would help these families avoid emergency high-cost medical expenditures and debt.

Third, a subset of low-income families face financial problems because of their inability to resist ‘temptation goods’ and successful efforts to reduce addiction and abuse of such goods would greatly improve the financial circumstances of these individuals, as well as increase their work effort and economic productivity. Excessive expenditures on alcohol, other drugs, or gambling, is a cause of ongoing financial problems. The greater availability of such goods clearly increases their use. For instance, Kearney (2005) finds that non-gambling expenditures go down 2.5 percent in low-income households when state lotteries are introduced.

Drug or alcohol abuse treatment programs are often relatively costly, with high recidivism rates. Few low-cost treatment programs are readily available (Alcoholics Anonymous is an exception.) Policies that increase the price of these goods, such as so-called ‘sin taxes’, typically reduce their consumption but raise expenditures among those who continue to spend.⁵ More controversially, policies to limit access (drugs interdiction, hours’ restrictions on alcohol sales, limits on the number of casinos, etc) are

⁴ Medicaid typically covers children in low-income families, the disabled and low-income elderly. It is rarely available to other adults.

⁵ For instance, see Chaloupka, Grossman and Saffer (2002) for a review of the evidence of negative price elasticities for alcohol, and Rhodes, et al. (2001) for evidence on negative price elasticities for illegal drugs.

often proposed at least in part to limit abuse and addiction. The evidence about the value of such policies is somewhat mixed, however. In short, this is a policy area where there is concern, but little sense of the most effective way to address existing problems.

IV. Policies to stabilize incomes

The less short-term income fluctuates among lower-income households, the less need for short-term credit and the more attractive low-income persons are as customers to financial institutions. Income stabilization policies can help reduce income fluctuations. I indicate four of the more important stabilization policies.

First and probably most important is *a macroeconomic policy of maintaining low unemployment*. Given the much greater cyclicalities in employment and jobs among lower-wage workers, maintaining a high-employment economy is more important for this group than any other. Blank (2000) notes that a strong macroeconomy is probably the most effective long-term antipoverty strategy. As welfare reform has moved more single mother families off public assistance and into low-wage employment, even more families rely on low-wage jobs for their primary income support.

Second, it is important to *maintain high coverage within the Unemployment Insurance (UI) system*. The UI system is designed to smooth income following job loss, but only a little more than one-third of unemployed workers receive UI; lower-wage workers have higher unemployment rates but are less likely to receive UI than higher-income workers (Kletzer and Rosen, 2006; Vroman, 2007). In part, this is because lower-wage workers are less likely to be eligible for UI benefits when a job ends. UI eligibility requires working at least 6 quarters in one job; in many states, part-time work,

quits, and firing for cause are not covered. The UI system could be reformed to cover a higher share of low-wage workers and to encourage use among those eligible, making it a more effective income smoothing mechanism for lower-wage workers.

Third, *maintaining eligibility for and take-up in safety-net programs can also help stabilize income*. While relatively few working low-income persons are eligible for cash assistance, various in-kind programs help supplement earnings and smooth incomes, including food stamps, housing assistance, and Medicaid. While take-up in food stamps and Medicaid has risen, due to efforts following welfare reform to increase program use among working low-income families, large numbers of eligible persons do not receive benefits (Currie, 2006).

Fourth, the most important cash support program for low income working families is the Earned Income Tax Credit (EITC). *Expanding EITC support to low-wage workers without children would greatly increase its power as an income supplement*. The EITC provides substantial income support to low-income families with children, but low-wage workers without dependents receive only small EITC supplements. A variety of proposals to expand EITC to this group would particularly help low-wage men, many of whom help support their non-resident children (Berlin, 2007; Scholz, 2007).

V. Conclusions

There are many ways to encourage more low-income households to utilize the services of formal financial institutions. On the one hand, expanding the services that banks and credit unions provide to meet the needs of low-income persons is important; there may also be policies that make informal financial services less attractive. On the

other hand, simply focusing on banking services ignores some of the primary reasons why families seek short-term credit and immediate refund returns. Helping families save and helping them smooth their expenditure and income streams is also important, and this requires focusing on a range of policies, from economic stability to savings policies to EITC payments to financial education.

Given the many reasons why different families utilize AFS, there are multiple policies that can reduce their use. At present, it is difficult to select the most effective approaches, however. We have only limited evidence on the comparative costs and benefits of many of the policies discussed above. With many institutions around the country experimenting with better ways to provide financial services to lower income customers, it might be a particularly fruitful time to evaluate this mix of efforts, their outcomes, and their implementation challenges. It would be highly useful to have a better sense of ‘best practices,’ to give guidance to those city, state, and private institutions that would like to improve the financial well-being of lower-income households and provide them with greater access to formal financial institutions.

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FTC Consumer Alert

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Payday Loans Equal Very Costly Cash: Consumers Urged to Consider the Alternatives

“I just need enough cash to tide me over until payday.”

“GET CASH UNTIL PAYDAY! . . . \$100 OR MORE . . . FAST.”

The ads are on the radio, television, the Internet, even in the mail. They refer to payday loans, cash advance loans, check advance loans, post-dated check loans, or deferred deposit loans. The Federal Trade Commission, the nation’s consumer protection agency, says that regardless of their name, these small, short-term, high-rate loans by check cashers, finance companies and others all come at a very high price.

Here’s how they work: A borrower writes a personal check payable to the lender for the amount the person wants to borrow, plus the fee they must pay for borrowing. The company gives the borrower the amount of the check less the fee, and agrees to hold the check until the loan is due, usually the borrower’s next payday. Or, with the borrower’s permission, the company deposits the amount borrowed — less the fee — into the borrower’s checking account electronically. The loan amount is due to be debited the next payday. The fees on these loans can be a percentage of the face value of the check — or they can be based on increments of money borrowed: say, a fee for every \$50 or \$100 borrowed. The borrower is charged new fees each time the same loan is extended or “rolled over.”

The federal Truth in Lending Act treats payday loans like other types of credit: the lenders must disclose the cost of the loan. Payday lenders must give you the finance charge (a dollar amount) and the annual percentage rate (APR — the cost of credit on a yearly basis) in writing before you sign for the loan. The APR is based on several things, including the amount you borrow, the interest rate and credit costs you’re being charged, and the length of your loan.

A payday loan — that is, a cash advance secured by a personal check or paid by electronic transfer is very expensive credit. How expensive? Say you need to borrow \$100 for two weeks. You write a personal check for \$115, with \$15 the fee to borrow the money. The check casher or payday lender agrees to hold your check until your next payday. When that day comes around, either the lender deposits the check and you redeem it by paying the \$115 in cash, or you roll-over the loan and are charged \$15 more to extend the financing for 14 more days. If you agree to electronic payments instead of a check, here’s what would happen on your next payday: the company would debit the full amount of the loan from your checking account electronically, or extend the loan for an additional \$15. The cost of the initial \$100 loan is a \$15 finance charge and an annual percentage rate of 391 percent. If you roll-over the loan three times, the finance charge would climb to \$60 to borrow the \$100.

Alternatives to Payday Loans

Before you decide to take out a payday loan, consider some alternatives.

1. Consider a small loan from your credit union or a small loan company. Some banks may offer short-term loans for small amounts at competitive rates. A local community-based organization may make small business loans to people. A cash advance on a credit card also may be possible, but it may have a higher interest rate than other sources of funds: find out the terms before you decide. In any case, shop first and compare all available offers.

2. Shop for the credit offer with the lowest cost. Compare the APR and the finance charge, which includes loan fees, interest and other credit costs. You are looking for the lowest APR. Military personnel have special protections against super-high fees or rates, and all consumers in some states and the District of Columbia have some protections dealing with limits on rates. Even with these protections, payday loans can be expensive, particularly if you roll-over the loan and are responsible for paying additional fees. Other credit offers may come with lower rates and costs.

3. Contact your creditors or loan servicer as quickly as possible if you are having trouble with your payments, and ask for more time. Many may be willing to work with consumers who they believe are acting in good faith. They may offer an extension on your bills; make sure to find out what the charges would be for that service — a late charge, an additional finance charge, or a higher interest rate.

4. Contact your local consumer credit counseling service if you need help working out a debt repayment plan with creditors or developing a budget. Non-profit groups in every state offer credit guidance to consumers for no or low cost. You may want to check with your employer, credit union, or housing authority for no- or low-cost credit counseling programs, too.

5. Make a realistic budget, including your monthly and daily expenditures, and plan, plan, plan. Try to avoid unnecessary purchases: the costs of small, every-day items like a cup of coffee add up. At the same time, try to build some savings: small deposits do help. A savings plan — however modest — can help you avoid borrowing for emergencies. Saving the fee on a \$300 payday loan for six months, for example, can help you create a buffer against financial emergencies.

6. Find out if you have — or if your bank will offer you — overdraft protection on your checking account. If you are using most or all the funds in your account regularly and you make a mistake in your account records, overdraft protection can help protect you from further credit problems. Find out the terms of the overdraft protection available to you — both what it costs and what it covers. Some banks offer “bounce protection,” which may cover individual overdrafts from checks or electronic withdrawals, generally for a fee. It can be costly, and may not guarantee that the bank automatically will pay the overdraft.

The bottom line on payday loans: Try to find an alternative. If you must use one, try to limit the amount. Borrow only as much as you can afford to pay with your next paycheck — and still have enough to make it to next payday.

Protections for Military Consumers:

Payday loans (and certain other financing) offered to servicemembers and their dependents must include certain protections, under Federal law and a Department of Defense rule. For example, for payday loans offered after October 1, 2007, the military annual percentage rate cannot exceed 36%. Most fees and charges, with few exceptions, are included in the rate. Creditors also may not, for example, require use of a check or access to a bank account for the loan, mandatory arbitration, and unreasonable legal notices. Military consumers also must be given certain disclosures about the loan costs and your rights. Credit agreements that violate the protections are void. Creditors that offer payday loans may ask loan applicants to sign a statement about their military affiliation.

Even with these protections, payday loans can be costly, especially if you roll-over the loan. You instead may be able to obtain financial assistance from military aid societies, such as the Army Emergency Relief, Navy and Marine Corps Relief Society, Air Force Aid Society, or Coast Guard Mutual Aid. You may be able to borrow from families or friends, or get an advance on your paycheck from your employer. If you still need credit, loans from a credit union, bank, or a small loan company may offer you lower rates and costs. They may have special offers for military applicants, and may help you start a savings account. A cash advance on your credit card may be possible, but it could be costly. Find out the terms for any credit before you sign. You may request free legal advice about a credit application from a service legal assistance office, or financial counseling from a consumer credit counselor, including about deferring your payments.

Military consumers can contact the Department of Defense, toll-free 24 hours a day, 7 days a week, at 1-800-342-9647, or at www.militaryonesource.com. Information on the Department of Defense rule, alternatives to payday loans, financial planning, and other guidance is available.

To Complain/For More Information

The FTC works for the consumer to prevent fraudulent, deceptive and unfair business practices in the marketplace and to provide information to help consumers spot, stop, and avoid them. To file a complaint or to get free information on consumer issues, visit ftc.gov or call toll-free, 1-877-FTC-HELP (1-877-382-4357); TTY: 1-866-653-4261. The FTC enters Internet, telemarketing, identity theft, and other fraud-related complaints into Consumer Sentinel, a secure online database available to hundreds of civil and criminal law enforcement agencies in the U.S. and abroad.

For more information on any state or local protections for payday loans, contact the consumer protection agency in your area. This information is available in the GSA Consumer Action Handbook, at www.consumeraction.gov. The state offices are listed at: www.consumeraction.gov/state.shtml

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March 2008



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The Social Science Journal 46 (2009) 521–538

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Payday lenders and economically distressed communities: A spatial analysis of financial predation

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Received 10 June 2008; received in revised form 18 November 2008; accepted 16 February 2009

Abstract

The payday lending industry has grown considerably in recent years, reflecting both widespread economic insecurity and market neglect by the traditional banking sector. Outlets are now commonplace in many communities across America. Accused by many of predatory practices, payday lenders can be viewed as financial hazards in already economically distressed communities. Using a Geographic Information System (GIS) and associated statistical analyses, this paper examines the social ecology of payday lending along the Front Range communities of Colorado. Comparison of means and logistic regression results reveal how communities' composition by class, occupation, race/ethnicity, nativity, age, and military affiliation affect their likelihood of hosting payday lending.

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1. Introduction

The past decade has seen a rise in both economically distressed communities and predatory industries which profit from them (Carr & Schuetz, 2001; Hudson, 1996). Among those industries, payday lending stands out for its rapid expansion and its near ubiquitous presence in some communities. Functioning as short-term, low-value lenders, payday outlets provide high-interest loans in cash to those able to show proof of income. While payday lenders can be a convenient source of quick cash, filling a credit gap in many communities, they can also trap borrowers in a spiral of debt (Carr & Schuetz, 2001; Stegman & Faris, 2003). In the event

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a borrower does not have the means to pay off the original loan, payday lenders pursue one of two options: a rollover or renewal of the initial loan with additional interest and extension fees; or the depositing of the borrower's original check, leaving the borrower to deal with the cost of a bounced check (Huckstep, 2003). Fees associated with the original loan are already excessive when expressed as an annual percentage rate, running nearly as high as 400% (Christie, 2008). Payday lending functions as a stopgap only about 2% of the time (King & Parrish, 2007). Loan flipping, King, Parrish, and Tanik (2006, p. 3) argue, is "the foundation of the payday lending business model." It is estimated that 91% of payday loans go to repeat borrowers (McGill & Monast, 2006).

The payday industry's rapid expansion in recent years indicates the growing distress of communities as much as it reflects a successful business model. Since the first payday lender opened in 1993, the industry has grown considerably. Estimates on the number of payday lending outlets in the country vary, but range between 15,000 and 22,000 (Kim, 2008; Lawrence & Elliehausen, 2008; Pyper, 2007). Payday industry outlets now outnumber McDonald's in the U.S. (Center for Policy Alternatives, 2007). As of 2007, payday lending had become a \$50 billion industry (Driehaus, 2008), up from \$25 billion just 4 years earlier (Ernst, Farris, & King, 2004).

The proliferation of payday lending outlets, occurring against the backdrop of growing economic insecurity and lax regulatory environments, is beginning to attract the attention of news agencies, community advocates, and elected officials (McGray, 2008; Smith, Mosher, & Akins, 2006; Squires, 2008). Thirteen states have already passed legislation placing limits on the fees and rates imposed by lenders, though such legislation has proven largely ineffective at completely curbing predatory practices (Center for Policy Alternatives, 2007; Driehaus, 2008). Only North Carolina and Georgia have succeeded in all but eliminating payday lending (Carr & Kolluri, 2001; Christie, 2008). In some cases even cities have taken action, imposing restrictive zoning ordinances to slow the spread of payday lending outlets (McGray, 2008). The national government, too, has begun to address the issue following reports of lenders exploiting military personnel.

We argue that payday lending outlets serve as an indicator of community economic distress, just as they function as an exacerbating factor in that distress. While lenders may cater to an unmet financial need among underserved or otherwise neglected populations (Lawrence & Elliehausen, 2008; McGray, 2008), it is also true that they contribute to the "poverty penalty" those populations endure, exacerbating their financial insecurity (Caplovitz, 1967). As such, their presence can be seen to represent a financial hazard to communities, one which reminds residents of the economic uncertainty which surrounds them. Seeking to better understand the populations and communities exposed to this hazard, as well as the social ecology of the industry, we identify the socio-demographic characteristics of communities that host payday lenders using Geographic Information Systems (GIS) software and associated statistical analyses. Specifically, we address the following sets of questions: First, what is the relationship of payday lenders to the economic profile of communities? Are payday lenders more likely to cluster in lower income communities and those that are most heavily impoverished? Does their presence correspond to the composition of the local labor force? Second, what is the relationship of payday lenders to the socio-demographic profile of communities? Are lenders more prevalent in minority and immigrant communities? Do they occupy neighborhoods dis-

proportionately comprised of the elderly and military personnel—populations with guaranteed, albeit modest, incomes? Finally, to what extent do predictive socio-demographic effects merely reflect the income and labor force profile of communities? In addressing these questions, our spatial analysis sheds light on the social ecology of the payday lending industry and adds a valuable dimension to our understanding of economically distressed communities and the “landscapes of predation” they encounter (Graves, 2003).

2. Payday lending in context

Driven by the convergence of a number of trends, economic insecurity and distress have spread in recent years, affecting ever more populations and communities (Frank, 2007). It is in this distress and insecurity that predatory industries find fertile soil within which to grow. The segmentation of the labor market, the steady decline in unionization, and a minimum wage systematically eroded by inflation have come together to compromise the economic standing of more and more Americans (Economic Policy Institute, 2006; Fox, 2007; Hacker, 2006; Lardner & Smith, 2005; Mishel & Bernstein, 2007; Rubin, 1996). Moreover, the proliferation of part-time and temporary work arrangements has led to higher levels of underemployment among a growing number of workers (Kalleberg, Reskin, & Hudson, 2000; Rubin, 1996). Whereas only about 10% of workers were part-time in the 1950s, by the 1990s nearly 19% of workers were employed part-time, while 4.9% were employed on a temporary basis (Hacker, 2006).

The results of these broader changes are reflected in income statistics. The average after-tax income level for the lowest quintile of Americans has experienced a negligible increase in the past three decades; in 1979 this figure was \$13,500, while the 2003 figure was \$14,100 (Mishel & Bernstein, 2007). Over this same time period, the share of national income for the bottom fifth of American families declined from 4.3% to 3.5% (Lardner & Smith, 2005). If growing income inequality and stagnant wages were not enough, families' economic insecurity is exacerbated by the rise in income volatility (Hacker, 2006; Ip, 2007). Ip (2007) points to a 23% increase in volatility between the early 1970s and early 2000s, while Hacker (2006) finds income instability in the mid-1990s to be approximately five times as great as in the early seventies.

The economic distress of communities and their neglect by traditional financial institutions creates a hospitable environment for predatory industries (Karger, 2005; McGray, 2008). It is the relationship between these vulnerable communities and the payday industry to which we direct this study. A spatial analysis provides a unique yet powerful method of exposing the social ecology of economic distress and the payday industry.

3. Spatial analysis and the ecology of payday lending

Interest in the spatial dimensions of social phenomena, particularly forms of inequality, has grown rapidly in recent years, facilitated by new methodological techniques. GIS, a mapping and database management software program, has facilitated the exploration of hypotheses,

contributing to an ever expanding body of spatial analysis studies (Galster, Cutsinger, & Booza, 2006; Lobao, Hooks, & Tickamyer, 2007; Massey & Denton, 1993; Massey, Gross, & Shibuya, 1994; Tickamyer, 2000). GIS has opened up possibilities for researchers to develop new ways of thinking about place-based social inequality and envision new solutions to methodological quandaries (Downey, 2006; Steinberg & Steinberg, 2006).

While GIS has been widely used in studies on environmental inequality (Downey, 2006; Houston, Wu, Ong, & Winer, 2004; Morello-Frosch, Pastor, & Sadd, 2001; Pastor, Sadd, & Hipp, 2001; Pastor, Sadd, & Morello-Frosch, 2004), it is increasingly being used to explore the spatial dimensions of other issues of concern, from the distribution of urban green space (Heynen, Perkins, & Roy, 2006) and crime (Lee, Hayes, & Thomas, 2008), to the effects of subprime lending on neighborhood foreclosures (Immergluck & Smith, 2005). Increasing income inequality, too, has been examined spatially. In their analysis of data from 1970 to 2000, Galster et al. (2006) document the disappearance of middle-income neighborhoods in a number of cities. In their sample, the number of middle-income neighborhoods dropped from 58% in 1970 to 41% in 2000. For twelve select metropolitan areas, the number of such neighborhoods dropped from 45% to 23% over the same time period.

It is against this backdrop of methodological advances that studies exploring the spatial patterning of payday lending have recently emerged (Burkey & Simkins, 2004; Graves, 2003; Graves & Peterson, 2005; Smith et al., 2006). These studies, though few in number, consistently point to disproportionate concentrations of payday lenders in poor, minority, and military neighborhoods. We review this literature before highlighting the ways in which our study builds upon and expands this growing body of research.

It is perhaps no surprise that studies routinely find minority communities are disproportionately exposed to predatory industries. Historical racism and exclusion have placed minority groups, on average, in the lower tiers of the labor market and income ladder. Add in continued discrimination and marginalization by traditional lending institutions and minority communities can be seen as vulnerable to the payday industry. Indeed, minority communities appear to be attractive environments for the industry. Graves (2003), looking at seven parishes in Louisiana and Cook County in Illinois, finds payday lenders are more likely to be located in poor and minority neighborhoods. Smith et al. (2006) find a similar pattern in Washington State.

Similarly, immigrant communities offer a potentially lucrative market for payday lenders. The precarious financial situation of many immigrants and the barriers to traditional banking and lending may make payday lending a necessary resource in immigrant communities. Although immigration has been cited as a contributing factor to the boom in fringe banking (Caskey, 1994), almost no empirical work has examined their relationship. In a notable exception, Burkey and Simkins (2004) report that, in addition to having a higher percentage of minorities, Zip Code Tabulation Areas with a higher density of payday lenders tend to have higher concentrations of recent immigrants. The consequences of these patterns can be considerable. Bailey (2005) goes so far as to argue that such predatory lending helps to perpetuate the widening wealth gap between whites and people of color.

The age profile of communities may also affect the likelihood of payday lending presence. Recent studies find that young workers, lacking in both financial security and experience, are disproportionately represented among users of payday lenders (Lawrence & Elliehausen,

2008; Pyper, 2007). The elderly, too, constitute another potentially vulnerable population. Many older Americans live on low incomes which stagnated or declined during the 1990s while costs increased, especially those associated with health care (McGhee & Draut, 2004; Seifert, 2004). In addition to these economic stresses, Kim (2008) cites three other reasons for why the elderly are an attractive target for predatory lenders: they have a guaranteed monthly income (Social Security); they tend to have higher home equity; and they have little to no control over how much money they receive. As a former payday loan manager stated of the elderly, “They always get paid, rain or shine” and “will always have money, every 30 days” (as quoted in Schultz & Francis, 2008). Despite the vulnerable situation of the elderly as it relates to predatory industries, they remain a hidden population in most analyses. In fact, only a single study, a Wall Street Journal analysis (Schultz & Francis, 2008), has explored the spatial dimensions of this relationship. Based on an analysis of data from the U.S. Department of Housing and Urban Development, the study found payday lenders cluster around government-subsidized housing for seniors and the disabled. While not direct evidence of actual use by the elderly, such findings suggest lenders find fertile ground in neighborhoods that are home to the elderly poor, at the very least exposing the latter to the financial hazard of payday lending.

The proximity of payday lenders to military communities has also been a central focus of spatial analyses of the industry. Graves and Peterson (2005), examining payday lender density in buffer zones around military bases, find payday lenders exist in military communities in significantly disproportionate numbers. Military communities provide fertile ground for payday lenders due to their relative youth, financial inexperience, and geographic mobility. It is also likely that military personnel, often temporarily stationed, occupy rentals that often cluster along major roadways and commercial zones, putting them in close proximity to payday lenders. Moreover, much like the elderly, military personnel receive steady, albeit modest, incomes, making them good credit risks. Since military personnel are geographically concentrated, lenders are also able to efficiently amortize the fixed costs of outlet operations (Carrell & Zinman, 2008).

By most accounts, payday borrowing by military personnel is prevalent. The Center for Responsible Lending reports that military personnel take out payday loans at three times the rate of civilians. Estimates on usage by military personnel range from 20% to 25% (Carrell & Zinman, 2008). According to Tanik (2005), one in five active-duty personnel were payday borrowers in 2004, resulting in an estimated annual cost to military families of \$80 million. The rate of usage among junior personnel is projected to be even higher. Responding to critics who point out this relationship, the Community Financial Services Association of America, an industry trade group, reports on its website that military personnel make up “only 13%” of the industry’s customer base (CFSA, 2008), an interesting statistic to trumpet given that active-duty military personnel make up less than 1% of the American adult population.

The Pentagon, following reports that payday lenders target military markets (Graves & Peterson, 2005), recently lobbied Congress for a federal cap of 36% APR on loans to military members and their families. It was argued that “predatory lending undermines military readiness, harms the morale of troops and their families, and adds to the cost of fielding an all volunteer fighting force” (as quoted in Center for Responsible Lending, 2006). A study by Carrell and Zinman (2008) finds the consequences of payday lending availability for military

personnel can indeed be significant. They document significant average declines in overall job performance and retention among Air Force personnel who are exposed to payday lending. As they state, “payday loan access causes financial distress and severe misbehavior for relatively young, inexperienced, and financially unsophisticated airmen” (p. 1).

The aim of this study is to build on and extend this emerging body of research. We therefore conduct a spatial analysis of the urban neighborhood characteristics associated with the presence of payday lenders. While the presence of a lender does not directly measure its use by those living in the neighborhood, it does, as noted earlier, represent a financial hazard and functions as both a signal and aggravating factor of economic distress in those communities. While we seek to submit the findings of prior studies to renewed testing, our study is unique in that it considers a wide range of variables not often included in the same analysis, including race/ethnicity, immigration, income and poverty, age groups, and military personnel concentration. Unlike previous studies, we also examine the relationship of labor force composition to the payday lending presence. This allows us to assess the degree to which any socio-demographic relationships represent income and labor force composition relationships. What is more, our study design allows us to include control variables not used in other studies and to test for curvilinear effects for poverty and income. Finally, the study complements previous work on other regions by examining Colorado’s Front Range communities, an understudied region of the country, yet one which reflects many of the economic and social trends transforming the country.

4. Methods and data

Our study focuses on the Front Range of Colorado, an area encompassing the metropolitan areas of Denver, Colorado Springs, Pueblo, Ft. Collins, and Greeley. Like much of the U.S., Colorado has witnessed dramatic growth in the number of economically distressed people turning to the payday lending industry to cover both short-term and long-term debts. The payday industry, responding to growing economic insecurity and a favorable regulatory environment,¹ has flourished in Colorado (UCCC, 2007). Since 2003 the state has experienced a 117% increase in payday loans (Brown, 2008), costing certain populations in Colorado an estimated \$76 million annually (estimated for 2005, as reported by King et al., 2006). In 2007 Colorado ranked 12th in the nation in terms of payday lending activity (Graves & Peterson, 2007).² The impact on borrowers and their communities has been significant. The percentage of Colorado borrowers who have been indebted to a payday lender during the past 6 months has increased steadily since 2001 (King & Parrish, 2007). The average Colorado payday borrower in 2006 took out nine loans, 65% of which were oriented toward refinancing other loans. The average APR paid was 353% and 70% of loans were made to borrowers who had received eleven or more loans in the previous 12 months (The Bell Policy Center, 2008).

By 2007 Colorado’s Front Range communities were home to 638 individual payday lending outlets. With a population of 3.25 million, there is approximately one payday outlet per 5100 people. While the proliferation of payday lenders along the Front Range makes the area attractive for study, so too does the area’s socio-demographic diversity. Our data show that 21.6% of the Front Range population falls below 185% of the federal poverty line, 28% are ethnic/racial

minorities, 9.6% are foreign born, 18.6% are between the ages of 18 and 29, 9.3% are over the age of 65, and 1.1% are active-duty military personnel. In terms of the labor force composition of the Front Range, 38.6% of adult civilian workers are employed in management/professional occupations, while 28% are employed in sales/office work and another 33.2% are collectively employed in service, construction and maintenance, or production/transport occupations. This diversity makes the Front Range ideal for a broad-based study such as the one we pursue here.

Our analysis focuses on socio-demographic characteristics of populations for defined geographic areas hypothesized to be associated with the presence of payday lending outlets. For this study we use census block groups, a common proxy for neighborhoods (Graves, 2003; Williams, 1999). Block groups provide a more focused measure than either census tracts or zip codes. Data for the 2413 block groups along the Front Range were obtained from the U.S. Census Bureau's Census 2000 Summary File 3. We examine block group composition variables covering income, poverty, labor force quality, race/ethnicity, nativity, age, and military personnel presence.

The economic profile of communities is measured using three different variables—median household income (MHI), the percent of the population falling below 185% of the federal poverty line, and labor force composition. MHI serves as a core income profile variable. Our decision to use an expanded measure of poverty reflects a growing concern among many that the official federal poverty line is an inadequate measure of financial insecurity (Besharov & Germanis, 2004; Short, Iceland, & Dalaker, 2002). Indeed, it is the communities with populations that fall below 185% of the official line that may be most attractive to payday lenders. It is worth noting, however, that the results we identify using this measure are comparable to those produced by models using the official poverty line measure.

As noted, we also include a measure of labor force composition, a factor not previously examined in the literature on payday lending. Our measures are based on the Census Bureau's data on occupation types by employed civilian population 16 years and over. Occupations are separated into five main categories—management/professional, sales/office, service, construction/maintenance, production/transport, and farming. We make use of measures based on the percent of the adult civilian population employed in each sector. With such measures, of course, collinearity poses an issue. As the percent of workers in one category rises, the percent of workers in other categories necessarily decreases. In particular, we found the percent of workers employed in management/professional occupations to be highly and inversely correlated with the percent of workers employed in service, construction/maintenance, and production/transport (these latter are positively correlated with one another). Only the percent of sales/office workers is not significantly correlated with the other categories, as it captures jobs that range the income ladder. The percent of workers along the Front Range employed in farming is very small and, as we show below, not a significant factor in *t*-tests. We therefore drop it from the regression analysis. Thus, for the purposes of our analysis we include only two labor force composition measures—one for the percent of workers employed in sales/office occupations and another for the percent of workers collectively employed in service, construction/maintenance, and production/transport. The percent of workers employed in management/professional occupations is excluded from the models, effectively serving as a reference category. In results not shown, the effect of this measure is simply the mirror opposite of that of the collective service/construction/production measure.

The race/ethnic composition of block groups is measured by the percent of ethnic/racial minority respondents. The immigrant composition of block groups is captured by the percent of the population that is foreign born. For age structure, we examine the relative presence of two separate demographic groups—the percentage of young adults (individuals between the ages of 18–29) and the percentage of people 65 years and older. To assess the relationship between payday lending and the military population, we look at the percent of the population in each block group that is comprised of active-duty military personnel. As is often the case, a large percentage of active-duty personnel are housed on or near bases. Since payday lenders are not permitted on the bases themselves, they are likely to populate the surrounding neighborhoods. Because military bases contain high concentrations of military personnel but no payday lenders, they may function as distorting outliers in our analyses. To correct for this, we include a dummy variable for the four block groups along the Front Range of Colorado that encompass military bases or installations. The means for our variables across block groups in our sample are provided in the comparison of means tests in [Table 1](#).

Data on the location of active payday lending outlets was obtained from the Colorado Attorney General's Office. The addresses for 638 payday lending sites along the Front Range were geo-coded and incorporated into GIS. Spatially joining payday sites to census block groups poses an issue for spatial analyses such as this one. The borders of block groups may be defined by roadways, artificially separating neighborhoods ([Downey, 2006](#)). If a payday lender lies on one side of a road, it most likely services and impacts those in nearby neighboring block groups in addition to the block group in which it technically lies. We addressed this issue by creating a 1/4 mile buffer around each of the payday sites.³ Thus, any block group within a quarter mile of a site is considered to be occupied by a payday lending site. The effect of this buffer is to more accurately capture the number of block groups exposed to payday lending. By this measure, we find that 1064 of the 2413 block groups in the Front Range of Colorado are effectively “occupied” by one or more payday lending outlets.

Census and payday lender data were collated in GIS and then analyzed with Stata software ([StataCorp, 2007](#)). Our analysis starts with illustrative maps of the Front Range. We follow with comparison of means tests which allow us to determine whether payday lender-occupied neighborhoods differ significantly from unoccupied neighborhoods in terms of their socio-economic and demographic composition.⁴ Since the data for many of our variables are not normally distributed, we report results of both Student *t*-tests and Mann–Whitney tests.

We also employ multivariate logistic regression. Logistic regression estimates the probability of payday lending presence based on our explanatory variables. Odds ratios are reported, indicating whether each variable increases or decreases the odds of payday presence controlling for all other explanatory variables in the model. Logistic regression also allows us to check for curvilinear effects for our income and impoverished composition variables, a possibility that goes unexplored in most analyses ([Burkey & Simkins, 2004](#)). While lenders may opt for or experience greater success in economically strained communities, they may also seek to avoid the most impoverished communities, since payday lending requires a customer base with at least a modest flow of income. As [Burkey and Simkins \(2004, p. 202\)](#) note, payday lenders may locate “not in the poorest of neighborhoods but neighborhoods populated by the working poor.” Finally, multivariate models permit us to investigate whether patterns remain significant while controlling for key variables. With this in mind, we use median household income and

labor force composition variables as control variables in later models to discern whether our other socio-demographic composition variables exert independent effects on the likelihood of hosting a payday lending site, or are merely masking income or labor force composition effects. Additionally, we control for both population size and the presence of a major roadway, a convenient proxy for commercial zoning.⁵

5. Results

Fig. 1a provides a map of Colorado's Front Range communities and the distribution of its 638 payday lenders. Fig. 1b and c provide focal maps of the area's two largest population centers—the Denver metropolitan area and Colorado Springs. For illustration purposes, each is shaded in two tones according to a separate variable of interest. The Denver metropolitan map (Fig. 1b) shows the distribution of payday lenders against percent foreign born, while the Colorado Springs map (Fig. 1c) shows the distribution of lenders against percent military personnel. One can see that payday lenders in Denver often cluster in or near population pockets defined by higher concentrations of foreign born, just as payday lenders in Colorado Springs occupy neighborhoods with higher percentages of active-duty military personnel.

Table 1 presents the results of the comparison of means tests, both parametric and nonparametric. It includes mean values of the variables for the entire sample of Front Range block groups as well as occupied and non-occupied block groups. Significant differences are reported for each variable examined, except for percent farming, and occur in expected directions. Neighborhoods occupied by payday lenders are characterized by lower median household income levels and higher mean poverty rates, ethnic/racial minorities, immigrants, young adults, elderly, and active-duty military. In terms of labor force composition, neighborhoods occupied by payday lenders have, on average, lower percentages of civilian adults employed in management and professional positions, and higher percentages of people employed in sales/office, service, construction/maintenance, and production/transport occupations. We also include a collective measure for the latter three categories, finding a robust significant difference. Tests performed on data specific to the Front Range's two largest urban populations, Denver metro and Colorado Springs, yielded similar results.

Univariate analyses and means tests, though informative, are insufficient when trying to confirm a pattern of persistent spatial disparities. Certain composition effects may be merely reflecting income or labor force profile effects, for instance. To explore this possibility, we employ multivariate logistic regression. Our models progress in systematic fashion. We begin by testing for possible curvilinear effects for our poverty and income variables. Next, we examine the predictive effects of our socio-demographic variables. Finally, we introduce both labor force composition and income variables to assess the degree to which socio-demographic variables exert a significant net effect, over and above the economic profile of communities.

Table 2 reports on the odds ratios of the likelihood of the presence of payday lending in a block group. As all models show, the presence of a major roadway and population size both greatly increase the likelihood of payday lending. Models 1 and 2, incorporating quadratic terms, investigate the possibility of curvilinear effects for our percent poor and income composition variables. A curvilinear relationship is apparent for percent impoverished, suggesting

Payday Lending along the Front Range of Colorado

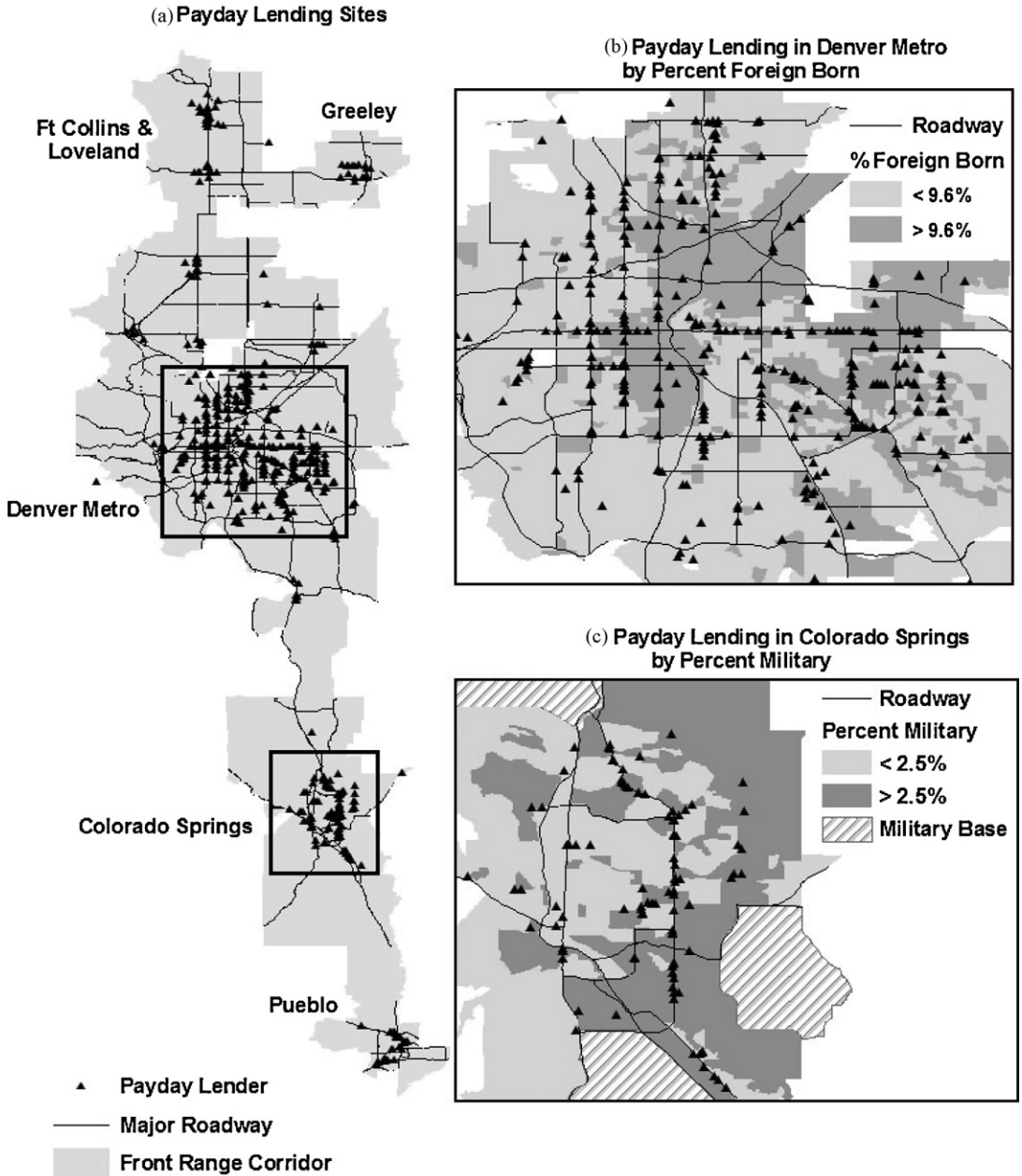


Fig. 1. Payday lending along the Front Range of Colorado: (a) payday lending sites, (b) payday lending in Denver Metro by percent foreign born, and (c) payday lending in Colorado Springs by percent military.

Table 1
Comparison of means tests.

Variables	Front Range mean	Payday lender(s) absent	Payday lender(s) present	Student's <i>t</i> -test	Mann–Whitney test
MHI	53,263	59,040	45,938.90	12.6176 ^{***}	12.601 ^{***}
%Impoverished	21.62	18.61	25.08	−9.1449 ^{***}	−11.141 ^{***}
%Ethnic minority	27.99	33.64	42.68	−6.9027 ^{***}	−10.818 ^{***}
%Foreign born	9.30	8.18	10.73	−6.6421 ^{***}	−8.653 ^{***}
%18–29	17.89	16.48	19.69	−7.1628 ^{***}	−10.297 ^{***}
%65+	10.32	9.57	11.27	−4.9940 ^{***}	−5.634 ^{***}
%Military	0.64	0.44	0.64	−3.0115 ^{**}	−2.328 [*]
%Mgmt/Prof	37.05	40.07	33.21	10.3617 ^{***}	10.138 ^{***}
%Sales/Office	27.75	27.21	28.44	−4.0140 ^{***}	−4.622 ^{***}
%Service	13.69	12.88	14.71	−6.3869 ^{***}	−7.315 ^{***}
%Const/Maint	10.28	9.58	11.17	−5.6545 ^{***}	−6.578 ^{***}
%Prod/Transp	10.28	9.99	12.24	−7.6855 ^{***}	−8.607 ^{***}
%Serv/Const/Prod	34.95	32.08	34.95	−9.4123 ^{***}	−9.876 ^{***}
%Farm/Agric	0.25	0.27	0.23	0.8646	0.700

Notes: Percent military statistics based on the exclusion of the four military base block groups. *N* = 2413 block groups for the sample; 1064 occupied and 1349 not occupied.

* *p* < .05 (two-tailed test).

** *p* < .01 (two-tailed test).

*** *p* < .001 (two-tailed test).

Table 2

Odds ratios for the effects of economic and socio-demographic variables on the likelihood of payday lending presence.

	1	2	3	4	5	6
Major roadway	2.139*** (.189)	2.132*** (.190)	2.241*** (.199)	2.125*** (.192)	2.194*** (.197)	2.154*** (.196)
Population (log)	1.352*** (.113)	1.423*** (.110)	1.421*** (.122)	1.463*** (.003)	1.411*** (.123)	1.43*** (.128)
%Poor	1.070*** (.008)					
%Poor ²	0.999*** (.000)					
MHI		0.969*** (.006)		0.978*** (.003)		0.979*** (.003)
MHI ²		1.000 (.000)				
%Sales/Office					1.036*** (.007)	1.026*** (.007)
%Serv/Const/Prod					1.019*** (.004)	1.001 (.004)
%Ethnic minority			1.007** (.003)	1.000 (.003)	1.001 (.002)	0.999 (.003)
%Foreign born			1.020** (.007)	1.022*** (.006)	1.024*** (.006)	1.026*** (.007)
%18–29			1.029** (.011)	0.989 (.012)	1.012 (.012)	0.986 (.012)
%65+			1.053*** (.009)	1.018* (.009)	1.041*** (.009)	1.016+ (.009)
%Active military			1.103** (.032)	1.096*** (.031)	1.096*** (.032)	1.089** (.031)
Log likelihood	–1540.66	–1512.52	–1538.33	–1493.83	–1513.91	–1484.26

Notes: Models 3–6 control for military base block groups. Standard errors are presented in parentheses.

+ $p < .10$ (two-tailed test).

* $p < .05$ (two-tailed test).

** $p < .01$ (two-tailed test).

*** $p < .001$ (two-tailed test).

that it is neither the most impoverished nor the least impoverished communities that attract or successfully host payday lenders. Rather, it would appear that modestly impoverished communities provide the most fertile soil for the payday industry. No such curvilinear relationship is found for median household income. In the models that follow, we use median household income as a control variable in order to assess the robustness of other neighborhood composition variables in predicting the likelihood of payday lending.

Model 3 introduces our socio-demographic variables. The findings reinforce the results in Table 1, demonstrating each to be a significant predictor of payday lending, even controlling for block group population size and the presence of a major roadway. Payday lenders are more likely to be present in communities characterized by higher percentages of race/ethnic minorities, foreign born, young adults, senior citizens, and military personnel. When income is included in Model 4, however, the significance of these variables is reduced or drops out

in certain cases. In particular, our percent racial/ethnic minority and percent young adults variables become non-significant when controlling for median household income. Thus, initial effects for those variables appear to reflect income composition effects. While payday lenders are more likely to populate neighborhoods with higher percentages of each, it is a pattern that appears to be based more on the income composition of such neighborhoods than their young adult profile or racial/ethnic composition. Of course, the lack of any independent effects, over and above income, does not negate those populations' disproportionate exposure to payday lending nor the influence of historical and contemporary discrimination in establishing the lower income profile of minority neighborhoods.

In contrast, percent foreign born, elderly, and active-duty military all retain significant positive associations with payday lending even when median household income is accounted for. These findings suggest that communities hosting higher percentages of these populations provide fertile ground for the payday industry, a relationship which cannot be reduced to those communities' income profile. As the literature suggests, it may be that immigrants are more likely as a population to make use of nontraditional lending institutions and the elderly and military personnel, with their low yet stable income, make for an attractive and reliable clientele base for the payday industry. Of course, our analysis can make no claims about the socio-demographic make up of payday borrowers; we can only ascertain the characteristics of the communities disproportionately exposed to the presence of payday lending.

Model 5 assesses the degree to which our socio-demographic effects are a function of the labor force composition of those communities. As with MHI, controlling for the percent of the population employed in both sales/office and service/construction/production combined accounts for the young adult and ethnic/racial minority effects. Model 6 reincorporates MHI, showing the service/construction/production effect itself to be a function of the income profile of those neighborhoods. Interestingly, the percent of the population employed in sales/office work remains a significant positive predictor of payday lending, likely reflecting the sector's varied income profile.

6. Discussion

The payday industry has expanded rapidly over the past decade, fed by growing economic insecurity and the financial marginalization of communities. As such, payday lenders have become an indicator of economically distressed communities, just as they function as an aggravating factor in that distress. While offering apparently needed services to populations that are often underserved or alienated by traditional banking establishments, the presence of payday lenders nonetheless represents a financial hazard to communities and serves as a signal to residents of the economic uncertainty which surrounds them.

To better understand the social ecology of the industry, we used GIS software and statistical analyses to examine the economic and socio-demographic composition of communities that are disproportionately exposed to the hazards and signals of payday lenders. Our results, based on comparison of means tests and multivariate logistic regression, show that payday lenders are more likely to populate neighborhoods that have lower income, moderate poverty (neither

too high nor too low), and higher percentages of ethnic minorities, immigrants, young adults, elderly, military personnel, and those working in non-management/professional occupations. Our multivariate logistic results show these relationships to be robust even controlling for population size and the presence of a major roadway. However, they also show income and labor force composition to be the driving factors behind certain relationships. Specifically, based on payday lending presence alone, it does not appear that minority communities or those with higher percentages of young adults, independent of their income profile, disproportionately attract, sustain, or serve as a target for payday lenders. The same can be said of communities with a larger share of the civilian labor force employed in service, construction/maintenance, and production/transport. However, we do find that communities characterized by a larger percentage of foreign born, elderly, and military personnel are significantly more likely to host payday lending, even controlling for their economic profile. There is indeed something about these communities, apart from their income profile, which attracts and/or sustains payday lenders. Though we are unable to comment on actual users of payday lenders in these communities, we might surmise that immigrant populations, based on their economic status and mobility, are more likely to use payday lenders in lieu of traditional banking services. The elderly and military personnel, with their relatively low, yet steady income, serve as attractive customers for the industry.

Our study, while building on previous spatial analyses of payday lending, makes a number of important contributions to the literature. For one, our study examined a wider range of variables than most other studies. In particular, our inclusion of immigrant, age, and labor force composition variables addressed noticeable gaps in the literature. Future research ought to explore these relationships more closely. In particular, more research is needed to better understand the relationship between senior citizens, their communities, and payday lenders. While the present study represents the second analysis to identify a spatial relationship, recent analyses on actual users of payday lenders finds very low usage rates among the elderly (Lawrence & Elliehausen, 2008; Pyper, 2007). The use of a dummy variable for military bases, effective at eliminating their outlier effect on the results, also provides a model for future studies seeking to examine the relationship between military communities and community resources or hazards. Second, our focus on Colorado's Front Range communities allowed us to expose a rather understudied region of the country, just as those communities' diversity facilitated our analysis. Lastly, we moved beyond traditional comparison of means tests to include multivariate logistic regression. This allowed us to assess the robustness of relationships through the inclusion of key control variables and explore potential curvilinear relationships for income and poverty. By subjecting our variables to the rigors of multivariate regression, we were able to expose nuances in the patterning of payday lending that previous studies have largely failed to explore.

While we believe this study contributes much to the literature on economically distressed communities and the ecology of the payday lending industry, it is worth noting a few limitations and important qualifications. For one, an ecological study such as this does not directly measure populations' use of payday lenders. We sought to avoid committing ecological fallacy, generally noting our primary interest in payday lenders as financial hazards and signals of community economic distress. That said, it is likely that the patterns we identified did not come about by accident. We are also cautious not to overly generalize our findings. Although

our results conform to and reinforce the findings of other studies, it always remains a question whether one's conclusions can be generalized to other areas. This is particularly true given regional and local variations in population, labor markets, residential patterning and regulatory oversight. Given the growing economic distress of communities, it is important to continue the examination of this industry and its relationship to vulnerable populations. Such studies can provide the empirical backing to legislative and regulatory drives to curb the predatory abuses of lenders while keeping needed credit services available.

Notes

1. The Colorado Deferred Deposit Loan Act (“DDLA”) exempts payday lenders from Colorado usury laws, granting payday lenders the right to charge 20% on the first \$300 loaned, plus 7.5% of any amount loaned in excess of \$300 (Graves and Peterson, 2005). Payday lenders are asked not to renew loans more than once, but they may refinance the loans. While some cities around the country have taken action to limit payday lending, no such city-level ordinances currently exist among the cities comprising our sample.
2. Colorado's legislature attempted, unsuccessfully, to place limits on the industry in the spring of 2008. The proposed legislation would have set a maximum finance fee of \$30 per year and an APR cap of 45% (Brown, 2008).
3. In general, our results are not sensitive to alternative specifications for our buffer.
4. Although the data for several variables are not normally distributed, non-parametric tests returned a similar pattern on findings. This is in part due to the large sample size of block groups in this study.
5. Analyses of this sort raise the prospect of spatial autocorrelation. While it can be reasonably argued that the spatial clustering of variables is what is of interest in studies such as this, it is also important to note that spatial dependence may result in findings that overstate the significance of multivariate relationships. The need to employ highly specialized techniques to deal with the issue in this kind of research remains a subject of methodological debate (Pastor et al., 2004). In fact, most environmental inequality studies that use a similar research design as this study ultimately side-step the issue for practical reasons, namely the sheer logistical obstacles associated with performing the necessary calculations on large data sets (Morello-Frosch et al., 2001; Pastor et al., 2004). Moreover, while such techniques may impact the significance level of individual variables, they often do not alter the overall pattern of results. Given these considerations, this study follows many other spatial analysis studies in using standard regression methods.

Acknowledgements

The authors wish to thank the anonymous reviewers of *The Social Science Journal* for their helpful comments and suggestions.

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Payday Loans, Inc.: **Short on Credit, Long on Debt**

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Center for Responsible Lending

March 31, 2011



www.responsiblelending.org

Overview

While payday loans are advertised as a quick solution to the occasional financial shortfall, new data analyzing the use of payday loans by borrowers over two years after their first payday loan show that borrowers are typically indebted to payday lenders for much of the year, with those who remain active borrowers taking on more debt over time. This study tracks the transactions of the 11,000 borrowers in Oklahoma who took out their first loans in either March, June, or September of 2006 for the following 24 months.

Specifically, this report finds:

- **The typical payday borrower remains in payday loan debt for much of the year, and many borrowers remain indebted in payday loans for extended periods of time.** While the Federal Deposit Insurance Corporation (FDIC) has ruled that it is inappropriate for payday borrowers to remain indebted for more than 90 days in any 12 month period, we find that borrowers are indebted for more than double this limit on average. For example, in their first year of payday loan use, borrowers are indebted an average of 212 days. Over the full two-year period, borrowers are indebted a total of 372 days on average.
- **Payday borrowers' loans increase in size and frequency as they continue to borrow.** Those payday borrowers who continue to take out loans over a two year period have 12 payday transactions in their second year of borrowing, up from 9 transactions in the first year. In addition, evidence suggests that borrowers' loan sizes increase after their initial loan. While borrowers' initial loans averaged under \$300, the average Oklahoma borrower owes \$466 on payday loans.
- **A significant share of borrowers become late or default on their payday loan, triggering more fees and placing their bank account at risk.** Over the first two years of payday loan use, 44 percent of borrowers will experience a "return event" or default in which they are cannot service their payday loan debt in a timely manner. These defaults place additional financial stress on borrowers by triggering bounced check fees from the lender and the borrower's bank.

About the Center for Responsible Lending

The Center for Responsible Lending (CRL) is a national nonprofit, nonpartisan research and policy organization dedicated to protecting home ownership and family wealth by working to eliminate abusive financial practices. CRL is affiliated with Self-Help, the nation's largest community development financial institution.

For additional information, please visit our website at www.responsiblelending.org.

Data collected by regulators of the payday lending industry in many states have demonstrated that the payday lending business model relies on borrowers taking out multiple loans in a year, often on a back-to-back basis. This report supports this finding by showing that very few new borrowers begin borrowing from a payday lender at any given point, but those who do begin borrowing are likely to continue for long stretches of time. This repeated borrowing is a result of the structure of the payday loan product itself—requiring that the borrower repay the entire

amount due with a single paycheck virtually ensures that they will not have enough money left over to get through the rest of their pay period without quickly taking out another loan. Borrowers are misled by the promise of a short-term credit product to take a loan that is designed to keep them indebted for extended periods. Payday lenders themselves acknowledge that their product is harmful if used on a continuing basis even though the bulk of payday revenue comes from borrowers stuck in repeated payday loans.

To ensure that available small loans help borrowers cover a financial shortfall without trapping them in long-term debt, states should end special exemptions for payday lenders that authorize triple-digit annual interest rates and restore traditional interest rate limits which are commonly set at or around 36 percent APR. While the new Consumer Financial Protection Bureau (CFPB) at the federal level cannot limit interest rates on payday loans as states can, both the new Bureau and states can take other steps to ensure that payday borrowers' short-term loans do not turn into long-term debt, such as (1) limiting the amount of time a borrower can remain indebted in high-cost payday loan debt; (2) setting sustainable loan terms which provide the borrower adequate time to repay and prohibit the taking of a borrower's personal check or an ACH authorization as security for the loan; (3) responsible underwriting standards that take the borrower's income and other obligations fully into account; and (4) facilitating efforts to help households save.

I. BACKGROUND AND METHODS

Payday loans—small, short-term loans due on a borrower's next payday—are marketed as a quick solution to a financial shortfall. Despite the contention that these loans are intended to be used only on an occasional basis, research from CRL and others confirms that the typical payday borrower has multiple payday loans per year, usually taking one after the other and paying a new fee each time.¹ This “debt treadmill” on which borrowers commonly find themselves is created by the nature of the loan itself—the loan must be repaid in full from a single paycheck, a tall order for a household already living close to the edge. Borrowers routinely find themselves short of cash soon after paying one loan back, and then must take out another to meet their ongoing financial obligations. Chart 1 illustrates this cycle of having to take out one payday loan after another.

Chart 1: Payday Lending Debt Treadmill



In a proposed rule on providing responsible small loans, the National Credit Union Administration (NCUA) found that a dependence on payday loans “often reflects or exacerbates other financial difficulties payday loan borrowers are experiencing.”² This is consistent with studies which have found that payday lending is associated with higher rates of bankruptcy filings and credit card delinquency, trouble paying bills and medical expenses, and a greater risk of losing a bank account due to excessive overdrafts.³

The fees allowed on payday loans vary by state, but are generally between \$15-20 per \$100 borrowed, the equivalent of an annual percentage rate (APR) of around 400 percent or more on a two-week loan. In most states in which payday lenders operate, they are allowed to charge these triple-digit rates because of special exemptions from the state’s traditional interest rate caps, which apply to consumer finance loans and other small loan products. Payday lenders do not operate in 17 states and the District of Columbia either because these jurisdictions do not authorize the product, or because they will not allow lenders to charge triple-digit rates.⁴ Payday lenders also do not make loans to active duty military personnel and their families in any state, because these families are protected from payday loans by a federal 36 percent APR limit.⁵

Many of CRL’s previous studies of payday borrowing activity have been derived from annual reports from regulators in the states in which payday lenders operate. While these reports provide valuable summary statistics, they do not tell the full story of the experience of borrowers over time. For example, the average number of loans per borrower in a given year is reported, but how many years a consumer remains in payday lending, or whether their borrowing patterns change over time, has not been documented.

This report fills part of this gap by tracking borrowers for 24 months from the date of their first payday loan. It documents the size of their initial loan, how many transactions they conduct, how long they remain indebted, and how many of them default. We analyze the transactions of Oklahoma borrowers whose first payday loan was logged into the state’s payday lending database in one of three months—March, June, or September of 2006 (the public records request and response is shown in the Appendix). This database collects data from all lenders in the state, so it reliably captures a borrower’s total use of payday loans, even if they borrow from multiple lenders.

We look at consumers who start borrowing from payday lenders in three different quarters to account for cash flow needs that may differ depending on the time of year. As discussed in more detail later, relative to the overall number of borrowers taking out a loan each month, there are few new borrowers entering the payday lending system at any given point in time. For example, during the three months in 2006 in which the borrowers in our analysis (totaling around 11,000 people) take their first loan, there are at least 50,000 total consumers conducting transactions with Oklahoma payday lenders every month.⁶

Table 1: Observation periods of borrowing activity for first-time borrowers

Cohort	Observation Period
1	March 2006-February 2008
2	June 2006-May 2008
3	September 2006-August 2008

In addition to allowing us to track all activity of a given borrower across multiple lenders, the database ensures compliance with Oklahoma’s payday lending regulations which allow borrowers to be indebted a maximum of \$1,000 across two loans outstanding at any given time. The table below summarizes the main provisions of Oklahoma’s payday lending law:

Figure 1: Provisions of Oklahoma’s payday lending law:

- Maximum principal outstanding at one time: \$1,000 (each loan can be for no more than \$500)
- Maximum number of loans outstanding at one time: 2
- Loan term: 12-45 days
- Maximum fees allowed: \$15 fee per \$100 on portion of loan up to \$300, \$10 fee per \$100 on portion of loan above \$300
- No direct rollovers permitted
- Cooling-off period—after 5 consecutive loans, 6th loan cannot be made until the 2nd business day after previous loan repaid
- Extended repayment plan option—eligible for plan on 3rd consecutive loan, subject to an additional processing fee and 15 day cooling off period once repaid

Source: Okla. Stat. Tit. 59 3101 et seq.

In the 11 states including Oklahoma that have a consolidated database tracking system, we can be more confident that lenders are following the laws as it relates to the number of loans a borrower is given.⁷ Therefore, it is reasonable to assume our findings on borrowing activity in Oklahoma are conservative relative to what occurs in other states with fewer limitations on payday lending. It should also be noted that because this analysis took place before the worst impacts of the financial crisis hit households across the country, our findings are not affected by more recent financial and employment conditions.

As discussed throughout this paper, we compared the findings from this analysis with other available information and studies, including regulator data from Colorado and Florida, as well as findings from borrower interviews conducted in New Mexico and California, and an analysis of transactions from a large Texas-based payday lender.⁸ These supplement and confirm our findings.

II. FINDINGS

Finding 1: The typical payday borrower remains in payday loan debt for much of the year, and many borrowers remain indebted in payday loans for extended periods of time.

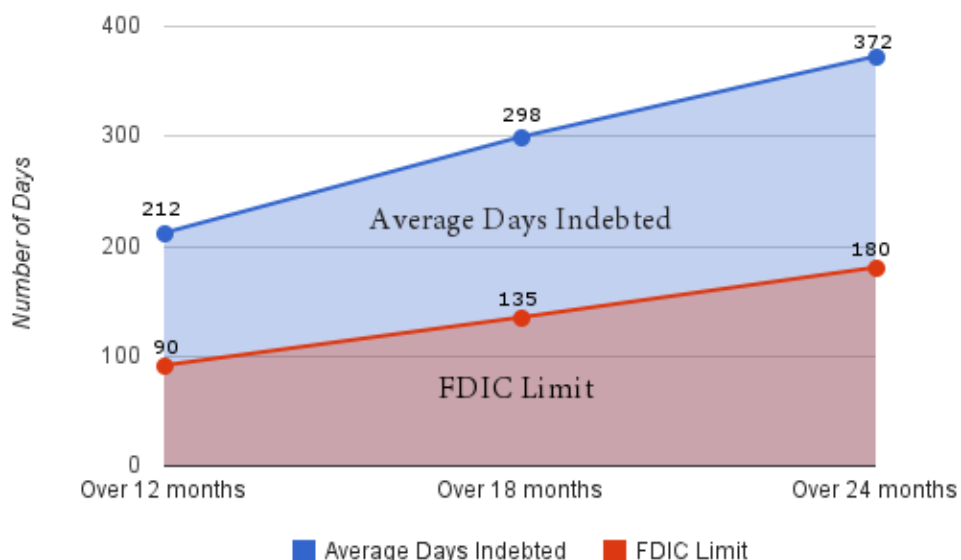
Payday lenders were granted exemptions to existing state interest rate caps that apply to other small loan products in part because of their assertion that borrowers would use these loans only sparingly for financial emergencies. The industry's trade group, the Community Financial Services Association (CFSA), acknowledges in its consumer guide that payday loans are "...not a long-term solution" and that "[r]epeated or frequent use of payday advances can cause serious financial hardship."⁹

Federal banking regulators agree with this assessment that long-term use of payday loans is harmful. In a warning to national banks considering partnering with payday lenders, the Office of the Comptroller of the Currency (OCC) stated that repeatedly renewing a payday loan, which can be done either by extending a loan or through a series of back-to-back transactions, is an exceedingly expensive and unsuitable way to borrow over the long term.¹⁰ The Federal Deposit Insurance Corporation (FDIC) has concluded that extensive use of payday loans is harmful. In guidance to banks that sought to partner with payday lenders, the regulator found that keeping borrowers in payday loan debt for longer than 90 days in any twelve-month period (the equivalent of 6 two-week loans) was inappropriate.¹¹

We find that, on average, borrowers stay indebted to payday lenders for far longer than the 90 days that the FDIC considers the maximum acceptable period. The borrowers in our study are indebted an average of 212 days in the first year they borrow (or 58 percent of the year), and continue to be indebted over half the time in their second year as well. This average includes the small number of borrowers (15 percent) who managed to borrow only once and then not return during the remainder of this two-year period, so the depth of indebtedness of the other 85 percent is understated. For example, if we leave out these one-time borrowers, we estimate that the remaining 85 percent of borrowers are indebted for 345 days (63 percent of the total time period) in their first 18 months and 432 days (59 percent of the total time period) on average over the course of two years.¹²

These numbers demonstrate that a substantial number of borrowers are trapped in payday lending debt for over twice what the FDIC has deemed the maximum appropriate length of payday loan indebtedness.

Chart 2: Average number of days indebted in payday loans



A previous report from CRL shows that borrowers in Oklahoma and other states tend to take loans on a consecutive basis—essentially staying in continuous debt for significant stretches of time.¹³ Among the 87 percent of Oklahoma borrowers who had multiple payday loan transactions in 2006, a new loan was opened the same day as a previous loan was repaid over half (59 percent) of the time. Other borrowers did not take out a new loan on the same day, but nevertheless had to return before their next payday two weeks later—our definition of being trapped in the payday lending debt treadmill. Nearly 90 percent of time, these repeat borrowers had to return to the payday lender for another loan within the same pay period of paying off the previous loan. Knowing that borrowers’ loans tend to be taken consecutively rather than spaced out more sporadically, it is likely that not only are the payday borrowers in this analysis indebted for many days of the year, but that this signifies extended periods of generally uninterrupted high-cost indebtedness.

A law professor at the University of New Mexico conducting interviews of payday borrowers in that state similarly found that most payday borrowers had been in payday loan debt on a continuous basis for more than a year. In an article outlining her findings, she concludes that “[t]o call this industry the ‘short-term loan’ industry is a misnomer.”¹⁴

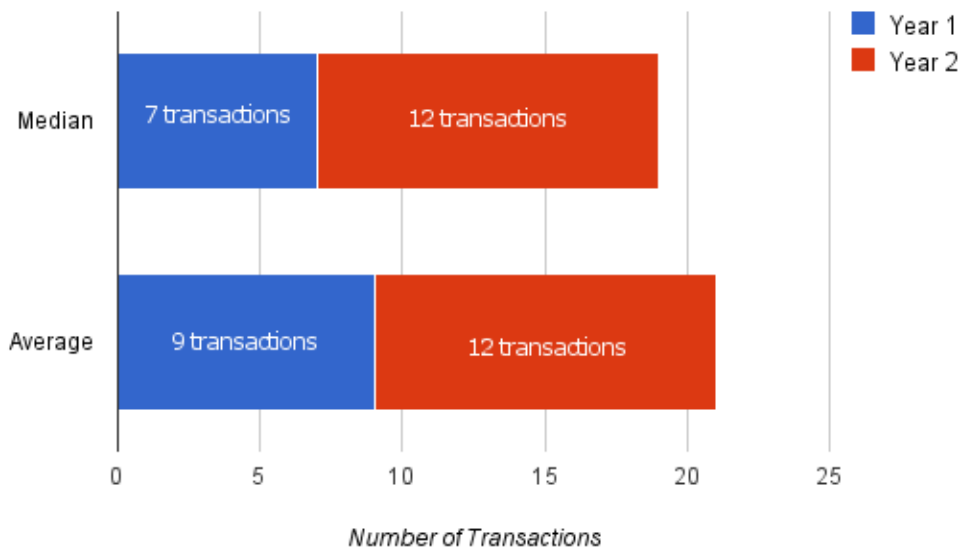
Finding 2: Payday borrowers’ loans increase in size and frequency as they continue to borrow.

In addition to staying indebted for long stretches of time, our data demonstrate that borrowers tend to become more heavily indebted—taking out loans more frequently and for larger amounts—as they continue to borrow from payday lenders.

First, we examine borrowers who remain “active” throughout the 24-month time period (defined as borrowers with at least one loan in months 13-18 and one loan in months 19-24).¹⁵ In their first year of payday usage, these borrowers had an average of 9 transactions (7 median). The

frequency of borrowing among those who remained active increases during the second year, where our data suggest that active borrowers take out a total of 12 loans—six loans during the first half of the year, and an additional 6 loans during the second half. Put another way, those using payday loans consistently throughout this two-year time period are taking out the equivalent of one loan every month by the second year.

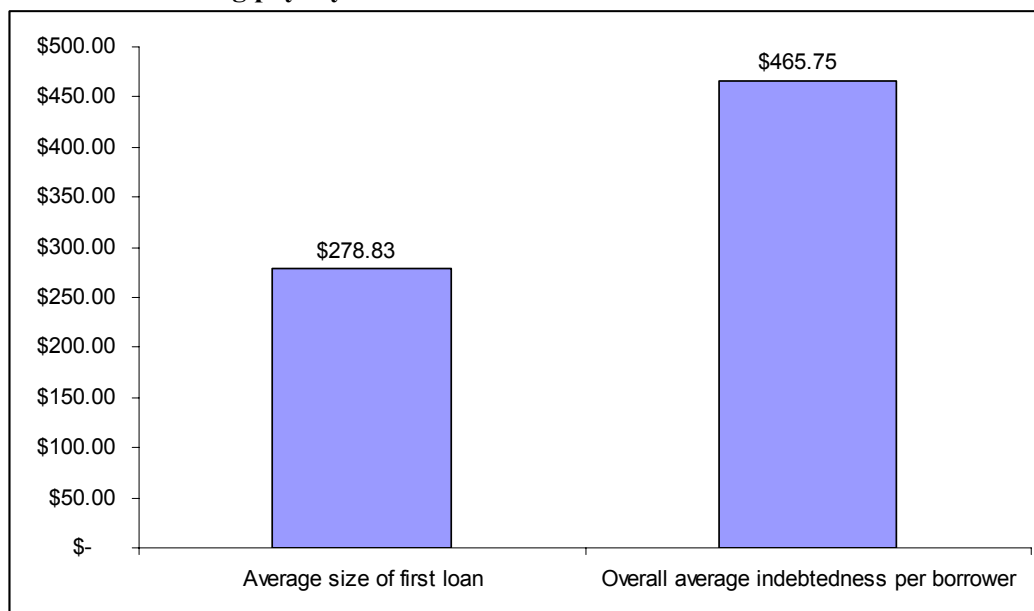
Chart 3: Increased frequency of payday borrowing, among active borrowers



These findings of borrowers engaging in multiple transactions over time are consistent with borrower comments in a focus group conducted in California for the state regulator. In this group of 16 payday borrowers, only one took just a single loan over an 18 month time period. For the remaining borrowers, six had 20 or more loans (or had so many loans they could not remember the exact number), and an additional six had 15 to 20 loans during 18 months' time.¹⁶

In addition to borrowing more frequently, our data suggest that the amount borrowed also increases over time. The first loans taken by borrowers in our study were for relatively small amounts. For example, the average (mean) size of an initial loan was \$279. Oklahoma allows consumers to borrow up to \$1,000, through two loans which individually cannot exceed \$500. During this 2006-2008 time period, the average amount by which all borrowers in Oklahoma were indebted by about \$466 to a payday lender—a 67 percent increase over the amount of a payday borrower's first loan.¹⁷

Chart 4: Increasing payday loan indebtedness



Taking out larger loans puts borrowers at greater risk of not being able to retire their payday loan debt and, as a result, needing to take out a new loan each pay period. For example, the regulator in Colorado has found that larger loans are more likely to be “refinanced” (defined in that state as either directly renewing the loan or taking out a new loan the same day a previous loan is repaid).¹⁸

The root of this problem of borrowers increasing the frequency and size of their payday indebtedness is the balloon payment structure of the payday loan product, which requires the loan to be repaid in full over a very short period of time. The financial burden of only having two weeks to repay can be insurmountable. Allowing a minimum of 90 days to repay over the course of installments—as the FDIC recommended for its own small loan pilot program—creates a more sustainable loan for borrowers. Table 2 shows that even a \$300 loan—which is far lower the average amount by which an Oklahoma borrower is indebted (\$466)—eats up all remaining funds after the borrower has paid for just their most basic expenses. In contrast, the same loan and fee paid off over a longer period of time becomes more manageable.¹⁹

Table 2: Amount repaid out of each paycheck, \$300 loan with 15% fee

	Payment (including principal and fee)	Payment as share of residual income (defined as income remaining after basic expenses for a pay period) *
\$300 loan and \$45 fee, 14 day loan term, one balloon payment	\$345.00	100%
\$300 loan and \$45 fee, 90 day loan term, 6 installment payments	\$57.50	17%

*A borrower earning \$35,000 a year would bring home a paycheck after taxes every two weeks of about \$1240.81 and need to spend \$895.42 during that period on basic expenses such as food, housing, transportation, and healthcare. This leaves the borrower with just over \$345 for their payday loan, other loan payments, and other

potential expenses such as childcare. See household budget calculations derived from the Bureau of Labor Statistics Consumer Expenditure Survey on page 15 of CRL's Phantom Demand, available at <http://www.responsiblelending.org/payday-lending/research-analysis/phantom-demand-final.pdf>.

Finding 3: A significant share of borrowers become late or default on their payday loan, triggering more fees and placing their bank account at risk.

Payday lenders say that over 90 percent of the time, borrowers successfully repay their loan.²⁰ This is consistent with the default rates of around five percent reported by state regulators in Oklahoma and elsewhere, which is similar to that of a credit card.²¹ However, while payday lenders have very little risk of not getting repaid on any given loan, the typical borrower taking out loan after loan every year has a much higher chance of not only experiencing an eventual default on one of their payday loans, but also other financial distress as they attempt to pay for their other obligations.

The payday lending industry contends that the small share of loans going into default is proof that their borrowers are demonstrating their ability to repay—or effectively handle—their payday loan debt. However, a low default rate on a per loan basis should be expected due to two critical factors: (1) the payday loan is timed to be due on the borrower's payday, when the borrower has an infusion of cash that can be used to repay the loan and (2) lenders can repay themselves, since they are holding the borrower's personal check for the amount due, or have authorization to withdraw funds from a bank account. In effect, the payday lender guarantees that he will have the first claim on the borrower's funds, potentially causing the borrower to come up short on his or her other obligations. Research finding that those with access to payday lending have trouble paying other bills and that payday borrowers are more likely to become delinquent on their credit card payments illustrates this dynamic of financial distress showing up in other areas of the borrower's balance sheet while they service their payday loan debt on time.²²

Eventually though, this financial distress can cause a default on payday loans as well. In his seminal book on the history of the payday lending industry, Robert Mayer notes that the typical payday lending company must set aside just over three percent of loan volume for losses, anticipating one out of every thirty loans will go unpaid. However, because lenders, such as Advance America, report that their borrowers take out about 8 loans on average in a given year, one in four borrowers will incur a default. Mayer concludes that “[t]hese debtors will flounder and drown, but in most cases not before they have generated more in fee income than must be written off in principal.”²³

In our sample of Oklahoma borrowers, we find that 37 percent—or almost two out of every five borrowers—experience a “return event” within their first year of payday borrowing. This return event, or default, occurs when the borrower has failed to return to the lender to repay their loan on its due date or their check bounces when the lender attempts to collect on the debt at the borrower's bank. Within the first two years of borrowing, nearly half (44 percent) of borrowers we tracked had experienced such a default.

A study of a large Texas-based payday lender finds an even higher default risk for borrowers. Tracking payday borrowers' activity from 2000-2004, the authors find that over half (54 percent) of payday borrowers who took out loans on a bi-weekly basis defaulted. Over half of the defaulting borrowers could not pay on the loan further after the initial default, resulting in the debt being written off.²⁴

These defaults place additional financial stress on borrowers, with both the lender and the borrower's bank assessing NSF fees, which average over \$30 per incident. Those that fail to make good on the loan and late fee may be taken to court or have their debt sold to a collection agency. The borrower's bank account is also placed at risk, since the leading cause of a bank closing a customer's account is excessive overdrafts. In fact, research has shown that access to payday loans is linked with increased rates of involuntary bank account closures.²⁵

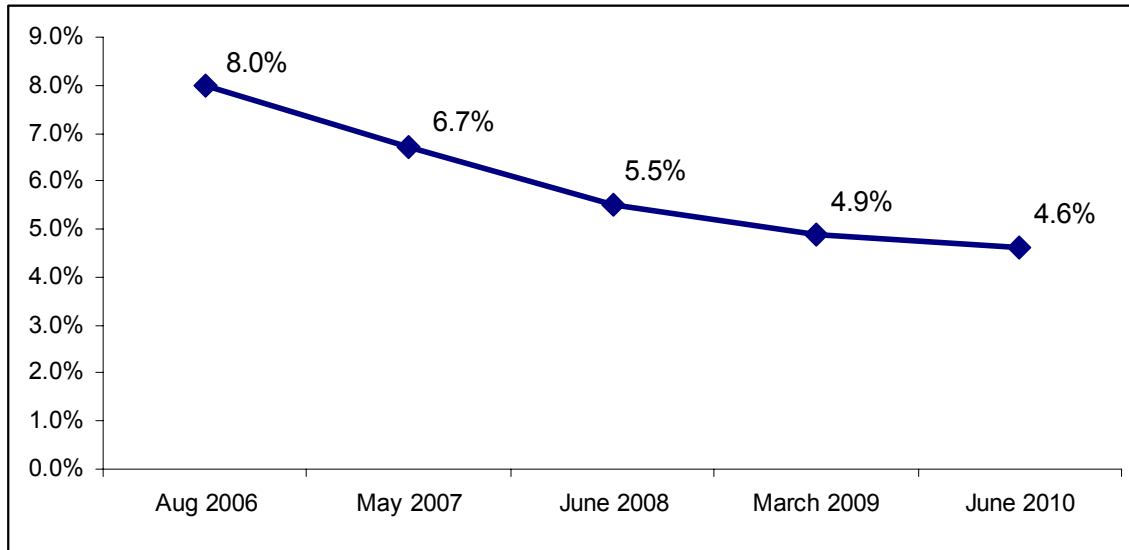
III. DISCUSSION

Tracking Oklahoma payday borrowers for 24 months from their initial loans reveals that many consumers end up indebted to payday lenders for a substantial period of time. This repeated borrowing is not an aberration; our previous research has found that the payday lending business model is dependent on keeping customers borrowing frequently over long periods of time—more than 60 percent of payday lending business is generated by borrowers who have 12 or more transactions per year. While the data clearly show a dependence on frequent borrowers, payday lenders also admit that long-term use of their product is harmful.

Keeping existing customers in extended periods of debt is important to the payday lending business model, since only a small base of new customers take out payday loans every year. The regulators in Florida and Oklahoma issue reports on payday lending activity over 12 month periods at somewhat regular intervals. These reports include what share of borrowers with transactions in the state are new to payday lending—meaning they have never taken a payday loan from a lender licensed in their state before.

As the graph below demonstrates, new borrowers make up a small share of total borrowers, and this percentage has declined to less than five percent of total customers in recent years.²⁶ For example, the August 2006 Oklahoma report found that 8 percent of borrowers were new over the year preceding that report; by its June 2010 report, this figure had dropped to 4.6 percent. Perhaps most interestingly, there was no discernable increase in new borrowers brought on by the financial crisis and subsequent tightening of the credit markets.²⁷

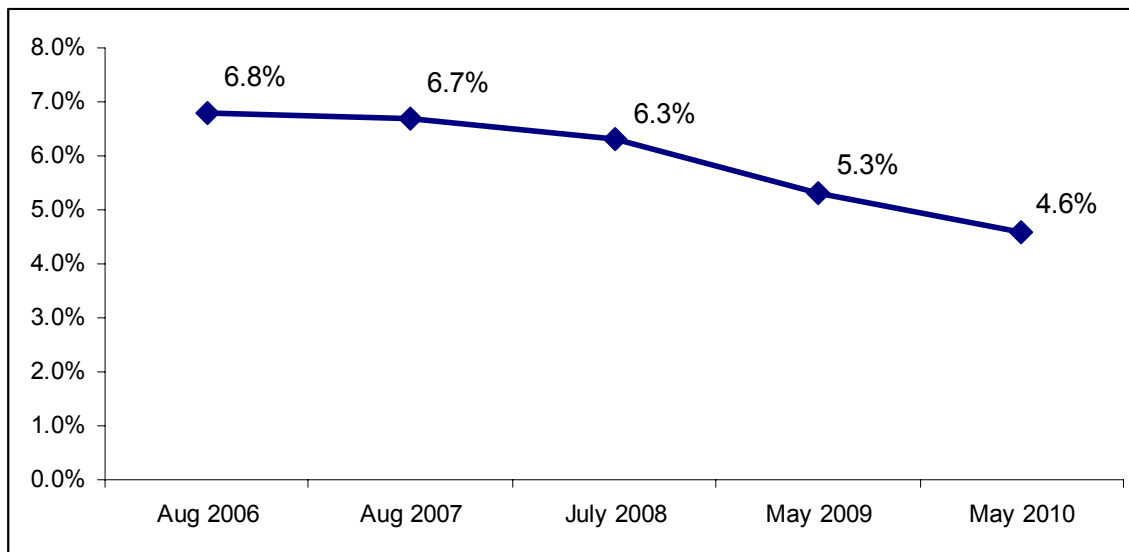
Chart 5: Share of borrowers who are “new” to payday lending in Oklahoma



Note: The dates in the chart above refer to the publication date of the report in which the share of new borrowers is reported for the preceding year.

We see a similar pattern when looking at regulator reports from Florida over roughly the same time period.

Chart 6: Share of borrowers who are “new” to payday lending in Florida



Note: The dates in the chart above refer to the publication date of the report in which the share of new borrowers is reported for the preceding year.

Put another way, well over 90 percent of payday borrowers conducting transactions in a given year are existing customers who remain payday borrowers for long stretches of time rather than new customers taking out their first loan. Because there are relatively few new borrowers entering the payday loan market, lenders have a strong incentive to keep existing customers borrowing on a regular, ongoing basis

This reality that underlies the payday lending business model is apparent in industry advertisements. These ads aim to get borrowers in the door the first time to try out a payday loan and then encourage them to keep borrowing. A survey of company websites and direct mail advertisements of the 15 largest payday lending companies from 2008-2010 showed that nine of these companies offered a free or discounted first loan and six offered a discount on loans for returning customers.²⁸ Offering a free first loan gives some suggestion of the industry's confidence that most borrowers will need to return often for new loans once the payday lending cycle begins and will make up for that initial "discount" many times over.

IV. CONCLUSION AND POLICY RECOMMENDATIONS

First-time payday borrowers take out a loan expecting a quick fix to a financial shortfall. However, our analysis demonstrates that these short-term loans often lead to long-term indebtedness. While the industry contends that the vast majority of its borrowers use the product responsibly—defined as using these loans only on an occasional basis for an unexpected financial emergency—our findings show otherwise. Even in a state such as Oklahoma that has a variety of protections in place, borrowers still remain in debt for a significant portion of the year. Among those borrowers who take loans regularly throughout this time period, the frequency and size of borrowing increases over time. In addition, on average, borrowers are indebted to payday lenders over twice as long as the FDIC found is appropriate for the product. The financial toll of this long-term high-cost debt results in more than one-third of those in our sample experiencing a default within their first year of payday loan usage, and close to half defaulting by the end of the second year.

The fundamental flaws of a payday loan are the product's design and weak underwriting. Payday lenders provide loans without giving consideration to a borrower's other obligations and therefore cannot gauge the borrower's ability to repay. They also require that the loan and fees be paid back in full from a single paycheck. To ensure households seeking to cover a financial shortfall with a small loan can do so without ending up in long-term debt and less financially secure, we recommend the following:

1. End special exemptions for payday lenders and other providers of high-cost credit that authorize triple-digit annual interest rates. Many states that are home to payday lenders and other providers of high-cost credit, such as car title lenders, have authorized this practice by creating a special exemption to the state's cap on interest rates that apply to all other small loan providers. Often, these exemptions were granted based on the payday lending industry's argument that its loans were to be used only occasionally for financial emergencies. Data from this and other analyses, however, clearly show that the industry does not function this way; instead, the average borrower stays indebted in payday loans for over half of the year.

Many states have rolled back their exemptions to existing double-digit interest rate caps for payday lenders in recent years.²⁹ Other states that did not have any interest rate caps on small loans have decided to subject all small loan lenders to an interest rate cap, including those making payday loans.³⁰ While these rate caps vary by state, they tend to be in the range of 36 percent annual interest, the historical median limit which protected citizens of many states from predatory lending throughout much of the 20th Century.³¹ As noted previously, 17 states and the

District of Columbia have rate caps that preclude triple-digit payday loans. Moreover, after considering how payday and other high-cost loans were harming the military, Congress enacted a 36 percent rate cap in 2006 to protect active-duty servicemembers and their families from payday loans nationwide. A study in North Carolina found that residents were overwhelmingly pleased to no longer have these loans offered in their state, and found other ways to deal with financial shortfalls.³²

2. Limit the amount of time a borrower can remain indebted in high-cost payday loans.

While a rate cap deals with the problem of predatory small loans comprehensively, regulators and policymakers at either the state or federal level, such as the Consumer Financial Protection Bureau, could—at a minimum—ensure that payday borrowers’ short-term loans do not turn into long-term debt by limiting the number of days in any 12-month period a borrower could be indebted to a payday lender. This could be done by following the FDIC’s guidance of no more than 90 days a year indebtedness—the equivalent of about six two-week loans. A measure such as this would help to ensure that lenders are providing these loans only as advertised—on no more than an *occasional* basis.

3. Ensure that small loans do not lead to debt traps by requiring sustainable loan terms and meaningful underwriting.

The FDIC and the NCUA have both laid out guidelines for what constitutes a responsible small loan with some similar features.³³ Both recognize that cash-strapped borrowers will need more than one pay cycle to repay their loan, and that payments should be in regularly amortizing installments. In an evaluation of its small loan pilot program, the FDIC concluded that “a longer loan term is key...because it provides more time for consumers to recover from a financial emergency than the single pay cycle for payday loans” and that “a 90-day loan term emerged as the minimum time needed to repay a small-dollar loan.”³⁴

Lenders should be required to assess a borrower’s ability to repay a loan in full without the need to refinance or immediately re-borrow by considering the borrower’s income and other obligations, rather than using access to a borrower’s bank account—either through taking a personal check or an ACH authorization—as security for the loan. Some states that have experimented with ability to repay standards for payday loans have only required lenders to limit loan sizes to a share of the borrower’s monthly income. This fails to take into account that most borrowers only have two weeks of income (rather than a month) available to repay a given loan. In addition, there is no accounting for the borrower’s other obligations and, therefore, the actual amount of money they have to repay the loan.³⁵

Facilitate efforts to help low- and moderate-income households save. All families, and especially those living paycheck-to-paycheck, would benefit from having savings that they could use as an alternative to taking on debt when an unexpected expense occurs. The Consumer Federation of America found that families earning \$25,000 per year with no emergency savings were eight times as likely to use payday loans as families in the same income bracket with more than \$500 in emergency savings.³⁶ Emergency savings can be encouraged and facilitated through a variety of means including small loan products with savings features, matched savings programs, and reforms to designs of government assistance programs, with asset limits that may discourage saving.³⁷

¹ For a more detailed discussion of how payday borrowers take out multiple consecutive loans, see Leslie Parrish and Uriah King, *Phantom Demand: Short-term due date generates need for repeat payday loans, accounting for 76% of total volume*, Center for Responsible Lending (July 9, 2009), available at <http://www.responsiblelending.org/payday-lending/research-analysis/phantom-demand-final.pdf>. Other research showing evidence that many borrowers take out multiple loans in a year include Marianne Bertrand and Adair Morse, *Information Disclosure, Cognitive Biases, and Payday Borrowing*, University of Chicago School of Business (March 2009) and Paige Marta Skiba and Jeremy Tobacman, *Do Payday Loans Cause Bankruptcy?*, Vanderbilt University Law School and University of Pennsylvania, (September 8, 2008).

² See 75 Fed. Reg. 24497 (May 5, 2010).

³ See Paige Marta Skiba and Jeremy Tobacman, *Do Payday Loans Cause Bankruptcy?*, Vanderbilt University Law School and University of Pennsylvania, (September 8, 2008); Sumit Agarwal, Paige Marta Skiba, & Jeremy Tobacman, *Payday Loans and Credit Cards: New Liquidity and Credit Scoring Puzzles?*, Federal Reserve Bank of Chicago, Vanderbilt University Law School, and University of Pennsylvania, (January 13, 2009); Brian T. Melzer, *The Real Costs of Credit Access: Evidence from the Payday Lending Market*, Kellogg School of Management, Northwestern University, (January 3, 2009); and Dennis Campbell, Asis Martinez Jerez, & Peter Tufano, *Bouncing out of the Banking System: An Empirical Analysis of Involuntary Bank Account Closures*, Harvard Business School, (December 3, 2008).

⁴ In addition to the District of Columbia, 17 states—including Arkansas, Arizona, Connecticut, Georgia, Maine, Maryland, Massachusetts, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Vermont, and West Virginia do not grant exemptions to interest rate caps that authorize triple-digit rate payday lending.

⁵ The Military Lending Act, which caps interest rates on small loans of 91 days or less to active duty military and their dependents, part of the John Warner National Defense Authorization Act for Fiscal Year 2007, was signed into law in October 2006. The interest rate cap took effect October 1, 2007.

⁶ Oklahoma regulator reports show that about 50,000-55,000 payday borrowers took out loans in the months of March, June, and September 2006. See *Oklahoma Trends in Deferred Deposit Lending*, Veritec Solutions LLC (August 2006) and *Oklahoma Trends in Deferred Deposit Lending*, Veritec Solutions LLC (May 2007).

⁷ States which currently operate a single database of all payday lending transactions to ensure compliance with regulations include Florida, Illinois, Kentucky, Michigan, New Mexico, North Dakota, Oklahoma, South Carolina, Virginia, Washington state, and Wisconsin.

⁸ See the results from focus groups conducted in California described in *2007 Department of Corporations Payday Loan Study*, Applied Management and Planning Group (December 2007) and a series of interviews with payday borrowers discussed in Nathalie Martin, *1,000% Interest—Good while supplies last: A study of payday loan practices and solutions*, Arizona Law Review Vol. 52 (2010). In addition, Paige Marta Skiba of Vanderbilt University and Jeremy Tobacman of the University of Pennsylvania have authored a series of studies documenting their findings of borrower outcomes using a database of 145,000 payday loan applicants from 2000-2004 from a large Texas-based payday and pawn lender.

⁹ *Your Guide to Responsible Payday Advances*, Community Financial Services Association of America. Available at http://www.cfsa.net/downloads/Your_Guide_to_Responsible_Use_of_Payday_Advances_English.pdf.

¹⁰ *OCC Advisory Letter on Payday Lending*, AL 2000-10 (Nov. 27, 2000).

¹¹ *Guidelines for Payday Lending*, FDIC Financial Institutions Letter FIL-14-2005 (February 25, 2005), available at <http://www.fdic.gov/news/news/financial/2005/fil1405a.html>.

¹² Since 15 percent of borrowers have just a single loan in year 1, we can assume they are indebted for zero days in year 2. Given that, we can estimate what number of days the remaining 85 percent of borrowers would be indebted to arrive at the overall average days reported by the Oklahoma regulator.

¹³ Leslie Parrish and Uriah King, *Phantom Demand: Short-term due date generates need for repeat payday loans, accounting for 76% of total volume*, Center for Responsible Lending (July 9, 2009)

¹⁴ Nathalie Martin, *1,000% Interest—Good while supplies last: A study of payday loan practices and solutions*, Arizona Law Review Vol. 52 (2010).

¹⁵ For purposes of our analysis, we assume that those borrowers active in the first half of year 2 are the same as those borrowers active in the second half of year 2. However, even if this assumption does not hold in all cases, the data still show an average of six loans in each six month timeframe, or one transaction a month for the average consumer that is using payday loans.

¹⁶ *2007 Department of Corporations Payday Loan Study*, Applied Management and Planning Group (December 2007).

¹⁷ During the 2006-2008 time period, three payday lending reports were issued by the Oklahoma regulator citing the average amount borrowers were indebted over the preceding 12 months. These averages were \$460.26, \$469.05, and \$467.94 for the August 2006, May 2007, and June 2008 reports, respectively, or an overall average of \$465.75. The reported amount of indebtedness for a single borrower takes into account that this borrower may have up to two loans outstanding at any given time. However, even if we only compare a borrower's initial loan to an average loan taken in Oklahoma during this time period (ranging from \$354 to \$378 per loan depending on the year), we find that the initial loan is for a significantly smaller amount. See *Oklahoma Trends in Deferred Deposit Lending*, Veritec Solutions LLC (August 2006), *Oklahoma Trends in Deferred Deposit Lending*, Veritec Solutions LLC (May 2007), and *Oklahoma Trends in Deferred Deposit Lending*, Veritec Solutions LLC (June 2008).

¹⁸ *Payday Lending Demographic and Statistical Information: July 2000 through December 2009*, Administrator of the Colorado Uniform Consumer Credit Code (March 2, 2010), available at http://www.coloradoattorneygeneral.gov/sites/default/files/uploads/DDLA_Summary2009corr.pdf

¹⁹ Some states require lenders to offer extended payment plans to borrowers who struggle with payday lending debt. However, many payday lenders are effective in dissuading borrowers from using this option. See page 15 in Uriah King and Leslie Parrish, *Springing the Debt Trap: Rate Caps are the Only Proven Payday Lending Reform*, Center for Responsible Lending (December 13, 2007).

²⁰ For example, the Community Financial Services Association's *Myth vs. Fact* notes that "More than 90 percent of payday loans are repaid when due..." available at http://www.cfsa.net/myth_vs_reality.html.

²¹ See historical credit card delinquency rates at <http://www.federalreserve.gov/releases/chargeoff/delallsa.htm>.

²² A study of payday borrowers with credit cards found that once the user began borrowing from a payday lender, they were 92 percent more likely to become delinquent on their credit card payment. See Sumit Agarwal, Paige Marta Skiba, & Jeremy Tobacman, *Payday Loans and Credit Cards: New Liquidity and Credit Scoring Puzzles?*, Federal Reserve Bank of Chicago, Vanderbilt University Law School, and University of Pennsylvania, (January 13, 2009). A study comparing low- and middle-income households in states with and without access to payday lending found that those who could access payday loans had increased chances of having difficulty of paying bills, or having to delay medical care, dental care, and prescription drug purchases. See Brian T. Melzer, *The Real Costs of Credit Access: Evidence from the Payday Lending Market*, Kellogg School of Management, Northwestern University, (January 3, 2009)

²³ Robert Mayer, *Quick Cash: The Story of the Loan Shark*, Northern Illinois University Press (2010), p 152-153.

²⁴ Paige Marta Skiba (Vanderbilt) and Jeremy Tobacman (U. Pennsylvania). *Payday Loans, Uncertainty, and Discounting: Explaining Patterns of Borrowing, Repayment, and Default*, Vanderbilt University Law School and University of Pennsylvania (August 21, 2008). Available at: <http://www.law.vanderbilt.edu/faculty/faculty-personal-sites/paige-skiba/publication/download.aspx?id=1636>.

²⁵ Incurring NSF fees as a result of payday loan defaults may ultimately cause a borrower to lose their banking account privileges—the leading cause of involuntary bank account closures is the customer becoming excessively overdrawn, and households with access to payday loans experience higher involuntary bank account closure rates than those with no access to these loans. See Dennis Campbell, Asis Martinez Jerez, & Peter Tufano, *Bouncing out of the Banking System: An Empirical Analysis of Involuntary Bank Account Closures*, Harvard Business School, (December 3, 2008).

²⁶ The decreasing share of new borrowers over time is likely attributable to the fact that as more borrowers are entered into the database system over several years, the base naturally grows. Thus, new borrowers will make up a declining share of total borrowers in the database. It is possible, however, that the actual number of new borrowers entering the system is also declining over time.

²⁷ While rising unemployment could temper demand for payday loans, some payday lenders have recently begun allowing unemployment benefits to be used as proof of an income stream. In addition, we find no evidence that the higher levels of underemployment, which might cause more financial shortfalls, have translated into a rise in payday loan users.

²⁸ A more detailed analysis will be provided in a forthcoming paper from CRL showing how payday lenders do not compete with each other based on differences in pricing or product offerings.

²⁹ For example, an existing payday loan authorization was allowed to expire in Arizona in July 2010, and recent laws in Ohio, Oregon and the District of Columbia curtailed payday lenders' ability to offer loans at triple-digit rates.

³⁰ In Montana and New Hampshire, laws were passed by ballot initiative and the legislature respectively to establish interest rate caps on a range on small loan products which are regulated at the state level.

³¹ For a comprehensive discussion on the history of usury laws in the United States and their impact on small loans, see Christopher L. Peterson, *Usury Law, Payday Loans, and Statutory Sleight of Hand: Salience Distortion in American Credit Pricing Limits*, *Minnesota Law Review* (Winter 2008) and Lynn Drysdale and Kathleen Keest, *The Two-Tiered Consumer Financial Services Marketplace: The Fringe Banking System and its Challenge to Current Thinking About the Role of Usury Laws in Today's Society* (2000).

³² Kim Manturuk and Roberto Quercia, *North Carolina Consumers after Payday Lending: Attitudes and Experiences with Credit Options*, UNC Center for Community Capital (November 2007), available at http://www.ccc.unc.edu/abstracts/1107_NorthCarolina.php

³³ See the FDIC's Financial Institution Letter FIL-50-2007, available at www.fdic.gov/news/news/financial/2007/fil07050a.html and the NCUA's announcement of its payday loan alternative product at http://www.ncua.gov/news/press_releases/2010/MA10-0916MatzPaydayLoan.pdf for a discussion of affordable small loan guidelines. Most notably, each program encourages loans with longer terms which are repayable in installments.

³⁴ "A Template for Success: The FDIC's Small-Dollar Loan Pilot Program," *FDIC Quarterly*, 2010, Vol. 2 No. 2, available at

http://www.fdic.gov/bank/analytical/quarterly/2010_vol4_2/FDIC_Quarterly_Vol4No2_SmallDollar.pdf

³⁵ A few states have ability to repay standards which limit payday loan indebtedness to 20-25% of total gross monthly income. However, because these loans are typically due in two weeks, the borrower only has available half of this monthly income to repay, and likely has other obligations that will consume much of a paycheck that are not considered in current ability to repay provisions.

³⁶ Testimony of Jean Ann Fox, Director of Consumer Protection, Consumer Federation of America before the Subcommittee on Domestic Policy of the House Committee on Oversight and Domestic Reform (March 21, 2007).

³⁷ For more information on how policymakers and regulators could encourage households to save and reform policies that discourage saving among low-income households, see Cramer et al. *The Assets Agenda 2011: Policy Options to Promote Savings and Asset Development*, New America Foundation (September 2010), available at http://assets.newamerica.net/sites/newamerica.net/files/policydocs/Assets_Agenda_2011.pdf. In addition to these broader policy ideas, several financial institutions have created small loan programs that can serve as alternatives to payday loans that incorporate savings features. The goal of these programs is to help borrowers build savings so that eventually they can tap into their own reserves if they have a financial short-fall. Some examples of these initiatives include the state-wide Pennsylvania Better Choice program (<http://www.patreasury.org/betterChoice.html>) and the Salary Advance loan offered by one of the country's largest credit unions, the North Carolina State Employees Credit Union (<https://www.ncsecu.org/Loans/SalaryAdvance.html>).

APPENDIX: PUBLIC RECORDS REQUEST QUESTIONS AND ANSWERS

Study parameters: An analysis of Oklahoma borrowers entered into the database in March, June, and September 2006 (the “study cohort”)

Initial loan data:

1. Total number of new borrowers which comprise the study cohort

11,062

2. For these borrowers’ first transactions: the average (median) loan size, average (median) loan term, average (mean and median) fee charged

Mean loan size: \$278.83

Median loan size: \$250.00

Mean loan term: 30.70 days

Median loan term: 17 days

Mean fee charged: \$36.70

Median fee charged: \$37.50

Repeat/consecutive borrowing:

1. Number/percent of study cohort borrowers who continued to use the product over the course of 12 months, over the course of 18 months, over the course of 24 months.

Continued use within months 0-12: 9,421 (85.2%)

Continued use within months 13-18: 4,413 (39.9%)

Continued use within months 19-24: 3,661 (33.1%)

(note: “continued use” for each time period is defined as follows: (1) for months 0-12, borrowers with more than one transaction during this time period; (2) for months 13-18, borrowers with at least one transaction during this time period; (3) for months 19-24, borrowers with at least one loan during this time period.)

2. Average (median and mean) number of transactions per borrower over the first 12 months; over the first 18 months; over the first 24 months *(note: we would want this reported two ways—(1) for all study cohort, even if they are no longer active borrowers after the first year and (2) only for “active” borrowers who are continuing to use the product during these time periods, ex: to measure the average number of transactions over 18 months, we would only look at borrowers with at least one transaction between months 12-18; to measure the average number of transactions*

over 24 months, we would only look at borrowers with at least one transaction between months 18-24)

(1) For all study cohort, even if no longer active:

Mean number of transactions per borrower 0-12 months: 9.31
Median number of transactions per borrower 0-12 months: 7

Mean number of transactions per borrower 13-18 months: 2.52
Median number of transactions per borrower 13-18 months: 0

Mean number of transactions per borrower 19-24 months: 2.10
Median number of transactions per borrower 19-24 months: 0

(2) Only for “active” borrowers (at least one loan during period in question)

Mean number of transactions per borrower 0-12 months: 9.31
Median number of transactions per borrower 0-12 months: 7

Mean number of transactions per borrower 13-18 months: 6.32
Median number of transactions per borrower 13-18 months: 6

Mean number of transactions per borrower 19-24 months: 6.36
Median number of transactions per borrower 19-24 months: 6

3. On average (mean and median), how many days are cohort borrowers indebted within a 12 month period? 18 month period? 24 month period?

Over 12 month period, mean days indebted: 211.87
Over 12 month period, median days indebted: 228

Over 18 month period, mean days indebted: 298.39
Over 18 month period, median days indebted: 313

Over 24 month period, mean days indebted: 372.45
Over 24 month period, median days indebted: 375.5

Return events:

1. Percent of cohort borrowers that have experienced a “return event” over the first 12 months, over the first 18 months, over the first 24 months. How many transactions on average (mean and median) has the study cohort borrower opened before this return event occurs?

Returns in first 12 months: 4,089 (37%)

Mean number of loans before return: 5.86
Median number of loans before return: 4.50

Returns in first 18 months: 4,506 (40.7%)
Mean number of loans before return: 7.34
Median number of loans before return: 5.00

Returns in first 24 months: 4,810 (43.5%)
Mean number of loans before return: 8.58
Median number of loans before return: 5.00

(note: the number of return events is cumulative)

RESEARCH ARTICLE

INVESTIGATING THE SOCIAL ECOLOGY OF PAYDAY LENDING

Does fringe banking exacerbate neighborhood crime rates?

Investigating the social ecology of payday lending

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Payday lenders have become the banker of choice for many residents of distressed urban communities in the United States. By offering cash advances on postdated checks, these businesses provide a growing number of financially strapped families the money they need to get by at least in the short run. As just one piece of a growing fringe banking industry (consisting of check cashers, pawn shops, rent-to-own stores, and other high-cost financial services), payday lenders provide services but at a heavy cost to some of the most financially vulnerable families. Much attention has been given to the costs the customers of such services are incurring. Yet additional broader community costs might have been ignored in recent debates and in the scholarly literature. One of those costs, and the focus of this research, is a possible link between payday lending and neighborhood crime rates.

We thank Robert Nash Parker and Glenn Deane for comments on an earlier draft of the article and Megan DeCrappeo for research assistance with this project. We are especially grateful to Ruth Peterson and Lauren J. Krivo for providing us with the data, which were prepared with funds from the National Science Foundation (SES-0080091). Direct correspondence to Charis E. Kubrin, Department of Sociology, George Washington University, Phillips Hall 409, 801 22nd St. N.W., Washington, DC 20052 (e-mail: charisk@gwu.edu).

Although pawn shops, loan sharks, and other predatory financial service providers have long histories, the number and range of such fringe banking institutions have mushroomed in the latter part of the 20th and early years of the 21st centuries amid great controversy. In financial services, the rise of subprime and predatory lending has led to record foreclosure rates. A broader economic recession is now reaching overseas. These developments have been followed by unprecedented bailout and rescue plans. Although these events have received most of the attention in financial industry circles, the increase in payday lending and other high-priced services has hardly gone unnoticed. Critics accuse payday lenders with charging exorbitant, exploitative interest rates and fees, and several states have taken legal action to restrict their activities or virtually put them out of business altogether. Providers maintain that they are offering valuable services to markets that are ignored by conventional financial services (e.g., banks, thrifts, and credit unions) and that their costs simply reflect the risks they encounter as well as other legitimate business costs.

The debates over payday lending so far have focused almost exclusively on the implications for immediate customers. Yet given the location of these services and the socioeconomic status of their customer base—what we refer to as the ecology of payday lending—other costs might be incurred by the communities in which they are located, costs that are paid by community members who do not use their services along with those paid by the clients. One potential cost for all residents might be higher crime rates in communities where payday lenders are located. Several theoretically plausible reasons have been suggested for such a link, starting with the simple fact that where payday lenders are present, a concentration of cash exists among store customers often late into the evening and during weekends in neighborhoods where many residents are experiencing financial hardships.

In the following pages, we provide some empirical evidence that such a connection, in fact, exists. Subsequently, we report on a case study of a fairly typical U.S. city where payday lending has grown in recent years—Seattle, Washington. In our discussion leading up to the analysis, we document the growth of payday lending and other fringe banking services in the United States and describe the controversy that such growth has produced. Next, we elaborate several theoretical arguments that support the hypothesized relationship between payday lending and neighborhood crime rates. Finally, we provide empirical evidence for that relationship in Seattle neighborhoods. Crime is just one community cost that might be associated with payday lending. In the conclusion, we briefly note other potential costs. We conclude with a discussion of the policy implications of our findings and recommendations for future research.

The Growth of Fringe Banking and Payday Lending

A two-tiered system in financial services has emerged in the United States in recent years, with one featuring conventional products distributed by banks and savings institutions and the other featuring alternative, higher cost services offered by payday lenders, check

cashers, and pawnshops—often referred to as “fringe bankers.” Fringe banking services are disproportionately though not located exclusively in low-income, minority neighborhoods (Fellowes, 2006; Graves, 2003; Li, Parrish, Ernst, and Davis, 2009; Logan and Weller, 2009; Temkin and Sawyer, 2004), and minority and low-income families are more likely than other families to use fringe banking services (Caskey, 1994; Hudson, 1996; Karger, 2005).

Fringe banking has been the subject of much policy debate among financial service providers, regulators, elected officials, and consumer groups. This reflects, in part, substantial growth of fringe banking, its greater concentration in distressed communities, and adverse economic consequences for those who rely on these institutions for financial services. To illustrate, payday lending outlets were virtually nonexistent in 1990, but by 2006, more than 15,000 outlets extended \$25 billion in credit (Lawrence and Eliehausen, 2008: 299). By 2008, more than 22,000 locations originated more than \$27 billion in loan volume annually (Parrish and King, 2009: 11).¹ The growth of payday lending has been impressive, growing faster than Starbucks during the mid-1990s (Graves and Peterson, 2008: 668). Today, more payday lenders exist than McDonald’s restaurants (Karger, 2005: 73).

Several studies demonstrate that these services are concentrated in low-income and minority neighborhoods, although they are starting to grow in many working and middle-class neighborhoods. In North Carolina, three times as many payday lenders per capita are present in African American neighborhoods as in White neighborhoods (King, Li, Davis, and Ernst, 2005). In the state of Washington, the site of the current study, they are twice as likely to be located in predominantly African American as White areas, and they also are concentrated in poverty zip codes (Oron, 2006). In California, they are eight times as concentrated in African American and Latino neighborhoods as in White neighborhoods. Even controlling on income, poverty, population, education, and other socioeconomic factors, the racial disparity persists (Li et al., 2009: 2). In Denver neighborhoods where the median income is below \$30,000, one check-casher exists for every 3,196 residents compared with one check casher for every 27,416 residents in neighborhoods where the median income is between \$90,000 and \$120,000 (Fellowes, 2006: 26–28).²

These services are expensive, and it is struggling working families who are paying the highest costs. The Center for Responsible Lending reported that payday lending costs U.S. families \$4.2 billion annually in excessive fees, or fees that exceed the risk posed by

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1. Payday loans are cash advances on a postdated personal check generally for 2 weeks or less when the borrower will receive the next paycheck. Amounts are typically in the range of \$300 to \$500. To qualify, a borrower must have a checking account, source of income, and identification. Typically, the borrower writes the check for an amount exceeding the cash loan (to cover the finance charge, generally \$15–\$30 per \$100 or approximately a 390–780% annual percentage rate for a 2-week loan). At the next payday, the borrower can repay the full loan amount, the check could be deposited for payment, or the borrower can pay the finance charge and renew the loan for another term (Consumer Federation of America, 2007: 3, 4).
 2. Check cashers are businesses that charge a fee for cashing checks (Karger, 2005: 215).

borrowers and the costs of similar services provided by conventional financial institutions (King, Parrish, and Tanik, 2006: 2,7). Ironically, more than 75% of these fees cover the costs of loans taken out by borrowers to repay debts incurred from previous payday loans, which they could not pay when the debt originally came due (Parrish and King, 2009: 11). Payday lenders claim that their fees simply reflect the costs of doing business.

Payday lenders also assert their borrowers are primarily middle income, although recent research indicates it is low- and moderate-income borrowers who constitute a disproportionate share of customers. A study of Colorado borrowers found that those earning less than \$30,000 a year make up two thirds of payday lender customers. A Texas study found that the median income of borrowers was \$18,540 (Fox, 2007: 6, 7). A 2001 nationwide survey found that 23% earned less than \$25,000 and that 51.5% earned between \$25,000 and \$50,000 (Lawrence and Elliehausen, 2008: 305). In its 2007 Survey of Consumer Finances, the Federal Reserve, for the first time, asked whether respondents had taken out a payday loan in the previous year. Those who did so had a median income of \$30,892 compared with \$48,397 for those who had not taken out such loans. Payday loan borrowers had a median net worth of zero compared with \$80,510 for nonborrowers (Logan and Weller, 2009: 8).

The industry also claims that its customers are generally people who use their services only on rare occasions to meet sudden emergencies. According to the 2001 survey, however, more than 22% had 14 or more payday loans that year, another 26% had more than 6, and just 15% had only 1 or 2 (Lawrence and Elliehausen, 2008: 311). The Center for Responsible Lending found that less than 2% of all payday loans went to borrowers who just took out one loan. Repeat borrowing was more common with more than 60% of loans going to those who took out 12 or more loans per year and 24% going to those with 21 or more per year (King and Parrish, 2007: 2, 3). Half of these loans were taken out within 1 day of repaying a previous loan, indicating that borrowers often take out such loans to retire the debt of previous payday loans (Parrish and King, 2009: 8). Given the high fees and frequent use, payday loans have been referred to as “debt traps” by many consumer groups (Fox, 2007: 7, 8).

Policy makers have begun to listen to consumer complaints. In 2006, the U.S. Congress prohibited payday lending to military members and capped at 36% the interest rate that could be charged to them on any loan in connection with any other product (Powers, 2006). Fifteen states and the District of Columbia have small loan usury laws or rate caps that effectively prohibit payday lending at triple-interest rates (Center for Responsible Lending, 2010: 7). Several other states and Congress are considering legislation and regulations restricting such lending (*American Banker*, 2007). However, some national banks (e.g., Wells Fargo and U.S. Bank) are now offering “direct deposit advance” or “checking account advance” products that are similar to payday loans. Because the Office of the Comptroller of the Currency has preempted many state banking laws, the national banks it regulates

legally can make such loans, and they are doing so in at least six of the states with the 36% cap (Center for Responsible Lending, 2010).

All this attention is generated primarily by the growth of the industry, the fees that are being charged, and the customers and neighborhoods that are being targeted. Borrowers are clearly paying high costs, as already noted. Lost in this discussion, however, are the broader costs that many communities might be incurring, including perhaps heightened levels of crime. Payday lenders seem to be more concentrated in precisely those neighborhoods where crime rates are highest and where ex-offenders are most likely to return when they leave prison (Lynch and Sabol, 2001: 3; Rose and Clear, 1998; Visser, Kachnowski, LaVigne, and Travis, 2004). No research, however, has examined the direct impact of fringe banking services on neighborhood crime rates. There is reason to believe that such a connection exists and that it is costly.

Theoretical Context of the Payday Lending-Crime Nexus

Theoretical arguments for why payday lending and crime might be related draw on a mixture of criminological perspectives. At a minimum, the availability of cash in distressed neighborhoods at readily identifiable businesses frequently operating with evening and weekend hours suggests a probable link between crime and payday lending, according to routine activities theory. According to this theory, crime can be understood in terms of the “routine activities” of everyday life including what we do, where we go, and with whom we interact on a daily basis (Cohen and Felson, 1979). At its core is the idea that, in the absence of effective controls, offenders will prey on attractive targets. In the current context, residents who use payday lenders often leave these establishments with great sums of cash in their wallets and at late hours in the evenings as well as on the weekends, a fact likely not overlooked by potential criminals.

It is also reasonable to believe that some increase in crime could be attributable to the manner in which payday lenders might lubricate the cash-only drug trade. In places where cash is available on a moment’s notice to anyone with a job or government check, those wanting to fuel an addiction, or deviant lifestyle, need not wait until payday with ample payday loan opportunities.

Persons who find themselves in an ever-descending debt spiral, perhaps pressured by the threats of debt collectors, also would seem more likely to suffer from emotional difficulties that manifest themselves in violence, particularly against family, coworkers, friends, and neighbors, as strain theory would predict. Agnew (1992) claimed that strain, which can result from the presentation of negative stimuli (e.g., going into debt), can produce “negative affective states,” including anger, fear, frustration, or depression, that might lead to crime. This result is especially likely to occur among individuals who have few resources for coping with strain. Along these lines, it is also easy to imagine that hopelessly indebted persons might turn to other forms of crime to compensate for the debt incurred to payday lenders.

Perhaps the greatest insight on the payday lending-crime nexus comes from social disorganization theory, which has emerged as the critical framework for understanding the relationship between neighborhood characteristics and crime in urban areas. According to the theory, certain neighborhood characteristics can lead to social disorganization, defined as the inability of a community to realize the common values of its residents and to maintain effective social controls (Kornhauser, 1978: 120). Social disorganization, in turn, can lead to more crime.

The most commonly studied aspects of neighborhoods include economic deprivation, residential instability, and population heterogeneity. An impressive literature produced over decades has found that these and related characteristics are positively associated with community crime rates, both directly and indirectly through their effect on neighborhood processes such as informal social control and collective efficacy (for a review of this literature, see Kubrin and Weitzer, 2003).

Along with these community characteristics, local institutions are theorized to play a key role in shaping crime rates. This effect occurs in large part because such institutions structure the daily interaction patterns of residents, affect the ability of communities to exercise social control, and influence available routes to valued goals such as economic or community development. Disadvantaged neighborhoods, in particular, have difficulty attracting and maintaining the types of local institutions that impede crime by providing community stability, social control, and alternatives to occupy residents' time (Peterson, Krivo, and Harris, 2000: 32).

Neighborhood studies of crime have focused on a variety of local institutions such as bars, public housing, and recreational facilities. It is argued that recreation centers and libraries:

provide places and activities where people can gather, thereby structuring time and observing each other in public. To the degree that these institutions offer organized activities, they place local residents in settings that promote and facilitate the sharing of common values and goals. As this occurs, community networks are more likely to form and fulfill control functions. (Peterson et al., 2000: 34)

Other types of local institutions, however, such as bars, might serve to encourage criminal behavior in neighborhoods. Researchers have argued that their presence can cause crime directly by inducing violence within these establishments themselves (because of intoxication and impaired judgment) and indirectly by undermining informal social control in communities where bars are densely located (Parker, 1995; Roncek and Maier, 1991).

In a study on the role of local institutions and their effect on violent crime rates in Columbus, Ohio, neighborhoods, Peterson et al. (2000) found support for these arguments. They documented that a greater prevalence of recreation centers reduces violent crime, at least in the most economically disadvantaged areas of Columbus. They also documented

that a greater prevalence of bars in Columbus tracts is related to higher levels of violent crime. Beyond their study and previous research, however, they claimed that “scholars have not explored the empirical linkages between the presence of various types of institutions and neighborhood crime” (2000: 36) and cautioned that “additional research is needed to specify more fully what types of institutions . . . will have the most payoff” (2000: 57) for reducing community crime rates.

We would like to add payday lenders to the list of local institutions that might affect community crime rates. In line with social disorganization theory, we argue that a concentration of payday lenders might constitute a visible sign of neighborhood disorder and decline. According to research, disorder has been shown to increase fear of crime (Taylor, 2001) and to reduce informal social control, thereby increasing crime (Wilson and Kelling, 1982). Skogan (1992), in particular, characterizes disorder as an instrument of destabilization and neighborhood decline, with implications for community crime rates.

In summary, several reasons suggest why the presence of payday lenders in neighborhoods might be associated with violent and property crime rates in those neighborhoods. Previous research has investigated the relationship between crime and residential instability, poverty, unemployment, and other factors. Previous research also has documented the effect of local institutions on community crime rates including bars and recreational facilities. To date, however, no research has systematically examined the relationship between payday lending and crime. In fact, little overlap has occurred in the payday lending and crime literatures, despite the plausibility of such a relationship. As such, this study is the first empirical examination of the fringe banking–neighborhood crime nexus.

The Research Context

The city of Seattle, Washington, was selected because it is a representative major U.S. city (with a population of more than 550,000, of which non-Whites account for 30%) and is located in a state where payday lending has grown substantially over the last several years. Payday lending was legalized in Washington State in 1995. It grew slowly at first but then gained momentum in 2003 when the state legislature increased the maximum loan amount from \$200 to \$700. In Seattle, the number of payday lenders has grown from 37 in 2003 to 52 in 2007, an increase of nearly 41%. Equally important, as in most metropolitan areas, the location of payday lenders in Seattle is concentrated in low- and moderate-income and minority communities, where crime rates are the highest. We also selected Seattle as our study site because it is typical in terms of the number and density of payday lenders. Payday lenders in Seattle do not exhibit any unusual spatial pattern as one might find in heavily ghettoized cities or in cities with a significant military presence. Finally, we chose Seattle because it has been the focus of numerous studies of community crime rates over the last 20 years (Crutchfield, 1989; Kubrin, 2000; Matsueda, Drakulich, and Kubrin, 2006; Miethe and McDowall, 1993; Warner and Rountree, 1997). The current study builds on this literature.

The primary question we explore is whether those neighborhoods that have a relatively greater share of payday lenders exhibit higher crime rates after taking into consideration a range of factors known to be associated with crime (e.g., poverty, unemployment, population turnover, and related socioeconomic factors). We continue to consider that question in analyses that attempt to account for analytic complexities such as spatial autocorrelation and endogeneity. The findings will inform current policy debates and suggest directions for future research on the impact of payday lending.

Data and Methodology

To examine the relationship between payday lending and neighborhood crime rates, we perform a series of regression analyses using data on the location of payday lenders in conjunction with census and crime data for census tracts in Seattle. Census tracts approximate neighborhoods and are the smallest geographic level for which all three data sets are available.³

Independent Variables

Our key independent variable is the prevalence of licensed payday lenders in Seattle census tracts in 2005. To calculate this variable, we divide the number of payday lenders in a tract by the tract population size (expressed in units of 1,000 persons) and take the natural logarithm of this rate.⁴ The raw data on payday lenders were collected by Steven Graves as part of a larger study focused on payday lenders and the military (Graves and Peterson, 2005). The street address for each lender was assigned a census tract number using ArcView GIS. In the 116 Seattle tracts for which crime data were available, 44 lenders were in operation in 2005. This number is comparable with other major U.S. cities including Milwaukee (41), Fort Worth (62), San Francisco (45), and Salt Lake City (53). The minimum number of payday lenders in a Seattle tract was 0, whereas the maximum was 4. The mean number of lenders across all tracts was .38.

The following variables were constructed from the 2000 U.S. Census to reflect critical neighborhood differences: *percent secondary sector low-wage jobs* (percent of total employed civilian population age 16 years and older employed in the six occupations with the lowest mean incomes),⁵ *jobless rate* (percent of civilian labor force age 16–64 years who

3. Seattle has 123 census tracts, but only 116 were included in the analyses. Recently, several tracts have been reconfigured into other tracts or eliminated altogether. Tract 23 is now subsumed in tract 40, tract 55 is now subsumed in tract 57, and tract 37 no longer exists. The remaining tracts were excluded because they encompass unique areas without corresponding census data. Tract 53 is excluded because it encompasses the University of Washington campus, and tracts 83 and 85 are excluded because they encompass the University's medical complex.

4. We added a constant of 1 to the rate prior to computing the logarithmic transformation.

5. The occupations include health-care support; food preparation and serving-related occupations; building and grounds cleaning and maintenance; personal care and service; farming, fishing, and

are unemployed or not in the labor force), *percent professionals and managers* (percent of employed civilian population age 16 years and older in management, professional, and related occupations), *percent high-school graduates* (percent of adults age 25 years and older who are at least high-school graduates), *poverty rate* (percent of the population for whom poverty status is determined whose income in 1999 was below the poverty level), *percent Black* (percent of the total population that is non-Hispanic Black), *percent young males* (percent of the total population who are males between the ages of 15 and 24 years), *residential instability index* (index comprising percent renters, or percent of occupied housing units that are renter occupied, and percent movers, or percent of population ages 5 years and older who lived in a different house in 1995),⁶ *percent female-headed households* (percent of households that are female-headed with no husband), and *population* (tract population).⁷ The literature has demonstrated that these characteristics are related to community crime rates in a variety of cities throughout the United States (Krivo and Peterson, 1996; Kubrin, 2000; Morenoff et al., 2001; Warner and Rountree, 1997).

An important variable that classifies tracts as within or not within the Seattle Central Business District (CBD) is included in the analyses because few and atypical residents live in CBD tracts. In Seattle, CBD residents tend to be urban professionals with high incomes or people who are poor and homeless. Controlling for whether tracts are inside or outside the CBD minimizes the likelihood that the unique characteristics of this area will distort the results (Crutchfield, 1989).

Previous community-level studies have found it necessary to address the problem of multicollinearity among the independent variables. To evaluate this issue, we examined variance inflation factor (VIF) scores, which confirmed the high level of collinearity among many disadvantage-related variables. Using these diagnostics and previous research as a guide (e.g., Sampson and Raudenbush 1999: 621), we performed principal components factor analysis with varimax rotation. Not surprisingly, the results suggest that the disadvantage-related variables all load on a single component with an eigenvalue of 4.39. This component, which we label *Neighborhood Disadvantage*, explains 73% of the variance and consists of the following variables (factor loadings in parenthesis): percent secondary sector low-wage jobs (.94), jobless rate (.87), percent professionals and managers (-.86), percent high-school graduates (-.93), poverty rate (.80), and percent Black (.71).⁸

forestry; and material moving. The mean wages were derived from 2000 census data available in the Integrated Public Use Microdata Series (ipums.org).

6 The index represents the average of the standardized scores of these two variables.

7 All census data used in the study were compiled by Ruth D. Peterson and Lauren J. Krivo (2006) as part of the National Neighborhood Crime Study (NNCS). The NNCS contains information on the Federal Bureau of Investigation's Index crimes and sociodemographic characteristics for census tracts in a representative sample of large U.S. cities for 2000.

8. Similar to prior research, we include percent Black in the disadvantage index because of its high correlation with the other items that comprise the index. Treating percent Black as a separate covariate

In the analyses, the disadvantage index is used along with the residential instability index, young male rate, rate of female-headed households, total population, central business district, and our payday lending measure to predict Seattle neighborhood crime rates.⁹

Dependent Variables

Data used to compute violent and property crime rates at the census tract level come from Seattle Police Department annual reports. Following common practice, multiple year (2006–2007) average crime rates (per 1,000 population) were calculated to minimize the impact of annual fluctuations.¹⁰ The violent crime rate sums murder, rape, robbery, and assault rates, whereas the property crime rate is calculated as a sum of the burglary, larceny, and autotheft rates.¹¹

Analytic Issues and Strategy

One critical issue in neighborhood research is that of spatial dependence. Crime is not randomly distributed but is spatially concentrated in certain areas in the metropolis. Formally, the presence or absence of this pattern is indicated by the concept of spatial autocorrelation, or the coincidence of similarity in value with similarity in location (Anselin, Cohen, Cook, Gorr, and Tita, 2000: 14). When high values in a location are associated with high values at nearby locations, or low values with low values for neighbors, positive spatial autocorrelation or spatial clustering occurs. In analyses using spatial data, such as in the current study, one must attend to potential autocorrelation because ignoring spatial dependence in the model might lead to false indications of significance, biased parameter estimates, and misleading suggestions of fit (Messner, Anselin, Baller, Hawkins, Deane, and Tolnay, 2001: 427).

In the current study, we address potential spatial dependence by mapping the residuals from our regression analyses and running a series of diagnostic tests to check for problematic levels of spatial autocorrelation. We used multiple variants of the Moran's I test and several software packages, including GeoDA, SPSS, ArcMap 9.3, and s3 (Mathematica).

results in levels of collinearity that create partialling and interpretation difficulties in regard to the disadvantage and percentage Black variables. In analyses not shown here, we computed supplemental models with percent Black as a separate covariate. The substantive results regarding payday lending and crime did not change in those models.

9. Examination of collinearity diagnostics revealed no multicollinearity problems in the parameter estimates presented subsequently (maximum VIF was 2.5).
10. Crime data by census tract for 2008 through the present have not yet been released publicly.
11. Histograms and descriptive statistics indicate that several variables are highly skewed, and we include log-transformed versions of these variables in the analyses that follow. Transformed variables include the young male rate, payday lender rate, and violent and property crime rates.

A second critical issue has to do with the possibility that endogeneity might be found in the payday lending–crime relationship. Although it is our contention that the most well-grounded theoretical relationship is one in which the presence of payday lenders in an area affects the crime rate, we acknowledge the possibility that the relationship might be reciprocal (i.e., crime could affect where payday lenders set up shop). One reason for this trend is that moderate levels of crime might serve as an environmental signal that informs payday lenders of locations where a reasonably high demand should exist for the sorts of financial services they provide. To the extent this argument has some merit, it seems prudent to account for the possibility that payday lenders might be an endogenous, rather than an exogenous, regressor in our analyses. As discussed subsequently, we do this by implementing an instrumental variables model, a commonly used approach to model endogeneity in social relationships.

Given the issues just raised and our focus on investigating the relationship between payday lending and neighborhood crime rates, after providing some descriptive statistics, our multivariate analysis begins with the estimation of a series of ordinary least-squares (OLS) regression analyses in which the effects of payday lending on crime are examined. In the first model, we assess whether payday lending and crime rates are associated using a baseline model in which only payday lending is included. In the second model, we introduce into the analysis the standard neighborhood crime correlates (e.g., neighborhood disadvantage, residential instability, etc.) to determine whether any payday lending effect withstands these controls. In the third model, we make an effort to allow for the possibility that our payday lending measure is endogenous by estimating an instrumental variables regression via the two-stage least-squares (2SLS) estimator. To implement the instrumental variable model, we require an instrument that is justified on theoretical grounds and meeting the following conditions: (a) It is highly correlated with the measure of payday lenders, and (b) it is uncorrelated with the disturbance terms from the payday lending–crime equations. To that end, we instrument payday lender rates with a measure of the prevalence of Federal Deposit Insurance Corporation (FDIC) banking institutions (i.e., the natural log of banks per 1,000 population). Our theoretical justification for this instrument follows below.

Within the limits of zoning regulations, FDIC banks are likely to locate themselves strategically to provide convenient access to consumers with financial and banking needs. Payday lenders, in turn, are likely to opt for locations in relative proximity to traditional banks for several reasons. First, because FDIC banks are likely to be located in an advantageous position relative to consumer demand, setting up shop nearby provides payday lenders with access to a steady flow of potential customers. Second, because payday lenders tend to provide services that traditional banks do not (e.g., short-term loans to customers with weak credit histories, nighttime, and weekend hours), a location near an FDIC bank provides potential visibility to banking customers whose needs occasionally might be unmet by the traditional bank. Third and most important theoretically, almost every payday loan transaction requires the customer to present a postdated personal check

from a valid checking account to obtain their cash loan. Therefore, logic suggests that the vast majority of Seattle's payday loan customers keep a checking account with a bank that is also nearby. As such, traditional banks and payday lenders do not attract completely different clientele; the customers of the latter are simply a subset of the banks' clients. Although the availability of banks is a necessary condition for payday lenders, banks have little, if any, need for payday lenders (although some lenders have partnered with and, in some cases, even purchased, payday lenders). In essence, the relationship between payday lenders and FDIC banks is commensalistic. Payday lenders benefit from their geographic connection to FDIC institutions without seriously affecting the financial service market of the bank itself. Based on these reasons, we argue that a concentration of payday lending institutions is driven, in part, by the location of traditional banking institutions. Consequently, we expect that payday lenders and FDIC banks will collocate and that the concentration of FDIC banks should be correlated positively with the concentrations of payday lenders.

Consistent with this expectation, a recent analysis by Fellowes and Mabanta (2008: 10) reports that "of the 22,984 payday lenders now in business, about 95 percent are located within one mile of a bank or credit union branch, and 84 percent are located in the same neighborhood or census tract as a bank or credit union branch."¹² This pattern of collocation between payday lenders and FDIC banks also appears in Seattle. As evidenced by the map presented in Appendix A, tracts with a greater prevalence of FDIC banks tend to be tracts that also exhibit more payday lending institutions. Moreover, as expected, we find that the bivariate correlation between the payday lender rate and the FDIC banking rate across Seattle census tracts is fairly strong at $r = .64$. Thus, consistent with its role as an instrument, we believe both theoretical and empirical evidence is present indicating that the prevalence of FDIC banks is related to the prevalence of payday lenders. In contrast, we perceived no compelling reason to expect that the FDIC banking institution rate will be correlated with the disturbance terms from the crime equations. However, because this latter "exogeneity" assumption cannot be tested directly (Wooldridge, 2002: 86), findings should be interpreted with appropriate caution.¹³

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12. Given that FDIC banks and payday lenders tend to be located close to one another, one might wonder why individuals choose to use the high-cost services of the latter. For starters, geographic proximity is not equivalent to access. As noted earlier, banks frequently do not offer products sought out by payday lending customers or provide services in a manner or at a time that is convenient for them. Furthermore, available evidence suggests payday loan usage is tied to limited or negative credit experiences, imbalances between living expenses and income, and ignorance about lower cost options (Fellowes and Mabanta, 2008). Lower income residents also indicate that they avoid banks because they fear that they do not have enough money, think the fees are too high, are not comfortable dealing with banks, find banks have inconvenient hours, and believe banks refuse to provide the desired services (e.g., see Fellowes and Mabanta, 2008; Washington, 2006; see also Caskey, 1994: 78–83).
13. Because this assumption involves an unobservable (the disturbance term) concept, it cannot be tested directly with empirical data. However, when two or more instruments are available for a single endogenous regressor (i.e., the equation is "overidentified"), one can assess the adequacy of instruments

Finally, for each model, we test for evidence of spatial autocorrelation, and if needed, we account for spatial effects that might bias our estimates of the direct relationship between payday lending and crime. For all sets of analyses, we examine both violent and property crime rates in Seattle neighborhoods.

Findings

Descriptive Statistics

A preliminary view of descriptive statistics suggests a positive association between payday lending and crime. Means, standard deviations, and correlations for all variables are presented in Table 1. The average count of payday lenders across Seattle neighborhoods is .38; the corresponding rate is 10 per 1,000 persons. Consistent with crime patterns throughout the United States, property offenses comprised the majority of reported crimes in Seattle in 2006–2007. The average rates for property and violent crime, respectively, were roughly 74 and 8 per 1,000 population. As expected, the explanatory variables, and particularly neighborhood disadvantage, have positive relationships with crime rates. More importantly, payday lending is significantly positively associated with both violent ($r = .48$) and property crime ($r = .56$). These correlations suggest initial support for a payday lending–crime relationship.

The bivariate relationship between payday lending and crime can be illustrated visually. Figure 1 plots the distribution of payday lenders and violent crime rates in Seattle neighborhoods. The map in Figure 1 clearly displays the strong bivariate relationship between payday lending and violent crime. In the downtown and inner-city areas where payday lenders are more numerous (as indicated by “x” on the map), the violent crime rate is also highest (as indicated by the darkest shading on the map). The safest neighborhoods in Seattle have no payday lenders in them. The map also shows moderate violent crime rates in areas with lower densities of payday lending. Results for the distribution of payday lenders and property crime rates, although not presented, mirror closely those for violent crime rates. At issue, however, is whether the relationship between payday lending and crime will remain after controlling for other community characteristics known to be associated with crime. To determine this relationship, we turn to the regression results.

Regression Results

Tables 2 and 3 present regression results for violent and property crime rates, respectively. These tables contain results from the series of three regression models, which were outlined earlier. For both tables, the first column reports a baseline OLS regression model in which violent or property crime rates are predicted only by the payday

via a test of overidentifying restrictions (e.g., see Baum, 2006: 191; Wooldridge, 2002: 121). Such testing is not possible in cases like ours in which only one excluded instrument is used for the endogenous regressor variable.

T A B L E 1

Descriptive Statistics and Correlations (N = 116 Census Tracts)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Violent crime rate (ln)	1.00	.80*	-.03	.74*	.45*	.63*	.25*	.45*	.48*	.75*	.62*	.56*	-.61*	.65*	-.63*
2. Property crime rate (ln)	1.00	1.00	-.23*	.44*	.38*	.75*	-.15	.58*	.56*	.64*	.41*	.25*	-.28*	.39*	-.29*
3. Total population			1.00	.08	.12	-.04	.22*	-.15	-.15	-.11	-.04	.08	-.22*	.12	-.12
4. Disadvantage index				1.00	.39*	.32*	.56*	.19*	.18	.80*	.87*	.71*	-.86*	.94*	-.93*
5. Young male rate (ln)					1.00	.51*	.13	.05	.20*	.46*	.23*	.18	-.44*	.40*	-.30*
6. Residential instability						1.00	-.28*	.46*	.34*	.65*	.23*	.09	-.23*	.31*	-.14
7. Female-headed households							1.00	-.29*	-.10	.17	.33*	.70*	-.56*	.48*	-.64*
8. Central business district								1.00	.24*	.42*	.31*	.02	-.05	.12	-.07
9. Payday lender rate									1.00	.30*	.19*	.05	-.17	.13	-.09
10. Poverty rate										1.00	.80*	.44*	-.55*	.70*	-.61*
11. Jobless rate											1.00	.54*	-.60*	.74*	-.77*
12. Percent Black												1.00	-.50*	.57*	-.65*
13. Percent professional													1.00	-.87*	.85*
14. Percent low wage														1.00	-.87*
15. Percent high-school graduate															1.00
Mean	7.69	73.74	4709	.00	6.30	.14	8.29	.08	.10	11.93	23.59	7.74	48.70	14.85	89.77
SD	11.60	78.00	1875	1.00	3.52	.86	5.27	.27	.24	9.16	8.25	10.11	13.30	7.46	9.45

Note. ln = measured in natural logarithm; means and standard deviations for all variables are expressed in nonlogged values for ease of interpretation.
*p < .05.

FIGURE 1

Payday Lenders and Violent Crime Rates in Seattle, Washington



lending variable. In the second column of each table, we expand on that initial model by adding measures typically associated with neighborhood crime rates. In the third column, we present results from a model that accounts for the potential endogeneity of payday lenders through an instrumental variables estimator. Finally, we calculate the level of spatial autocorrelation in each of the prior models. Consistent with our

T A B L E 2

OLS Regression Results for Violent Crime

	1	2	3
	Baseline Model	Ecological Correlates Model	2SLS-IV Endogeneity Model
Payday lenders (ln)	.482*** 3.424 (.582)	.248*** 1.756 (.325)	.196** 2.346 (.658)
Neighborhood disadvantage		.442*** .506 (.076)	.431*** .494 (.075)
Young male rate (ln)		.023 .062 (.143)	.017 .046 (.141)
Residential instability index		.351*** .469 (.087)	.334*** .447 (.088)
Female-headed households		.182** .040 (.015)	.188** .041 (.014)
Central business district		.189*** .806 (.221)	.182*** .776 (.218)
Population size		-.028 -.000 (.000)	-.018 -.000 (.000)
Constant	1.098 (.104)	1.478 (.318)	.687 (.283)
Model summary information			
R ²	.233	.808	.802
Adjusted R ²	.226	.742	—
D-W-H endogeneity test	—	—	1.08
Total number tracts (N)	116	116	116

Notes. Cell entries are standardized coefficients and unstandardized coefficients followed by standard errors in parenthesis. In the first stage of the 2SLS model, the excluded instrument predicting payday lenders is the number of FDIC lending institutions per 1,000 population (see Appendix A for full first-stage results).
p < .05; ***p* < .01; ****p* < .001.

objectives, this model-building strategy allows us to gauge the extent to which the observed relationship between payday lending and crime remains after controlling for other ecological correlates.

Baseline model. In the first model of Table 2, we find evidence, not surprisingly, of a statistically significant positive relationship between payday lending and violent crime. Also not surprisingly, we find evidence of a statistically significant positive relationship between payday lending and property crime, as indicated in the first model of Table 3. In essence,

TABLE 3

OLS Regression Results for Property Crime

	1	2	3
	Baseline Model	Ecological Correlates Model	2SLS-IV Endogeneity Model
Payday lenders (ln)	.565*** 2.323 (.318)	.289*** 1.189 (.205)	.340*** 2.365 (.466)
Neighborhood disadvantage		.207** .137 (.048)	.171* .114 (.054)
Young male rate (ln)		.010 .016 (.090)	-.010 -.015 (.100)
Residential instability index		.534*** .355 (.055)	.401*** .310 (.062)
Female-headed households		-.006 -.001 (.009)	.016 .001 (.010)
Central business district		.237*** .587 (.139)	.214** .528 (.155)
Population size		-.149** -.00005 (.00002)	-.113* -.00004 (.00002)
Constant	3.842 (.057)	4.061 (.179)	3.952 (.201)
Model summary information			
R^2	.319	.773	.704
Adjusted R^2	.313	.759	—
D-W-H endogeneity test			11.04**
Total number tracts (N)	116	116	116

Notes. Cell entries are standardized coefficients and unstandardized coefficients followed by standard errors in parenthesis. In the first stage of the 2SLS model, the excluded instrument predicting payday lenders is the number of FDIC lending institutions per 1,000 population (see Appendix A for full first-stage results).

* $p < .05$; ** $p < .01$; *** $p < .001$.

these results suggest that across Seattle neighborhoods, as the presence of payday lenders increases, so do violent and property crime rates.

Ecological correlates model. In the second model, we introduce several measures typically associated with neighborhood crime rates. In line with prior research, regression results show that neighborhood disadvantage, residential instability, and female-headed households are all significantly positively associated with violent crime rates. Likewise, disadvantage and residential instability are significantly positively associated with property crime rates.

T A B L E 4

Moran’s I Test for Spatial Autocorrelation

Model	Dependent Variable	Technique	Moran’s I	Z Score	P Value	Pattern
Social disorganization model	Violent crime rate	Contiguity	.03	.70	.48	Random
		Inverse distance	-.02	-.25	.80	Random
Social disorganization model	Property crime rate	Contiguity	.07	1.40	.16	Random
		Inverse distance	.05	1.41	.16	Random
Endogeneity model	Violent crime rate	Contiguity	.03	.72	.46	Random
		Inverse distance	-.02	-.15	.87	Random
Endogeneity model	Property crime rate	Contiguity	.08	1.50	.13	Random
		Inverse distance	.05	1.37	.17	Random

Moreover, whether the census tract is located in the CBD also matters for violent and property crime rates. Our CBD variable is significant and positive in both models. Most important, however, is that the inclusion of these variables does not eliminate the association between payday lending and crime. Although the coefficients for the payday lending variable are roughly cut in half in the violent and property crime equations, payday lending remains a significant predictor in both models. In fact, the standardized coefficients suggest that the effect of payday lending is fairly robust, with a magnitude that compares favorably with several neighborhood measures that have been considered important predictors of crime for a long time.

Using variants of the Moran’s I test and several software packages, we next measured the potential effects of spatial autocorrelation within the OLS ecological model. We found that the effect of spatial autocorrelation was minimal in both analyses of violent and property crime, falling well below the threshold that might raise concern (see, e.g., Parker and Asencio, 2009: 208).

Table 4 reports the results of these tests, using a minimum threshold distance of 2,500 m and first-order contiguity models. As shown, the Moran’s I scores, which are similar to a Pearson’s *r* score, are low and in some instances slightly negative. Although typical in many cities, the lack of spatially autocorrelated data in Seattle appears because of its unusual physical geography. Unlike many cities, Seattle has numerous natural (e.g., bodies of water, hills, etc.) and manmade (e.g., bridges, freeways, etc.) barriers that seem to inhibit interaction. The map in Figure 1 helps make this point clear. This finding is consistent with other studies that have examined spatial autocorrelation and neighborhood crime rates in Seattle (e.g., Kubrin, 2000) and accounts for why previous researchers have not addressed autocorrelation directly in their analyses of Seattle neighborhoods (e.g., Crutchfield, Matsueda, and Drakulich, 2006; Rountree, Land, and Miethe, 1994; Warner and Rountree, 1997).

Endogeneity model. The third model in our investigation is an effort to explore the possibility that the payday lender rate is an endogenous regressor in our models. To account for endogeneity, we use an instrumental variables approach via 2SLS regression. Per our earlier discussion, in the first stage of the 2SLS analysis, the prevalence of payday lenders is instrumented by a single “excluded” instrument—the natural logarithm of FDIC banks per 1,000 persons—with the ecological variables specified as “included” instruments.

The results of this first-stage analysis, reported in Appendix B, are consistent with the bivariate evidence cited earlier and suggest that “FDIC banks” is a “relevant instrument” for the payday lender rate. Several statistics provide evidence of such relevance. First, the coefficient for the FDIC bank rate, which reflects its partial association with the payday lending rate (net of the other covariates), is positive and has a large and statistically significant t ratio. Second, we report an F test that also evaluates the relevance of the included instrument. This statistic is derived based on the R -squared of the first-stage equation after the included instruments have been partialled out (Baum, 2006: 207; see also Bound, Jaeger, and Baker, 1995). Previous research on instrumental variables (IV) methods has shown that, even when the instrument is a statistically significant predictor, bias might be found in the IV estimator because of limitations in the explanatory power of the instrument (see Baum, 2006; Staiger and Stock, 1997). Consequently, it has been suggested that, for a model with one endogenous regressor, an F statistic lower than 10 is problematic (Baum, 2006: 211). As shown at the bottom of the table in Appendix B, the F statistic in our analysis is 33—more than three times the minimum threshold suggested. Finally, we also present results of the Anderson canonical correlation underidentification test, which evaluates the null hypothesis that the equation is underidentified. In this case, the test statistic is large and statistically significant, thereby indicating a rejection of the null. In summary, these statistics imply that one of the two critical assumptions of IV analysis is supported in our data (i.e., that the instrument has a high partial correlation with the endogenous regressor). We note again, however, that the second assumption cannot be evaluated empirically, so findings and conclusions should be regarded as suggestive, not definitive.

Turning our attention to the second-stage regression results, reported as model 3 in Tables 2 and 3, our interest centers on whether the criminogenic effect of payday lenders remains evident in the instrumental variable analysis. Examining the results for violent crime first, the findings continue to indicate that the prevalence of payday lending institutions has a significant positive relationship with violent crime rates. Indeed, the results of the IV analysis mimic fairly closely the substantive results of the OLS analysis, both for the measure of payday lending as well as for the ecological variables. Moreover, a closer inspection of the coefficients in models 2 and 3 indicates that differences are not especially great. Intuitively, this similarity suggests that payday lenders might not be endogenous to violent crime. The “Durbin–Wu–Hausman (D-W-H) endogeneity test” reported at the bottom

of Table 2 evaluates that idea.¹⁴ In this case, the test is not significant, which suggests that little is changed by specifying payday lenders as endogenous to violent crime. Across model specifications, the evidence is consistent in indicating that payday lending is predictive of violent crime rates, controlling on a range of factors associated with neighborhood crime rates.

Looking next at the results for property crime, reported in the third model of Table 3, several findings are noteworthy. Most importantly, in big picture substantive terms, the results of the instrumental variables analysis differ little from OLS results. Payday lenders, neighborhood disadvantage, residential instability, population size, and location within the CBD all are significantly related to property crime rates in expected ways. Thus, the substantive issues most central to the current study seem unaffected by our efforts to model endogeneity in the relationship between payday lending and crime. However, differences in the magnitude of the coefficients in the OLS and IV analyses are more prominent in the property crime analyses than they were in the analyses of violent crime. For instance, the estimated effect of payday lending is roughly twice as large in the IV analysis compared with the OLS analysis. Given this difference, it is not surprising that the D-W-H test is statistically significant in Table 3. In essence, this test suggests systematic differences occur in the coefficients for the OLS and 2SLS-IV models. On the assumption that the instrumental variable is exogenous to the disturbance term of the property crime equation, this result is consistent with the idea that endogeneity exists in the relationship between payday lender prevalence and property crime rates. Nonetheless, our analyses suggest little reason to doubt that payday lending has an effect on property crime rates, net of our controls.¹⁵

Finally, to evaluate the potential for biases related to spatial processes in the endogeneity models, we once again measured the level of spatial autocorrelation using a variety of tests. As before, these results suggest no appreciable evidence of unmeasured spatial effects in our analysis of violent or property crime rates. The results of tests for spatial autocorrelation in these models using Moran's I are listed in Table 4.

In sum, the results of our analyses indicate that payday lending is significantly associated with both violent and property crime rates. This relationship holds even after controlling for a host of factors typically associated with neighborhood crime rates. Moreover, the significant, positive relationship between payday lending and crime remains evident in models that attempt to deal with endogeneity as well as after concerns with spatial autocorrelation have been addressed.

14. It should be noted this test statistic also relies on the critical assumption that the instrumental variable is uncorrelated with the crime equation disturbance term.

15. We replicated the models substituting in the individual components of the disadvantage index to see whether the effects of payday lending remained. In all supplemental analyses, payday lending remained a significant predictor of violent and property crime rates. Results of these analyses are available on request.

Conclusion

Payday lenders in Seattle tend to be concentrated in communities where crime rates are higher. More importantly, the correlation between payday lending and violent and property crime remains statistically significant after a range of factors traditionally associated with crime have been controlled for and when other model specifications have been taken into account. The substantial costs that customers pay for using payday lenders have long been documented for a long time. Our findings indicate that important broader community costs also might persist—such as exposure to crime—that *all* residents pay when they reside in neighborhoods with a concentration of payday lenders. These costs suggest numerous policy implications.

Policy Implications

One critical public policy challenge is to preserve access to small consumer loans on an equitable basis and to do so in a way that does not enhance the danger to those in the community where these services are provided. This is a challenge not just for financial service providers and regulators, law enforcement authorities, or community development officials. Coordinated efforts should be launched to meet these objectives successfully. One approach would be to cap the interest rate that payday lenders are allowed to charge at 36% as several states have done and as Congress did with respect to loans given to members of the military and their families. (Credit cards, although not ideal for all consumers, currently offer cash advances for far less than the 36% annual percentage rate.) Although this approach would reduce many abusive practices often associated with payday lending, it would likely put many payday lenders out of business. This outcome raises the question of whether alternative financial institutions could step in and provide small consumer loans.

One credit union has found a profitable way to serve this function with a high-risk pool of borrowers. In 2001, the North Carolina State Employee's Credit Union (SECU) created the Salary Advance Loan (SALO) product that helps employees make it from paycheck to paycheck while building savings. Members who have their paycheck automatically deposited can request salary advances up to \$500. The advance is repaid automatically the next payday. The annual percentage rate is 12%. Typical SALO borrowers have an annual income of less than \$25,000 with account balances of less than \$150. Two thirds take out advances every month. SECU has earned a net income of \$1.5 million on a loan volume of \$400 million with loan charge-offs of 0.27%. As Michael A. Stegman (2007: 183) concluded, this experience "shows that large institutions can market more affordable payday loan products to high-risk customers at interest rates that are a small fraction of prevailing payday loan rates." Credit unions around the country offer similar loans, generally with the proviso that borrowers also build a "rainy-day" fund with the credit provider.

Federal banking regulators could encourage larger financial institutions to offer similar services by giving credit to those lenders in their Community Reinvestment Act (CRA) examinations and evaluations. Under the CRA, federally regulated depository institutions

are required to ascertain and respond to the credit needs of their entire service areas, including low- and moderate-income communities. Regulators take lenders' CRA records into account when considering applications for mergers, acquisitions, and other changes in bank lending practices (Immergluck, 2004). Providing CRA credit for offering small consumer loans on equitable terms would encourage more large institutions to do so.

State and local governments could enact zoning laws that limit the number of new payday lenders. Today 81 cities, 5 counties, and 19 states have enacted local ordinances limiting the location and density of alternative financial institutions like payday lenders, check cashers, and pawn shops. For example, in 2008, St. Louis passed an ordinance prohibiting check cashers and short-term loan operators from opening within 1 mile of an existing store and within 500 feet of a residence, elementary school, or secondary school (Standaert, 2009: 432). Similar rules could be targeted explicitly to payday lenders. Such zoning laws could reduce the extent to which neighborhoods become stigmatized as a result of the concentration of fringe banking institutions.

A more direct approach would be to establish a suitability standard prohibiting payday lenders from providing multiple loans to borrowers or from offering loan terms that are designed to entrap borrowers in a cycle of debt. Current FDIC guidelines that prohibit regulated banks working with third parties (like payday lenders) from issuing loans to borrowers with recent outstanding payday loan debts could be extended to cover all payday lenders.

Another immediate concern is the safety of those in neighborhoods where payday lenders are concentrated. Local law enforcement authorities should assess levels of criminal activity carefully in those areas and consider providing additional service at appropriate times. Not only would employees and customers of payday lenders benefit, but residents of the surrounding neighborhoods likely would enjoy safer streets as well. In turn, this change might attract other businesses and more residents to the area, stimulating broader economic and community development in many currently distressed areas. In essence, by reducing the social disorganization of such neighborhoods, a virtuous cycle could be launched that might bring lower crime rates and several associated benefits.

Research Implications

A growing body of research has been developing on the business operations of payday lenders, their customer base, and the linkages to other financial services. Not so widely researched are the potential neighborhood costs associated with such institutions. As detailed in this study, a spike in neighborhood crime rates is one probable cost, but other related costs also might be associated. Most problematic, perhaps, might be a depressing impact on local property values because crime has been shown to be associated with declining property values (Bowes and Ihlanfeldt, 2001; Gibbons, 2004; Thaler, 1978). If a concentration of payday lenders reduced property values (and it is difficult to imagine it would increase values), then this effect would reduce the equity and wealth of property owners. In turn, property tax revenues would

decline and thereby require either a reduction in critical public services (e.g. schools, police, and fire protection) or an increase in taxes for local residents and businesses. It would be informative to know whether payday lenders have such an impact and, if so, to quantify that impact.

It also stands to reason that, in communities with significant concentrations of payday lenders, capital loss in the form of the so-called multiplier leakage might occur. In this scenario, capital crucial to local economic development efforts, or for simple circulation within the local economy, is siphoned off by payday lenders, most of which are owned by interests far removed from local branch operations. Compounding this, of course, is the fact that payday lenders are most prevalent in neighborhoods that already suffer from various types of disinvestment. Estimating the flight of capital from such communities because of the activity of payday lenders would provide valuable information for planners and regulators as well as for the research community.

Limitations of our study suggest several additional directions for future research. An obvious extension would be case studies of additional cities. We suspect that our findings are not unique to Seattle but that variations might be associated with the size, demography, regional location, industrial structure, and other city characteristics that affect the linkage between payday lending and crime. Unfortunately, uneven crime data and even poorer data on payday lenders constitute a key challenge.

How the payday lending–neighborhood crime link varies over time is also unknown. Payday lenders suddenly appeared on the map of virtually all major cities within the past 20 years. Depending on the trajectory of various political initiatives, their numbers could continue to grow or decline with equal speed. In the current study, we offer a snapshot. Longitudinal or pooled time-series work would offer the opportunity to flesh out this connection better. Moreover, relative to the limitations of the current analysis, such data likely would provide a better means of investigating the potential for reciprocal relationships between payday lenders and crime.

A final suggestion for future research involves expanding our model of neighborhood crime rates to include other potentially salient local institutions. Indeed, because of data limitations, we did not include measures of bars or recreational facilities, which previously have been linked to community crime rates. Although we believe incorporating such measures would not change the pattern of results, it is important for future research to account for the scope and diversity of local institutions when assessing the predictors of neighborhood crime rates.

A Final Word

Access to a wide range of financial services on fair and equitable terms has become a major public policy issue as well as the topic of much social science research in recent years. Payday lenders constitute part of the growing web of fringe bankers that have been concentrated in low-income and disproportionately minority communities, although they have begun to

expand into working- and middle-class communities as well. The cost of these services to individual borrowers and families has been evident for a long time, often quantified with some precision. Although not understood with the same level of specificity, the broader neighborhood costs are becoming recognized as facts of life in the nation's metropolitan regions. The link between payday lending and neighborhood crime, in fact, should come as no surprise. How we choose to respond to that connection, if we choose to respond at all, remains to be determined.

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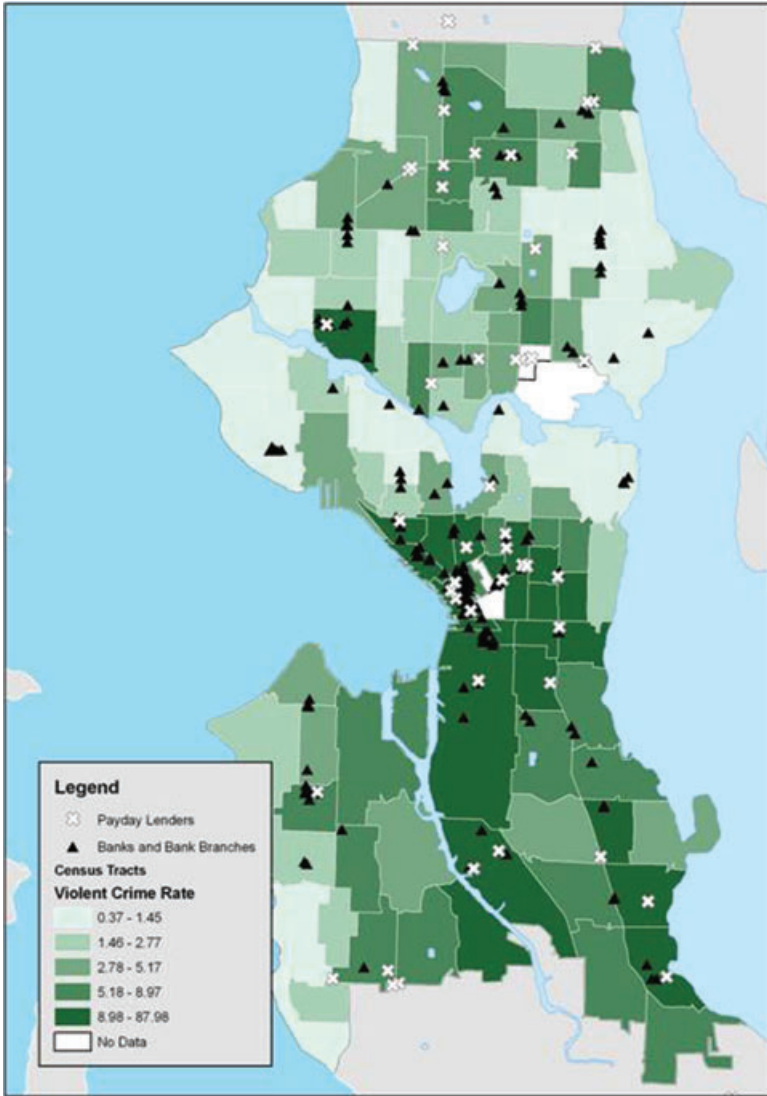
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APPENDIX A

Payday Lenders, FDIC Banks, and Violent Crime Rates in Seattle, Washington



A P P E N D I X B

First-Stage Model of Payday Lenders (ln)

Excluded Instrument	Coefficient	Standard Error
FDIC banks per 1,000 (ln)	.262***	.046
Controls		
Neighborhood disadvantage	-.015	.021
Young male rate (ln)	.069	.038
Residential instability index	.014	.023
Female-headed households	.002	.004
Central business district	-.043	.059
Population size	-.000008	-.000007
Summary results for first-stage regression		
Partial R^2 of excluded instrument	.234	
F test of excluded instrument (1,108 degrees of freedom)	33.00*	
Anderson canon. corr. underid. test	27.15*	

*** $p < .001$.