Auto title lending has an important role in the financial services marketplace.

Money to Go

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ecent years have seen growth in the use of certain types of nontraditional lending products such as payday lending and auto title lending, and a relative decline of others such as personal finance companies and pawnbrokers. Despite the fact that much of the growth in the use of the former group of products is simply a substitution from some types of high-cost lending to others, the onset of the recent financial crisis has spurred renewed scrutiny of nontraditional lending products, even though there is no suggestion – much less evidence – that these products contributed to the crisis. Indeed, these products may be playing a positive role in mitigating the fallout from the crisis.

Title loans are extensively regulated at the state level. According to a 2005 survey by the Consumer Federation of America, just four states place no interest-rate caps on title loans made by licensed lenders, and 13 states have either enacted title loan laws or issued court decisions that authorize high-cost title loans under long-standing pawnbroker exceptions from state usury laws. Other states have special regulations that allow title loans but at a low and uneconomic rate cap, and 31 states have small-loan rate caps or usury limits that technically restrain car title loan rates, although title loans are often structured to avoid the limits. This regulation may soon intensify; Congress and state legislatures around the country are considering new legislation that would hamper or even eliminate several of the most popular forms of nontraditional lending, including payday lending and auto title lending.

Title lending is an important source of credit for many Americans and is beneficial for the economy overall. If deprived access to title loans, many consumers would have to sell their cars, substitute less-preferred sources of credit, or risk losing access to legal credit altogether. Many small, independent businesses use title lending as a source of short-term operating capital. Moreover, although the price of title loans appears

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high, there is no evidence that title lenders are earning supernormal economic profits once the high cost and risk of making the loans are taken into account. The title loan market, like other markets for nontraditional loans, appears to be highly competitive and barriers to entry appear to be low. Pricing is highly transparent and simple, allowing easy comparison shopping by consumers. Absent an identifiable market failure, the case for heavy-handed paternalistic intervention is weak.

TITLE PLEDGE LENDING

Title pledge lending grew out of traditional pawnbroker operations, mainly to enable making larger loans than traditional pawnshop loans that are backed by items such as consumer electronics, musical instruments, and jewelry. In a title pledge lending arrangement, the lender holds as collateral the title to the borrower's car and/or either a copy of the car's keys or a device that permits the title lender to disable the car's ignition. Lenders may verify employment, income, and perform a credit check, but such practice is not uniform. Most scrutiny focuses on the value of the vehicle rather than the borrower. The amount the lender will lend against the collateral varies: some studies have found that lenders typically will lend about 33 percent of the resale value of the automobile; others have found a typical loan value of 50–55 percent and even up to 100 percent of the value of the car. Moreover, the loan is typically for 30 days with a rollover option — most loans are rolled-over and paid off in about four to six months. Most of the loans are rather small, ranging from \$250 to \$1,000, although some loans are larger, depending on the value of the car and the needs of the borrower. The annual percentage rate on a title loan is typically 120-300 percent, depending on the amount borrowed.

The American Association of Responsible Auto Lenders (AARAL), an industry group that represents several large title lenders, states that the average loan size for its members is \$700. A study of the Illinois title lending industry found the median loan principal to be \$1,500. Many loans are small; a Tennessee state government study reported that 82 percent of new title loans in 2006 were for \$1,000 or less, and 50 percent were for \$500 or less. But some loans are larger; the same study found that over 7 percent of title loans ranged from \$1,750 to \$2,500.

If the borrower defaults, the lender can repossess the collateral. Beyond that, the loan usually is nonrecourse. If, for

example, the car is not in operating condition because of a mechanical breakdown, or if it has been stolen or totaled, or if the lender resells it for less than expected, the lender is still limited to repossession and generally cannot or will not sue the borrower for any deficiency. Providers of title loans must include these types of costs and risks in the price of the loan.

Industry sources report that about 14–17 percent of title loans default, but only about half of those defaults (4–8 percent overall) result in vehicle repossession. Furthermore, about 20 percent of borrowers redeem repossessed cars before they are resold. The high percentage of defaults that do not lead to repossession reflects the reality that many of these cars have mechanical failures or other damage that makes it not worthwhile to expend the cost of repossession (as well as the borrower's decision not to pay). By way of comparison, pawnshop loans have a repossession rate of over 30 percent.

Some 70 percent of title loan customers own two or more cars, and others presumably have access to public transportation in the event of repossession. The cars used as collateral for the loans tend to be older vehicles and are owned outright. One study of court records involving auto title loans found that vehicles that were pledged as collateral were 11.4 years old and had 90,823 miles on average. At the time of default, many of the cars had major mechanical failures or other major damage, which explains both the borrower's

choice to default as well as the lender's decision not to absorb the cost of repossession. Bad debt and repossession expenses amount to about 20 percent of operating revenues.

For many consumers and independent small businesses, their vehicle is one of their most valuable economic assets. Prohibiting them from pledging their vehicle for a title loan could force many of them to sell their cars instead. Most title loans for operating vehicles are eventually redeemed, thus consumers seem obviously better off by being able to keep their car and borrow against it rather than selling it outright. Given that title loan customers could sell their cars if they preferred to, the fact that they do not indicates that they prefer a title loan over being forced to sell their car to get cash.

WHO USES TITLE LOANS AND WHY?

Auto title lending serves three very different demographic groups: moderate-income borrowers who prefer title lending to other available credit products; the unbanked who view it as a superior alternative to pawnbrokers; and small, independent businesses that use title lending as a source of operating capital. The multifarious ways in which borrowers use title lending indicate the inevitable problems of one-size-fits-all regulation such as interest rate caps or the efforts of a consumer financial protection regulator to determine whether a given lending product is "abusive" in nature.

Moderate-Income Borrowers First, auto title lending is used by a moderate-income segment of the population: consumers of sufficient wealth and income to own a car outright (often one of reasonably high value), but with impaired credit that reduces access to mainstream lenders. According to the AARAL, the typical title loan customer for its members is 44 years old and has a household income of more than \$50,000 per year, but is excluded from traditional lenders such as credit card companies, banks, credit unions, and small loan companies. Further, most borrowers are employed.

The most comprehensive profile of title loan borrowers to date, a study prepared for the New Mexico state legislature in 2000, found that 30 percent of title lending customers earned over \$50,000 per year, a higher percentage of higherincome customers than other nontraditional loan products. Another 41 percent of title loan customers earned between \$25,000 and \$50,000. One lender reports today that its largest group of customers has a household income of between \$50,000 and \$75,000 per year, and that over half of its customers earn more than \$40,000 per year. Almost 10 percent of its customers earn over \$100,000 per year. A study by the State of Illinois using data provided by the Illinois Title Loan Company found that 36 percent of title loan customers earn under \$30,000 per year, 55 percent earn over \$40,000 per year, and over 30 percent earn more than \$50,000 per year. Title loan customers also tend to be somewhat older on average than users of other nontraditional lending products, consistent with the intuition that more established people are more likely to own one or more cars.

Moderate-income consumers who use title loans almost always have impaired credit, notwithstanding their moderate incomes and employment status. These borrowers apparently view auto title lending as a superior alternative to payday loans, revolving credit cards (if available), or retail credit (if financing the purchase of a product).

Users of nontraditional credit products typically do not have credit cards, or the cards they have are maxed out. According to the Illinois report, 77 percent of title loan customers had no credit cards at all, and only 11 percent had a general-use bank card. Those who revolve credit card balances tend to be older, higher-income, and more likely to own a home than those who use nontraditional credit products such as payday loans. Studies of payday loan customers, for example, find that even if they have a credit card, they were at their credit limit or would incur over-the-limit fees if they used it. They also were more likely to have paid late fees on their credit cards than other consumers. Moreover, most payday loan customers have only one or two credit cards, usually with low credit limits; thus they are unable to add accounts sequentially in order to increase their available credit as those with multiple cards and higher credit limits can. This suggests that, for most title loan customers, credit cards are not a viable alternative source of credit.

Restricting access to alternative credit products such as title lending might force many of these consumers to use credit cards even if they might prefer not to. Both credit card delinquencies and delinquency-related revenues are higher in states with interest-rate ceilings that squeeze auto title lending and payday lending out of the market. As credit card lenders have increasingly moved toward risk-based pricing through greater use of such fees, interest-rate restrictions have increased the frequency and amount of the fees, dramatically affecting borrowers who tend to trigger fees at a disproportionate rate, thus making them pay even higher costs for credit and run into greater financial difficulty. The analysts at the European research group Policis write, "Low APR products which depend on penalty-based pricing and which are intolerant of irregular payment patterns appear to expose low-income and vulnerable borrowers disproportionately to the risk of financial breakdown." By contrast, those who use higher-cost products "appear more likely to be using credit vehicles which are a closer fit with the specific needs of those on tight budgets and are less exposed to the possibility of financial breakdown." In particular, those who use short-term lending products often have irregular income and thus prefer short-term credit products with predictable prices rather than those that require long-term regular payments (such as installment loans) or permit long-term carrying of debt (such as revolving credit).

Some borrowers might also prefer title lending to payday loans, as they can borrow more on title loans - payday loan maximums are often capped by state law at \$300 or similar amounts. Interest rates for auto title loans are typically lower as well, because of the larger loan size and lower risk due to the fact that collateral is being provided.

Auto title loans may be especially valuable to consumers in an environment like the current one of high unemployment rates, recession, and tight credit markets. Payday loans (and credit cards) provide a mechanism for consumers to borrow against their future income to bridge short-term liquidity problems. Auto title loans, by contrast, enable borrowers to borrow against their current wealth to meet short-term financial obligations. Few title loan customers own homes, maintain large savings balances, or hold other sources of liquid wealth. The ability to access wealth to meet short-term obligations may be especially valuable to a borrower who is currently unemployed and may remain unemployed for an indefinite period of time, and thus would have difficulty servicing payday loans or revolving credit. By contrast, auto title loans permit the borrower to roll over the loan so long as equity remains in the car, which may provide flexibility for unemployed or underemployed consumers and small business owners.

Unbanked Customers A second group of title loan customers is the unbanked. According to interviews with industry figures, as much as half of title loan customers in some areas do not have bank accounts. Payday loans are not available to unbanked consumers because payday loans require a borrower to have a bank account against which a post-dated check can be drawn. Thus, for unbanked customers, pawnbrokers are the primary alternative for cash credit and rent-toown or retail credit for purchasing goods. But pawn loans tend to be quite small (\$70 on average) and inconvenient because of the need to transport the goods and surrender possession.

Some 29 percent of auto title borrowers earn less than

\$25,000 per year — not an insignificant percentage, but one that is much smaller than for other types of nontraditional lending products. (By comparison, 65 percent of pawnbroker and 61 percent of rent-to-own customers earn under \$25,000 per year.) According to one study of credit use by low-income consumers, 7 percent of low-income borrowers overall had used an auto title loan in the past 12 months, with 12.6 percent among the subset of those in the study who actually owned cars. According to those authors, more consumers used auto title loans in the preceding 12 months than pawnshops (5 percent), payday lenders (4.2 percent), or rent-to-own firms (3.2 percent); a preference that was consistent across all income groups. A 1996 study conducted by John Caskey of 300 households in Atlanta, GA found that about 9 percent of respondents with annual incomes of \$25,000 or less had an auto title loan in the past year.

Unbanked borrowers have limited credit options in general, and title loans may be comparatively superior to their alternatives. States with liberal consumer credit regulatory regimes have a much higher volume of auto title lending than states with much stricter regimes, suggesting that title loans are popular with consumers when given the choice. States with strict regulatory regimes have a much lower level of auto title and payday lending than other states, and a higher level of pawnbroking (which often holds long-term exemptions from generally applicable regulations), retail debt, and revolving debt.

Small Independent Businesses A third group of title loan borrowers is comprised of small independent businesses that use title loans as a source of short-term working capital. Such businesses include small landscaping, plumbing, or handyman firms, and a vehicle title loan provides a useful source of operating capital for those independent businesses. For example, an independent landscaping company may need several hundred dollars to purchase sod and bushes for a job, or for temporary cash to meet payroll while finishing a job or awaiting payment. The proprietor may be forced to pledge his truck to obtain the necessary capital to buy the supplies to complete the job. When the job is finally complete (often only days later), payment is made and the owner can redeem the collateral. The likelihood of default and repossession is extremely low (assuming that the customer pays in a timely manner), and the likelihood of rolling over the loan is very low as well. Moreover, some of these businesses may be seasonal and volatile in nature, making short-term credit (even at relatively high cost) more useful and appropriate than long-term bank loans or other types of credit.

There are approximately 26 million businesses in the United States, most of which are small businesses or self-employed enterprises. Many such businesses do not have access to small business loans and rely on consumer credit, such as credit cards, home equity loans, auto title loans, and other sources of consumer lending to finance their business operations. Women and minority entrepreneurs, who have traditionally faced higher levels of exclusion from business credit markets, are especially dependent on consumer credit to finance their businesses.

Industry members estimate that small independent businesses constitute approximately 25–30 percent of the title loan

customer base. Since small businesses tend to need larger loans than individuals, and these businesses often borrow repeatedly for short periods of a few days at a time, small businesses may make up an even larger percentage of total dollars and number of loans. Title lending may be a useful source of credit for these independent businesses, especially since credit card, home equity, and other small business lending have become scarce as a result of the recent financial crisis. Title loans usually are closed on the spot within 30 minutes, providing the small business proprietor with immediate access to cash. Bank loans, by contrast, often require a lengthy underwriting process that delays access to needed cash and may ultimately require borrowing more money than is needed at the time. Moreover, title loans typically only charge interest and do not charge upfront fees or prepayment penalties. Thus, title loans are uniquely useful for those who need money quickly and who expect to repay the loan within a few days or weeks. Even if the original loan term is for 30 days, if the balance is paid within a few days, interest is charged only on the period the loan was outstanding. Independent businesses may at times use several title loans in sequence (perhaps even rolling over the loan), making it appear that they are in a "debt trap" of sorts. In reality, they are engaging in a series of independent transactions to gain working capital for a series of independent jobs.

The use and the risks borne by these small business borrowers are obviously distinct from either group of the previously mentioned consumer borrowers, yet regulatory regimes appear to make no distinction between them.

WHY CONSUMERS USE NONTRADITIONAL LENDING PRODUCTS

There are no comprehensive studies of the reasons that trigger use of title lending by consumers. Studies of similar products, especially payday lending, suggest that consumers generally use nontraditional lending products responsibly in order to address short-term needs for cash and to meet emergencies.

Consumers find nontraditional lending products useful for a variety of reasons. As previously noted, cash on a title loan can be obtained in 30 minutes or less, as opposed to banks, which typically require borrowers to wait several days before funds become available. Auto title loan defaults are rarely referred to credit agencies, and lawsuits to collect deficiencies are rare as well, unless a lender believes a borrower to be acting strategically. Pricing is transparent and easy to understand. Finally, many borrowers, especially lower-income or non-English speaking borrowers, have often had negative experiences with banks and other traditional lenders, and value the flexibility, informality, and customer service-oriented nature of nontraditional lenders. Nontraditional lending stores are also ubiquitous and maintain customerfriendly hours (even 24 hours in some places), unlike traditional banks that keep shorter hours. These flexible hours and locations are especially valuable for shift workers who may have trouble banking during traditional business hours.

Use of nontraditional lending products is most often precipitated by an unexpected expense that the borrower could

not postpone, such as a health emergency, necessary home repair, or utility bills, but not because of spendthrift behavior. In one survey of payday-loan borrowers, most reported that they "strongly" (70.8 percent) or "somewhat" (15.7 percent) agreed that their use of a payday lender was to cope with an unexpected expense. At the time of their most recent payday loan, over 80 percent of payday-loan customers reported that they lacked sufficient funds to deal with the expense. Jonathan Zinman similarly found that payday loan customers primarily use their funds for "bills, emergencies, food and groceries, and other debt service." Some 31 percent of borrowers reported using the funds for emergency expenses, such as car repairs or medical expenses. Only 6 percent said that they used the funds for "shopping or entertainment."

Comparisons of high-cost lending in Europe reveal that low-income borrowers in countries with strict consumer credit regulation, such as France and Germany, are much more likely to suffer utility cutoffs than consumers in countries with less intrusive regulation of consumer credit markets, such as the United Kingdom. French and German consumers also report having more difficulties purchasing food, clothing, and fuel than those in Britain, and they are more likely to have difficulty paying for rent and housing.

Access to flexible short-term credit is especially useful to lower-income consumers for two reasons. First, consumers with higher risk profiles in more heavily regulated markets have more difficulty getting access to credit generally. That difficulty, combined with their more volatile income patterns, tends to create difficulties dealing with recurrent obligations like rent, utility payments, and groceries. Their incomes tend to be more volatile than their expenses, creating liquidity problems. Where credit options are limited, borrowers are restricted in their ability to smooth income fluctuations. Thus, they can introduce "flex" into their budgets only by skipping payment of selected bills such as rent. Second, borrowers in markets with heavier regulation are aware of the dire consequences of missing debt payments - a blemished credit record that can disqualify them for future credit. In less heavily regulated countries, by contrast, blemished credit often results in a higher price of future credit, but not a complete disqualification from obtaining credit. In order to avoid delinquency and default, therefore, borrowers in heavily regulated markets are much more likely to prioritize payment of debt over payment of utilities and to divert funds saved for utilities and other necessities to debt payment in order to avoid delinquency.

Although details on title loan customers are not available, research on the use of other nontraditional loan products is instructive. A study conducted in 2007 found that 43 percent of payday-loan customers had overdrawn their checking account at least once in the previous 12 months (in 2001, 68 percent of respondents had done so). Almost 21 percent of payday-loan customers were 60 or more days past due on a consumer credit account during the previous 12 months. Some 55 percent of respondents stated that during the preceding five years they had had a credit request denied or limited, and almost 60 percent had considered applying for credit but did not because they expected to be denied. Over 16 percent of payday loan customers had filed for bankruptcy in the past five years — four times the rate of all consumers.

This research suggests that eliminating nontraditional lending products could force low-income consumers to make decisions that would be more harmful and expensive than those resulting from the use of nontraditional lending products. Research by Federal Reserve economists Donald Morgan and Michael Strain found that when Georgia and North Carolina outlawed payday lending, the incidence of bounced checks, consumer complaints about debt collectors, and Chapter 7 bankruptcy filings rose.

Although title loans are expensive, they are less expensive than these alternatives. Bounced checks can accrue penalty fees of as much as \$50 per bounced check, not to mention the threat of termination of a bank account and even criminal prosecution. Overdraft protection for bounced checks is often available, but is expensive as well. According to a study by the Federal Deposit Insurance Corporation, the median APR on a two-week checking account overdraft is 1,067 percent. Personal finance companies also offer small-dollar loans to be repaid in installments, but their rates approximate payday loans, offer less flexibility, and often provide pressures for borrowers to borrow more than they prefer in order to offset the costs of lending operations.

Finally, some low-income borrowers can also turn to the informal sector of friends and family. But friends and family may not be able, willing, or even ready to lend when needed, in the amounts needed, or for needed purposes. Most social networks are limited in scope; most of the friends and family of low-income individuals also have low incomes and thus have limited funds to lend. Many people, such as immigrants, orphans, or transients, do not have friends or family to whom they can turn for emergency funds. Perhaps more significantly, research finds that people consider borrowing from friends and family personally embarrassing and potentially damaging to personal relationships. Informal borrowing may also be less useful than standard credit in managing one's finances because personal acquaintances may be willing to lend only for expenses considered particularly meritorious (such as medical emergencies), and not for other expenses or for business purposes. As a result, many borrowers are willing to borrow from their families only for an emergency (such as to meet urgent utility bills), but not for other purposes. Social borrowing also tends to be zero-sum in nature, as it does not introduce any new capital into the social circle, but simply redistributes existing funds within the circle.

Eliminating access to high-priced credit does not eliminate consumer need for credit. Historical experience indicates that where credit access is restricted, illegal loan-sharking often thrives. Deregulation of consumer lending markets in the United States has largely eliminated the market for illegal loansharking that dominated American cities in the early 20th century, a period in which illegal lending was organized crime's second biggest revenue source, trailing only gambling. By contrast, international studies have found that illegal loan-sharking is still a concern today in countries where credit access is restricted by regulation. Studies by Policis have found that

countries with stricter regulation (such as France and Germany) have rates of illegal lending 2.5–3 times higher than in Britain, which is lightly regulated. News reports indicate that in Italy the turmoil in consumer credit markets during the past year led to an increase in lending by illegal loan sharks to consumers and small businesses. Japan, which severely tightened its rate ceilings in 2006, saw a two-thirds drop in acceptance of consumer loan applications and an accompanying rise in "Yamikin" lending by Japan's organized crime syndicates. In heavily regulated countries where access to legal credit is restricted, loan sharks also service consumers and small businesses higher up the income ladder than where regulations are not so tight.

REGULATION AND COMPETITION

At first glance, title lending seems very expensive, leading to fears of market failure. However, there is no evidence of market failure or persistent economic profits in the title lending industry. Moreover, the observed prices can be explained by the economic realities of the industry, once the costs and risks of the business are accounted for.

Small loans are difficult to make economically because of the high fixed costs associated with making a loan, such as employee time, operation of the storefront, rent, etc. Nontraditional lenders often have higher costs than traditional lenders because of longer store hours, more intensive customer service, and high store density. This often leads to a reduced ability to capture economies of scale in operations. This may be especially so in the context of auto title lending. The quality of the collateral is highly variable. Moreover, because of the nonrecourse nature of the loan and the potential for deterioration or destruction of the collateral, auto title lending has a substantial idiosyncratic risk. Repossession on default is expensive relative to the value of collateral, and many title lenders contract out for repossession services. As a result, although prices are high, costs and risks are high too.

Barriers to entry are low, capital start-up requirements are modest, and competition is fierce. Pricing is also simple and transparent, promoting comparison shopping by consumers, although, as noted, there is substantial competition on nonprice margins as well.

Similar factors of cost, risk, and market conditions are present in the context of payday lending, and researchers have concluded that there is no evidence of persistent economic profits (or "rents") in the payday loan industry once risk and costs are taken into account. Empirical studies of the payday loan industry find that where competition is stronger, payday lending prices are lower, just as standard economic theory would predict. It is unlikely that results are significantly different for title loans than for payday loans.

CONCLUSION

Auto title lending provides a valuable service in particular niches of the financial services marketplace, especially for those with impaired credit, the unbanked, and small, independent businesses. One-size-fits-all regulation of interest rates, rollovers, minimum maturities, or maximum loan size ignores this wide variety in the way in which different borrowers rely on title loans. Regulations that eliminated title lending from the marketplace could force many of those who use title lending to sell their cars (thereby losing their transportation) or switch to alternative, less-desirable types of credit such as payday lending and pawnshops. That consumers use title lending instead of these alternatives suggests the value of this product. That the overwhelming number of consumers who use nontraditional lending products do so responsibly confirms the value of making these choices available to consumers. Misguided paternalistic regulation of nontraditional lending will deprive consumers of this valuable option and inevitably hurt those who the laws are purportedly intended to help.

Readings

- "A Comparative Analysis of Payday Loan Customers," by Edward C. Lawrence and Gregory Elliehausen. *Contemporary Economic Policy*, Vol. 26, No. 2 (2008).
- An Analysis of Consumers' Use of Payday Loans, by Gregory Elliehausen. Financial Services
 Research Program Monograph No. 41, 2009.
- "Banking the Poor," by Michael S. Barr. *Yale Journal on Regulation*, Vol. 21 (2004).
- "Consumer Lending Study Committee Report for the Forty-Fourth Session of the New Mexico State Legislature," by William J. Verant. January 2000.
- "Consumers' Use of High-Price Credit Products: Do They Know What They Are Doing?" by Gregory Elliehausen. Networks Financial Institute at Indiana State University, Working Paper 2006-WP-02, 2006.
- "Defining and Detecting Predatory Lending," by Donald P. Morgan. Federal Reserve Bank of New York Staff Report No. 273, January 2007.

- Economic and Social Risks of Consumer Credit Market Regulation: A Comparative Analysis of the Regulatory and Consumer Protection Frameworks for Consumer Credit in France, Germany, and the UK. Policis, 2006.
- "Let's Compete With Loan Sharks," by John M. Seidl. *Harvard Business Review*, Vol. 48 (May–June 1970).
- Lower Income Americans, High Cost Financial Services, by John Caskey. Filene Research Institute, 1997.
- "Loansharking in American Cities: Historical Analysis of a Marginal Enterprise," by Mark H. Haller and John V. Alviti. American Journal of Legal History, Vol. 21 (1977).
- "Pawnbroking in America: The Economics of a Forgotten Credit Market," by John P. Caskey. *Journal of Money, Credit, and Banking*, Vol. 23 (1991).
- "Payday Holiday: How Households Fare after Payday Credit Bans," by Donald P. Morgan and Michael R. Strain. Federal

- Reserve Bank of New York Staff Report No. 309, 2008.
- "Payday Lending: Do the Costs Justify the Price?" by Mark Flannery and Katherine Samolyk. FDIC Center for Financial Research, Working Paper 2005/09, 2005.
- "Payday Loan Pricing," by Robert DeYoung and Ronnie J. Phillips. Federal Reserve Bank of Kansas City Working Paper RWP 09-07, 2009.
- "Restricting Consumer Credit Access: Household Survey Evidence on Effects around the Oregon Rate Cap," by Jonathan Zinman. Working paper, 2008.
- "The Impact of Interest Rate Ceilings: The Evidence from International Experience and the Implications for Regulation and Consumer Protection in the Credit Market in Australia," by Anne Ellison and Robert Forster. 2008.
- "The Profitability of Payday Loans," by Paige Skiba and Jeremy Tobacman. Working paper, 2006.