Does Payday Lending Impact Neighborhood Crime Rates?

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Abstract

This article provides a study of the relationship between payday lending and neighborhood crime. I examine 2008 neighborhood crime rates by census tract in Nashville, Tennessee. I find that census tracts with payday lending have lower property crime rates and higher robbery rates than census tracts without these lenders. Once sample selection bias is corrected, payday lending availability remains significant only in the robbery model. While these results do not prove causality, they suggest there may be previously unexamined benefits of payday lending for property crime and motivate further econometric analysis of the impact of commercialization on robbery rates.

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Keywords: Payday Lending, Crime.

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I. Introduction

The majority of the publicity regarding payday lending has been negative, citing excessive fees, exorbitant interest rates, and claims of "trapping" families into vicious debt cycles. Much of the research on this industry has also focused on the detriments of the services provided by these payday lenders. However, several studies have found that communities actually benefit from its availability (Morgan, 2007; Morse, 2006) and that other credit options are poor substitutes (Morgan and Strain, 2007; Morse, 2006). Limited access to short-term credit may have a negative impact on households, and in extreme cases, households may consider borrowing through nonmarket, non-familial channels such as "loan sharks" or obtaining the funds through illegal activities such as theft or robbery. Short-term credit offers a convenient alternative to these activities. A 2006 study finds that cities with payday lenders have lower rates of foreclosure and lower admissions to substance abuse treatment facilities (Morse, 2006). Past research further indicates that higher rates of foreclosures and substance abuse increase crime (Clark and Brent, 2005; Gould et al, 2002; Raphael and Winter-Ember, 2001; Immergluck and Smith, 2006; Sardakis, 2004; Gyimah-Brempong, 2006). Therefore, because payday lending availability reduces foreclosures and substance abuse and increases in these variables have been found to increase crime, payday lending availability may reduce crime. Thus, the community may experience positive externalities through previously unexamined benefits of payday lending. This is a timely issue in light of the recent spike in foreclosures and dismal employment news. If crime increases in times of economic turmoil, the availability of payday lending may help offset the increase in crime and the social costs of the industry.

There has been comprehensive research on the payday lending industry, in general (Brown et al, 2004; Stegman, 2007; Herrmann and Tescher, 2008). More focused studies have examined industry profitability and pricing (Flannery and Samolyk, 2005; Morgan, 2007; Lehman, 2005) as well as customer profiles and consumer impacts (Skiba and Tobacman, 2008; Lawrence and Elliehausen, 2008; Blank, 2008). There is limited research, however, on the impact of payday lending on broad community welfare measures. Indeed, I find only one study that specifically focuses on this relationship (Morse, 2007) and only one working paper that explores the relationship between payday lending and crime (Kubrin et. al., 2009).

Using cross-sectional data from the United States Census Bureau, Tennessee Department of Financial Institutions, and Nashville Police Department, I examine the relationship between payday lending and 2008 neighborhood crime rates in Nashville, Tennessee. This study is important and unique for three reasons. First, the relationship between payday lending and crime has been given extremely limited attention in the literature. Second, I examine this relationship at the census tract levels, which allows me to control for neighborhood-specific characteristics. Lastly, I examine both payday lending availability and store density. The results indicate that neighborhoods with payday lenders have lower property crime rates than those without payday lending services. These results provide motivation for further analysis and suggest payday lending may offer previously unexamined benefits for the communities in which they operate.

To my knowledge, a 2009 working paper is the only paper specifically examining the relationship between payday lending and crime (Kubrin, et. al., 2009). This study finds that higher concentrations of payday lending lead to higher violent crime rates. Using 2005 census data and average neighborhood crime rates from 2006 and 2007, this study examines the impact of store density on crime in Seattle, Washington. They include a composite neighborhood

disadvantage index, control for spatial autocorrelation, and include prior crime rates to address potential endogeneity. Using ordinary least squares (OLS) analysis, they find the payday lending coefficient to be positive and statistically significant in the full model, which leads the authors to conclude that payday lending and violent crime rates are positively associated. Specifically, if the number of payday lenders increases by 100 percent, violent crime per 1,000 people increases by 0.116. This implies an increase from the mean rate of 7.69 crimes per 1,000 to 7.81 crimes per 1,000, an increase of 1.56%.¹

A 2007 study suggests that that availability of payday lending may have positive community outcomes (Morse 2007). This study finds that communities with payday lending have lower foreclosures and lower admittance rates to alcohol and drug treatment centers post natural disaster. These findings are important to my study because foreclosures and alcohol treatment are correlated with crime rates (Clark and Brent, 2005; Gould et al, 2002; Raphael and Winter-Ember, 2001; Immergluck and Smith, 2006; Sardakis, 2004; Gyimah-Brempong, 2006).² The Morse study uses community socioeconomic data from 1996 to 2005 and examines the impact of payday lending availability on community welfare measures: foreclosures, births, alcohol and drug treatment admissions, and deaths. The community socioeconomic data is matched with payday lending store location information retrieved from the California Department of Corporations. Using a natural disaster as an exogenous financial shock, the author implements a propensity score matching system and a triple difference model to examine

¹ The authors do not provide interpretation of the coefficient estimates in the paper. The independent variable, number of payday lenders is in the natural log form, and they state the value ranges from 0 to 4 in each census tract. If this is indeed the case, this implies many census tracts have invalid observations or observations that take on a value of 0 (natural log of 1).

² A 2006 study found a 2.8 percent increase in foreclosure rates increased violent crime in Chicago neighborhoods by 6.7 percent (Immergluck and Smith, 2006). In addition, numerous studies have found that alcohol consumption and availability increase crime (Saridakis, 2004; Raphael and Winter-Ebmer, 2001; Gyimah-Brempong, 2006). Most recently, Gyimah-Brempong (2006) examined data on liquor licenses and crime in Michigan and concluded a 10 percent increase in liquor licenses increased total crime by 4.3 percent, with a larger impact on low income neighborhoods (Gyimah-Brempong, 2006).

community resiliency. The author finds that communities with payday lending have positive community welfare effects. Foreclosures increase after natural disasters, but in communities with payday lenders, this increase is largely offset. Admissions into drug and alcohol treatment centers generally fall after natural disasters, and in communities with payday lenders, these admissions fall even further. Lastly, natural disasters usually decrease birth rates, but communities with payday lenders are able to maintain birth rate levels post-disaster. This study suggests that the availability of payday lending has a positive impact on communities and may help them weather financial shocks.

The remainder of the paper is organized as follows. Section 2 discusses the theoretical relationship between payday lending and neighborhood crime. Section 3 outlines the data and econometric approach. Section 4 presents the empirical findings and section 5 summarizes and discusses implications of the findings.

II. Payday Lending and Neighborhood Crime

Crime is an important community welfare measure. Increases in crime rates negatively impact neighborhoods and public resources through falling property values and lower tax receipts. High crime rates also lead to low community morale and may deter families and businesses looking to relocate. There are many factors that impact neighborhood crime, including unemployment, education levels, and police coverage. Business activity and availability of financial resources may also have an impact on neighborhood crime levels. Neighborhoods with higher nightclub and liquor store densities may experience higher crime rates, while neighborhoods with businesses such as financial services and investment that contribute to household stability may experience lower crime rates. I propose that if payday lending has an impact on neighborhood crime, it is a negative one. Specifically, I expect neighborhoods with payday lending to experience lower crime rates, especially property crime rates, because payday lending provides an income substitute to illegal activity for the "marginal criminal." Indeed, Figure 1 indicates a slightly negative correlation between payday lending store density and property crime rates. The correlation between store density and violent crime is less clear, however (see Figure 2).

Typically, payday loans are short term credit extended to employed individuals in small increments. The typical payday consumer is young, married, credit constrained and debt burdened (Brown et al, 2004; Elliehausen and Lawrence, 2001). This group of individuals is unlikely to be engaged in frequent, criminal activity. In other words, these individuals are more likely to be "marginal criminals." However, these credit constrained individuals are more sensitive to income shocks and may not be able to weather financial hardships. These households may resort to property theft or other minor criminal activity in order to cover unexpected monetary obligations.

Prior research also indicates that payday lending may reduce crime rates through a variety of other mechanisms including lowering foreclosure rates and reducing alcohol and drug use (Morse, 2007). Following a natural disaster, communities with payday lending experience lower foreclosure rates than communities without payday lending (Morse, 2007). Homeowners are able to obtain short-term credit to cover additional financial obligations that arise post-disaster, which helps the family weather financial shocks and avoid foreclosure. Foreclosed properties are detrimental not only to the families who lose their homes, but to the community at large. The properties often sit empty and abandoned, which leads to increased crime and high social costs (Immergluck and Smith, 2006).

Furthermore, communities with payday lending also experience lower admissions to drug and alcohol treatment programs post-natural disaster (Morse, 2007). Because intoxicated individuals have less social control and are more likely to commit crimes, crime rates increase as alcohol use and availability rise (Saridakis, 2004; Raphael and Winter-Ebmer, 2001; Gyimah-Brempong, 2006). If financial stress is reduced through the household's access to short-term credit and its ability to meet additional financial obligations, payday lending may reduce financial stress and potential substance abuse in the household.

III. Data and Econometric Approach

I examine the impact of payday lending availability and store density on crime using a cross-sectional dataset for Nashville, Tennessee. I chose Nashville as the focus of my study because it is a fairly typical U.S. city, has seen representative payday lending growth without legislative restrictions, and has been the focus of other neighborhood crime studies.

Payday Lending Availability

To examine the impact of payday lending availability on crime, I estimate the following model. It is similar to previous neighborhood crime studies (Gyimah-Brempong, 2006; Immergluck and Smith, 2006), including the working paper that examines payday lending and crime (Kubrin et al., 2009).³

 $Crime_{i} = B_{0} + B_{1}Payday \ Lending \ Availability_{i} + B_{2}log(Income_{i}) + B_{3}Unemployment_{i}$ $+ B_{4}Race_{i} + B_{5}MaleYouth_{i} + B_{6}Education_{i} + B_{8}Homeownership_{i} + \varepsilon_{i} \qquad (1)$

³ These models all differ slightly in specification, but the general controls are consistent. For instance, the Kubrin, et al. (2009) and Gyimah-Bremprong (2006) papers use crime per 1,000 and 10,000 people, respectively, as the dependent variable while the Immergluck and Smith (2006) study uses log of violent crime incidents.

Incidents of crime in 2008 were provided by the Metropolitan Nashville Police Department. Each incident was geocoded and matched with its census tract number based on the address of the offense.⁴ Consistent with standard practice, the incidents were sorted and appropriate offenses divided into two major categories: property crime and violent crime.⁵⁶ Violent crime includes murder, manslaughter, rape, robbery, and aggravated assault. Property crime includes burglary, theft, and motor vehicle crimes. Equation 1 is run separately for both property crime and violent crime. For the violent crime specification, *Crime_i*, is equal to the number of violent crimes per 1,000 people in census tract, *i*. Likewise, for the property crime specification, *Crime_i*, measures the number of property crimes per 1,000 people in census tract *i*. The population statistics were obtained from the U.S. Census Bureau.

I include a dummy variable, *Payday Lending Availability*, which indicates whether or not payday lending stores exist in neighborhood, *i*. If payday lending stores exist in a census tract, the variable is assigned a value of 1; otherwise, it is assigned a value of 0. Payday store location information is available online through the Tennessee Department of Financial Institutions. Each payday lending store location is geocoded and matched to its census tract.

The following variables are available through the US Census Bureau by census tract: Income, Unemployment, Race, Youth, Education, and Homeownership.

• Median family income, *Income*, is included in the estimation as research indicates crime is impacted by household income (Brush, 2007; Gyimah-Brempong, 2006; Dahlberg and Gustavsson, 2005). Higher income households have less motivation for committing

⁴Specific addresses are only available for closed incidents.

⁵ See the Federal Bureau of Investigation's (FBI) Uniform Crime Report (UCR) (http://www.fbi.gov/ucr/ucr.htm).

⁶ The complete file includes all incidents that were reported to the Nashville Police Department. Therefore, the file contains information on non-criminal activity as well as crimes that do not fall into the two categories mentioned.

property crime; however, areas with higher income provide greater incentive ("loot") for criminals.

- The percent of the labor force that did not work in the survey year, *Unemployment*, is included in the estimation. The labor force is defined as individuals 16 years and older. Previous research indicates unemployment impacts crime rates (Steven and Winter-Ember, 2001; Levitt, 2001). Employed individuals have less motivation and less opportunity to commit crime. Neighborhoods with high unemployment rates are expected to have higher crime rates.
- The white population as a percent of total population, *Race*, is included as research suggests racial composition impacts crime rates (Saridakis, 2004). Areas with higher white populations are expected to have lower crime rates.
- The male population (age 14 to 24) as a percentage of the total population, *Youth*, and percent of the population with a bachelor's degree, *Education*, are included in the model (Gyimah-Brempong, 2006; Brush, 2007; Levitt, 2001). Older households with higher levels of education are expected to commit fewer crimes. However, areas with older, more highly educated populations are also expected to have higher property values and significant tangible assets, thus increasing the incentive for criminals to commit property crimes.
- The percent of owner-occupied houses, *Homeownership*, is included. Homeownership has been used as a proxy for the benefits of crime in previous research (Gyimah-Brempong, 2006). However, homeownership can also reduce crime because owners have a vested interest in neighborhood property values and the likelihood of neighborhood watch groups increases.

Using OLS, I estimate equation 1 for all census tracts in the Nashville metropolitan area except for one. This one census tract is omitted because it encompasses LP Field and the immediate surrounding area, and it does not have reported income or other demographic variables associated with it.⁷ I also include a specification that substitutes *Payday Lending Availability* with *Payday Lending Store Density*, which measures the number of payday lending stores in each neighborhood. In both estimations, I adjust the standard errors for heteroskedasticity. I also test for multicollinearity. I examine variance inflation factors and none of them exceed 5.5, thus leading me to conclude that multicollinearity is not a problem in this particular dataset. Nonetheless, I do consider alternate specifications that account for multicollinearity, as discussed in the results section.

Sample Selection Bias

Some census tracts do not have violent or property crime incidents reported in 2008, and equation 1 is only estimated for those tracts reporting these types of crime. Therefore, I use Heckman's two-step estimation to control for potential sample selection bias that may arise due to selecting only those census tracts with populated crime statistics. Consistent with Heckman's approach, the inverse of the Mill's ratio is estimated from the Probit equation in the first step and inserted in the OLS estimation in the second step (Heckman, 1979). The variables included in equation 1 are included in the two-step estimation with two exceptions: the payday lending variable is excluded and population density is included.⁸ All variable definitions and discussion for equation 1 apply to those used in the selection correction estimation.

IV. Empirical Results

⁷ LP Field is Nashville's sports stadium and is the home stadium for NFL team, the Tennessee Titans.

⁸ The Heckman estimation requires one variable included in the first stage be omitted from the second stage.

Sample means are provided in Table 1 for all census tracts, census tracts with payday lending, and census tracts without payday lending. On average, census tracts without payday lenders have higher median incomes and are more likely to consist of households who are white homeowners with at least a bachelor's degree. While violent crime rates are similar across census tracts, property crime rates differ substantially. Specifically, census tracts without payday lenders experience 9.3 property crimes per 1,000 people while census tracts with payday lenders experience 6.9 property crimes per 1,000 people.

Table 2 reports the OLS estimations for violent crime rate and its subcategories. The payday lending availability variable is only significant in Model 3. This result implies that neighborhoods with payday lenders have higher robbery crime rates. Specifically, if payday lending becomes available in a neighborhood, the robbery crime rate increases 0.54 units. Using the median robbery crime rate of 1.25 crimes per 1,000 people, this estimate implies an increase to 1.79 crimes per 1,000 people.

Table 3 reports the OLS estimations for property crime rate and its subcategories. The payday lending availability variable is only significant in Model 1. This result implies that neighborhoods with payday lenders have lower total property crime rates. Specifically, if payday lending becomes available in a neighborhood, the property crime rate decreases 4.81 units. The median rate is 4.77, so this result implies that property crime will drop to zero in the median neighborhood. The average rate is 8.70 property crimes per 1,000 people, so this result implies a reduction to 3.89 property crimes per 1,000 people.

As discussed previously, there are two issues that need to be addressed: potential sample selection bias and suspected multicollinearity. Potential sample selection bias is corrected using the Heckman two-step approach. Multicollinearity is addressed through principal component

analysis. Tables 4 and 5 report the results from the second stage of the Heckman estimation and include a Job and Neighborhood Index variable.⁹ The results reported in Tables 2 and 3 indicate many of the neighborhood variables are not statistically significant, but the overall F statistic is significant. This suggests mulitcollinearity may exist, but the inflation variance factors remain small. Nonetheless, I conduct principal component analysis and conclude the income and education variables load on a single index, which I include as an explanatory variable in the Heckman estimation. The payday lending availability variable is only significant in the robbery model, suggesting that if payday lending becomes available in a neighborhood, robbery crime rates will increase by 0.64 units. For the median neighborhood, this implies an increase to 1.89 robberies per 1,000 people. I suspect that the payday lending availability variable is serving as a dummy variable for neighborhood commercialization. I do not think payday lending in itself actually increases robberies in a given neighborhood. It is more likely that payday lenders locate to neighborhoods where there is already a high level of business activity and potential customer base. The number of businesses in a census tract is not readily available, so I examine commercialization at the zip code level. Business count by zip code was collected from Dun and Bradstreet. The correlation coefficient between the number of businesses and the number of payday lenders in a zip code is 0.47. In addition, zip codes with payday lenders have, on average, over 30 more businesses than zip codes without payday lenders. I do not have robbery crime rates at the zip code level, so I am unable to run a regression that examines the relationship between business count and robberies.

⁹ First stage probit estimates are available by request.

V. Discussion and Conclusion

The majority of the publicity regarding payday lending has been negative, citing excessive fees, exorbitant interest rates, and claims of "trapping" families into vicious debt cycles. However, very few studies have actually examined the impact of payday lending on broad community welfare measures (Morse, 2007; Kubrin et. al., 2009). This paper contributes to the literature by examining the relationship between payday lending and neighborhood crime. The results indicate census tracts with payday lenders have lower property crime rates and higher robbery crime rates than those without payday lending locations. However, once I control for sample selection bias, payday lending availability is no longer significant in the property crime model. It remains significant in the robbery model. While these results do not prove causality, they suggest there may be previously unexamined benefits of payday lending for property crime and motivate further econometric analysis of the impact of commercialization on robbery rates.

Future extensions of this paper should attempt to address causality, consider controlling for neighborhood policing strategies, and test for spatial autocorrelation. The first two extensions pose challenges with respect to data availability and endogeneity, but the spatial controls can be added relatively easily.

FIGURE 1

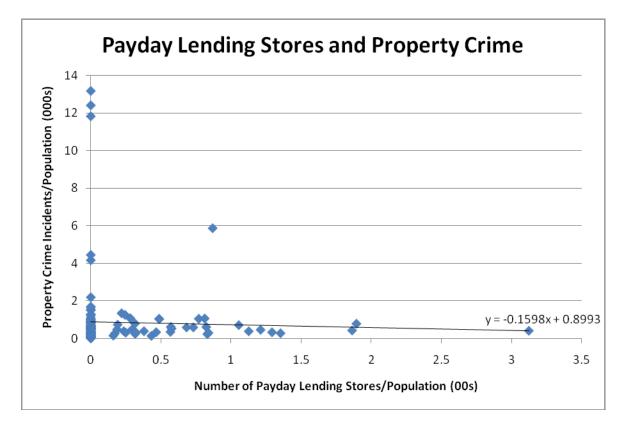


FIGURE 2

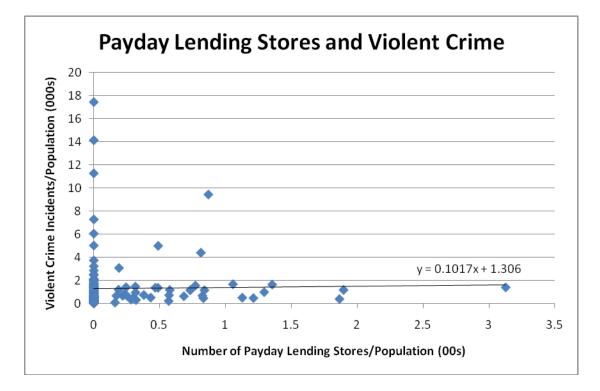


TABLE 1. Sample Means.

Variable Definition	All Census Tracts	Tracts with Payday	Tracts without Payday	
		Lenders	Lenders	
Median Income	41,206	35,688	43,132	
Percent of Population 16 and Older Not Working	21%	21%	21%	
Males (14 to 24 years of age)/Population	8.0%	8.3%	7.9%	
Percent Owner Occupied Housing	54%	49%	56%	
Percent White Households	65%	61%	67%	
Percent of Population (25 and older) with a Bachelor's Degree or Higher	29%	23%	31%	
Violent Crime/Population (000s)	13.25	13.47	13.17	
Property Crime/Population (000s)	8.7	6.9	9.3	
Number of Census Tracts	143	37	106	

Data Sources: U.S. Census Bureau, 2000; Nashville Metropolitan Police Department, 2008; Tennessee Department of Financial Institutions, 2009.

	(1)	(2)	(3)	(4)	(5)
	Violent	Murder	Robbery	Assault	Rape
	Crime	Crime	Crime	Crime	Crime
	Rate	Rate	Rate	Rate	Rate
Payday Lending Availability	-3.63	-0.003	0.54***	0.78	-0.05
	(3.58)	(0.03)	(0.32)	(0.81)	(0.03)
Log(Median Income)	31.30	-0.14	0.16	-7.00	0.11
	(45.65)	(0.18)	(2.04)	(4.88)	(0.30)
Unemployment Rate	13.92	-0.10	-0.68	-3.93	-0.03
	39.21)	(0.19)	(1.64)	(4.61)	(0.32)
White (% of Total Population)	-17.26**	-0.09	-0.28	-4.97*	-0.06
	(8.48)	(0.07)	(0.64)	(1.75)	(0.11)
Male Youth	23.62	1.07	-1.32	4.11	0.59
(% of Total Population)	(78.76)	(0.79)	(4.61)	(9.95)	(0.85)
Bachelor's Degree or Higher	-12.86	0.13	-2.41**	-3.54***	-0.11
(% of Total Population)	(22.90)	(0.11)	(1.02)	(2.10)	(0.14)
Owner Occupied	-51.10***	0.03	-2.21***	-0.002	-0.19
(% of Total Housing Units)	(26.60)	(0.08)	(1.29)	(2.38)	(0.17)
R^2	0.26	0.16	0.28	0.42	0.12

TABLE 2. OLS. Dependent Variable: Violent Crime and Subcategories/Population (000s)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Property	Burglary	Other	Theft from	Theft	Theft Auto	Motor
		0.	Larceny	Building	from	Parts and	Vehicle
			ť	0	Vehicle	Accessories	Theft
	1 01444	0.25	0.04	0.16	0.21	0.002	0.02
Payday Lending Availability	-4.81***	-0.25	0.04	0.16	0.21	0.003	0.02
	(2.79)	(0.23)	(0.20)	(0.11)	(0.20)	(0.07)	(0.13)
Log(Median Income)	32.29	0.26	0.07	-0.17	0.07	0.29	0.55
	(38.73)	(0.79)	(0.97)	(0.35)	(0.75)	(0.25)	(0.54)
Unemployment Rate	9.48	-2.17***	-0.84	0.50	0.67	-0.13	0.96
	(32.63)	(1.21)	(1.10)	(0.59)	(0.82)	(0.26)	(0.70)
White (% of Total Population)	-0.78	0.05	0.56***	0.11	0.49**	0.16	-0.11
	(7.30)	(0.36)	(0.33)	(0.17)	(0.25)	(0.13)	(0.27)
Male Youth	6.48	-1.34	-0.11	0.56	1.19	0.08	-1.37
(% of Total Population)	(50.52)	(2.73)	(2.37)	(1.04)	(2.19)	(0.70)	(2.24)
Bachelor's Degree or Higher	-12.74	-3.26*	-2.52*	0.29	0.02	-0.55*	-0.91*
(% of Total Population)	(19.92)	(0.72)	(0.56)	(0.25)	(0.43)	(0.17)	(0.34)
Owner Occupied	-44.75**	-0.43	-0.78	0.18	-1.06***	-0.29***	-1.16**
(% of Total Housing Units)	(21.25)	(0.57)	(0.78)	(0.29)	(0.60)	(0.17)	(0.52)
R^2	0.17	0.21	0.17	0.04	0.11	0.09	0.19

TABLE 3. OLS. Dependent Variable: Property Crime and Subcategories/Population (000s)

TABLE 4.	Heckman Correction: Second Stage OLS Estimates.
Dependent V	ariable: Violent Crime or Subcategories/Population (000s)

	(1)	(2)	(3)	(4)	(5)
	Violent	Murder	Robbery	Assault	Rape
	Crime	Crime	Crime	Crime	Crim
	Rate	Rate	Rate	Rate	Rate
Payday Lending Availability	-2.36	-0.07	0.64**	0.80	-0.11
	(8.93)	(0.17)	(0.30)	(0.75)	(0.09
White (% of Total Population)	-17.30	0.66	-0.23	-6.03*	-0.14
	(19.94)	(1.51)	(0.68)	(1.55)	(0.26
Male Youth	14.73	-2.44	-2.30	3.37	1.73
(% of Total Population)	(106.53)	(5.78)	(4.50)	(8.85)	(1.43)
Owner Occupied	-49.75***	-0.29	-2.39**	-2.57	-0.39
(% of Total Housing Units)	(26.33)	(0.67)	(0.99)	(2.19)	(0.42)
Job and Education Index	0.23	-0.01	-0.37**	-1.00*	-0.01
	(4.32)	(0.13)	(0.19)	(0.36)	(0.08
Lambda	47.34	-0.66	1.16	3.27	0.50
	(51.91)	(1.35)	(1.15)	(4.37)	(0.66

	(1) Property	(2) Burglary	(3) Other Larceny	(4) Theft from Building	(5) Theft from Vehicle	(6) Theft Auto Parts and Accessories	(7) Motor Vehicle Theft
					veniere	necessones	Incit
Payday Lending Availability	-3.74	-0.22	0.07	0.17	0.27	0.40	0.02
	(8.43)	(0.40)	(0.21)	(0.28)	(0.20)	(0.51)	(0.14)
White (% of Total Population)	-0.74	-0.38	0.34	0.32	0.58	0.30	0.37
······· (/· ·· ························	(18.49)	(0.93)	(0.49)	(0.89)	(0.44)	(1.72)	(0.33)
Male Youth	14.35	-0.56	-2.58	-4.95	0.91	-10.79	2.62
(% of Total Population)	(95.35)	(5.50)	(2.51)	(7.90)	(2.03)	(9.63)	(2.41)
Owner Occupied	-34.80***	0.71	-0.37	-0.56	-0.97	-1.67	-0.85**
(% of Total Housing Units)	(20.81)	(1.20)	(0.54)	(1.30)	(0.64)	(1.48)	(0.33)
Job and Education Index	0.53	-0.11	-0.22***	0.19	-0.2	0.38	0.03
boo una Dadoution mach	(3.96)	(0.28)	(0.12)	(0.29)	(0.10)	(0.56)	(0.10)
Lambda	44.14	-2.16	-0.72	-1.73	0.10	-3.05	-0.66
	(78.24)	(2.49)	(0.85)	(2.46)	(0.53)	(2.86)	(0.42)

TABLE 5.	Heckman Correction: Second Stage OLS Estimates.
Dependent '	Variable: Property Crime or Subcategories/Population (000s)

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