

A Contribution to the Empirics of Crime

by

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Abstract

We consider two questions. First, we examine the extent to which economic versus sociological theories explain the variation in property and violent crime rates separately. Second, we consider how the relative economic position of a community among neighboring areas may be associated with crime. Both economic and sociological theories suggest that higher inequality may be associated with crime. Economic theories imply that inequality may be positively correlated with crime through its effect on the differential returns from criminal activity versus legitimate pursuits. This suggests that there would be no relationship between crime and inequality, if the benefits and costs of crime participation are controlled. However, sociological theories of crime imply that inequality may have effects on crime through other channels such as lack of social capital, lack of upward mobility, or social disorganization. The empirical evidence on the crime-inequality relationship generally shows a positive relationship. However, there are several limitations in this literature. First, the unit of analysis for which crime is examined is relatively large (e.g. country, states and large metropolitan areas). Various studies suggest that the appropriate geographical unit to study crime might well be much smaller, such as neighborhood. Some recent studies have examine crime at the commune, city block, police precinct level, respectively, but none of these studies address the issue of local inequality and crime. Second, comparability of definitions of crime categories and well-being indicators poses serious problems for most cross-country studies. Finally, most studies treat crime markets as closed, meaning that only the characteristics of own area, and not those of neighboring areas, are allowed to influence the crime rates. This assumption quickly loses appeal when geographical units are such that travel for legitimate or illegitimate activities between them is plausible. Using data for the eight categories of crime during 1998-2002 in the three cities of the US (Nashville, TN; Portland, OR; and Tucson, AZ), we address the limitations summarized above. The geographical unit used in the analysis is block group.

The results show that, controlling for economic and structural characteristics, there is statistically significant correlation between local inequality and levels of almost all categories of crime. The unemployment rate and racial heterogeneity are powerful predictors of the level of crime in an area. However, results do not support the hypothesis that criminals travel to wealthier areas in order to commit crime. Finally, we find strong evidence in support of both the Social Control and the Routine Activities theories.

1. Introduction

Crime is a top concern of the US public policy. If compared to other developed countries, the US shows a higher rate of violent crime, and especially of gun violence. Only in 2007, over 11 million crimes were reported, with an increase in the crime rate of about 350% since 1964¹. At the same time, the United States is also characterized by high levels of income inequality (Kelly, 2000) that, according to many sociological studies, fosters higher levels of crime, especially when the possibilities for the poor to move up to the higher levels of the society are scarce (Coser, 1968) or when it is associated with inequality between ethnic or racial groups (Blau and Blau, 1982).

Economic theory of crime, on the other hand, suggests that the higher the income inequality, the higher the difference between returns from legal and illegal activities (Becker 1968; Ehrlich 1973). Therefore, contrary to the testable predictions of the sociological theories, crime and inequality would be unrelated once benefits and costs of criminal activities are controlled for.

In a recent study, Demombynes and Özler (2005) analyzed the relationship between crime and local inequality in South Africa at police precinct level, allowing for neighboring effects and criminals' mobility. Cahill (2005) studies the relationship between the characteristics of neighborhoods and the rates of property and violent crime, in order to discover whether the relationship between crime and local structural characteristics is "generalizable across urban areas" (p. 70). However, her study does not address the issue of the relationship between local inequality and crime, nor this was

¹ Source: US Bureau of Justice Statistics.

done by other studies that analyzed the determinants of crime at smaller units of analysis in the United States.

In this thesis I use crime and structural data for eight categories of crime during 1998-2002 in three cities of the US (Nashville, TN; Portland, OR; and Tucson, AZ) to explore the effects of local income inequality on crime at a Block Group level, a much smaller unit of analysis. Crime data, comprehensive of location of each criminal activity, were collected from the Police Departments of the cities. These data have been aggregated to arrive at block groups measures and averaged over the five years. Structural data, on the other hand, come from the 2000 U.S. Census of the Population: they are used to construct inequality measures and other structural indicators that might be related with the level of crime in an area. The dependent variable of interest is the count of crime reported to the police by Block Group. I estimate alternative specifications of negative binomial regression model after rejecting the suitability of Poisson model. I also estimate the models by OLS to test the sensitivity of results to choice of model. In the case of OLS, the dependent variable is rates of crime rather than count of crime, consistent with past studies.

I first include in a “base model” indicators consistent with both economic theory - Index of concentration at the extremes, per capita income, etc. - and sociological theories, in order to test whether the former or the latter better explain variation of crime across space at a local level. Then I run a second regression model in which I substitute an indicator of the level of poverty in an area for the income indicator, in order to test whether poverty is a better predictor of crime than the absolute wealth of an area. Thirdly, I test the routine activity theory by including in the model other explanatory

variables consistent with it. Finally, I examine whether it is inequality within each Block Group or rather inequality in the “criminal catchment area”, defined later, which is more strongly related with the level of crime.

After a review of the sociological and economic theories on crime and inequality, included in the next section, in chapter 3 I analyze the more relevant empirical findings of previous studies. Descriptions of the methodology and data adopted, of the cities under study and of the findings of the analysis are included in chapter 4, while the final considerations are included in chapter 5.

2. Literature Review

2.1 Economic Theory of Crime

Economic theory of crime is based on Becker's occupational choice model, according to which a key-factor determining crime is the difference between the returns that can be obtained from legal and illegal activities: "A person commits an offense if the expected utility to him exceeds the utility he could get by using his time and other resources at other activities" (Becker, 1968, p. 176). The number of offenses a person would commit also depends on her probability of conviction and the degree of punishment, which represent the cost of the criminal activity, and on her willingness to commit an illegal act².

There are many ways to measure the expected utility from both criminal and legitimate activities. Ehrlich (1973), for example, used the median income of the residents' of a given area as a proxy for the returns from property crimes such as burglary and theft. Machin and Meghir (2000), on the other hand, used the 25th percentile wage as a proxy for the income obtainable by means of legitimate activities, as they claimed criminals mostly belong to the poorer part of the society. Combining these two measures we could therefore argue that, wherever the difference between median income and the income earned by the relatively poor is big, i. e. wherever there is great wealth inequality, the level of crime is expected to be higher, and vice versa. However, as opposed to what is claimed by sociological theories, this relationship does not necessarily mean that

² Individual motivations are fundamental in order for a criminal act to take place. However, this study is focused on economic and "environmental" factors influencing the level of crime, therefore leaving other individual motivations to further investigations.

inequality causes crime. Controlling for the benefits and costs of crime, local inequality might not be correlated with the number of offenses (Demombynes and Özler, 2005). This is an important point of departure of the economic theory from the sociological theories of crime, according to which local inequality *per se* causes higher levels of crime, especially if it is associated with low levels of social capital (Kennedy et al., 1998; Lederman et al., 2002), inequality across racial groups (Blau and Blau, 1982), or finally with lack of upward mobility in society (Blau and Blau, 1982; Wilson and Daly, 1997).

Income, on the other hand, can also be used as a proxy for the higher levels of residents' protection from victimization, as richer communities might have more ways to protect themselves from crime (Chiu and Madden, 1998).

Finally, as pointed out by Demombynes and Özler (2005), we can consider every community as an open market for criminal activities whenever criminals can travel "at a negligible cost" from a community to a bordering one in order to commit illegitimate activities. Under this hypothesis, even controlling for inequality the observed level of crime will be higher in communities with the higher returns from crime. Therefore, what really matters in order to explain the level of crime in a given community is represented not only by the characteristics of the community itself, but also by those of all the bordering communities, that together make up the "criminal catchment area"³. However, if the returns from crime are correlated with higher levels of protection from crime, we might not expect a greater number of offenses in the richest community; moreover, the *criminal mobility* hypothesis might not apply for all the different kinds of crime, and be more suitable for some (e. g.: property crime) and unsuitable for others.

³ The criminal catchment area is the area of influence of a criminal. In this study, I define it as the whole of the Census Block Group under observation and all the Block Groups bordering on it.

2.2 Sociological Theories of Crime: the Ecological approach

The “ecological” approach to crime is focused on the environment in which crime occurs, rather than on individual offenders. Therefore, such approach is not concerned with individual motivations to commit crimes, but rather provides a macro-social explanation of deviant behavior (Cahill, 2005). Crime, according to the environmental criminologists, can only be understood having a thorough knowledge of the social, economic and geographic context in which it occurs.

Two main theories make up the core of the ecological studies of crime: Social Control-Disorganization theory, and Routine Activities theory. The former is focused on the factors influencing the ability (or the inability) of residents of a given area to collaborate in order to achieve a common goal; the latter is focused on people’s daily activities and on how such activities determine the presence or the absence of opportunities for criminal events.

The Social Control-Disorganization theory is based on the work of Shaw and McKay (1942, 1969) according to which high levels of poverty, high residential mobility and high racial heterogeneity are the factors that characterize socially disorganized areas. Extremely poor residents, in fact, might not have the necessary resources to organize the community, while a fast population turnover might impede the development of strong social ties; racial heterogeneity, finally, contribute to create differences in standards of behavior (Cahill, 2005). Two other factors have been later indicated by Sampson (1986) and by Sampson and Groves (1989), namely family disruption and degree of urbanization; the former exerts its effect on crime through a reduced possibility for adults to form social networks and through a lower supervision of youth; the latter increases the

level of anomie of an area, thereby reducing the likelihood of strong social networks among residents. All these factors, therefore, hinder residents' ability to advance a common strategy to address problems, as well as to collaborate in order to prevent crime or in the informal control of youths.

In the Routine Activities theory the attention shifts from the society to the physical place in which crime occurs. People's lifestyle, determined in turn by socio-economic characteristics (Hindelang et al., 1978), is a key-factor for having a good understanding of crime, as it determines the presence (or the absence) of the spatial and temporal convergence of motivated offenders, suitable targets and incapable guardians (Cohen and Felson, 1979; Felson and Cohen, 1980). A fourth element, namely "target attractiveness", or the value of the target, was also included in the analysis by Cohen et al. (1981).

The two theories have recently been merged by Wilcox, Land and Hunt (2003) in the "Dynamic Multicontextual Criminal Opportunity Theory", according to which an opportunity context for crime coexists at both the individual level (e.g.: target vulnerability, motivated offenders, etc.) and the environmental level (ephemeral motivated offender concentration, aggregated social control).

2.3 Empirical Evidence from the Literature

2.3.1 Evidence supporting the Economic Theory

Most of the empirical evidence on the relationship between income inequality and crime displays a significant and positive correlation between them (Blau and Blau, 1982; Hsieh and Pugh, 1993; Kennedy et al., 1998; Kelly 2000; Fajnzylber et al., 2002; Lederman et al., 2002), even though some studies (Messner and Tardiff, 1986; Patterson,

1991) found no significant relationships between inequality and either violent crime or burglary.

The most commonly used measure of inequality is the Gini coefficient (Blau and Blau, 1982; Messner and Tardiff, 1986; Patterson, 1991; Fajnzylber et al., 2002; Lederman et al., 2002); other indicators are the Robin Hood Index, RHI,⁴ (Kennedy et al., 1998, p. 8), the mean log deviation (Demombynes and Özler, 2005, p. 273) and the Index of Concentration at the Extreme, or ICE (Massey, 2001; Morenoff et al., 2001; Sampson and Morenoff, 2004; Cahill, 2005; Matsueda et al., 2005).

Given the unavailability of income data at an individual level, which are necessary in order to calculate the Gini index of income inequality, in this thesis I use the ICE indicator, defined as:

$$ICE_i = \frac{A_i - P_i}{T_i}$$

where A_i is the number of affluent families (or persons) in a given neighborhood i , P_i is the number of poor families (or persons) and T_i is the total number of families (or population) of the neighborhood i . The Index of Concentration at the Extremes expresses, therefore, the *proportional imbalance* (Massey, 2001, p. 44) between the rich and the poor, i.e. the degree of concentration of affluence relative to the concentration of poverty in an area. Should the difference between poor and rich people be the same in different areas, this indicator assumes lower values where such difference is displayed within a larger population. ICE can assume values ranging from -1, when all the families are poor,

⁴ Calculated “by summing the excess shares of income for those deciles with shares that exceed 10%”. It therefore “represents the share of income that would have to be transferred from those above the mean to those below the mean to achieve an income distribution of perfect equality (Atkinson and Micklewright, 1992).

to +1, when all the families are affluent, while a value of zero means there is a balanced number of poor and affluent families in a neighborhood. According to Massey (2001), neighborhoods with $ICE < -.30$ are “areas of concentrated poverty”, those with $ICE > .30$ are “areas of concentrated affluence” and those with ICE between $-.30$ and $.030$ are “middle class areas”. In the literature, ICE has been found negatively correlated with crime (Morenoff et al., 2001; Sampson and Morenoff, 2004), with higher levels of crime in neighborhoods characterized by lower values of ICE.

2.3.2 Evidence supporting Sociological Theories on Crime

Socially distressed areas are characterized by poverty, residential mobility, racial heterogeneity, family disruption and degree of urbanization.

As to the effects of poverty on crime, the empirical evidence is not unambiguous: a positive relationship is found to be significant in many studies (Patterson, 1991; Messner and Tardiff, 1986; Warner and Pierce, 1993; Jarjoura et al., 2002), but there is no unanimity about how to measure poverty and whether relative poverty should be used in place of absolute poverty indicators. Blau and Blau (1982), for example, found that the relationship between absolute poverty - measured as the percent leaving below the poverty line - and crime is insignificant after controlling for income inequality. On the other hand, Warner and Pierce (1993) found poverty to be significantly correlated with burglary and assault rates, even after controlling for factors such as family disruption that, according to Sampson (1985) and Smith and Jarjoura (1988), mitigates the effects of poverty on crime.

Several studies found a positive relationship between mobility and crime (Crutchfield et al., 1982; Sampson 1985; Patterson, 1991; Warner and Pierce, 1993;

Miethe and Meier, 1994). However, the effects of mobility on crime might also be affected by the level of poverty in an area (Smith and Jarjoura 1988); moreover, Sampson and Groves found no significant relationship between mobility and crime, therefore hypothesizing that the effects of mobility might be reduced by the presence of local social networks.

Also for racial heterogeneity the results found in the literature are not univocal: according to Warner and Pierce (1993), for example, although racial heterogeneity is significantly and positively correlated with burglary rates, the sign of the relationship is negative in very poor neighborhoods. Besides absolute poverty, also economic inequality (Blau and Blau, 1982) and family disruption might affect the relationship between race and crime. For example, controlling for family structure, the relationship between racial heterogeneity and crime turned to be insignificant in Smith and Jarjoura's (1988) study.

Another indicator of socially disorganized societies is the high level of divorce rate and prevalence of single-parent families, which is highly correlated with crime (Sampson, 1985, Messner and Tardiff, 1986, Smith and Jarjoura, 1988) through the lower level of participation of divorced individuals in social activities and hence the fewer possibilities to create strong ties with the other residents of an area.

Finally, as to the relationship between level of urbanization and crime, Sampson (1985) found a strong positive relationship between violent crime and urbanization. According to Wikstrom (1991), moreover, more criminal events are expected to occur in highly urbanized area due to the negative effects on social ties among residents. However, other studies on the relationship between population density - one of the most commonly used indicators of urbanization, along with population size - and crime have

shown contrasting results.

The second sociological theory on the ecology of crime is the “Routine Activities” theory, according to which the most important determinant of criminal opportunities in an area is represented by its residents’ lifestyle and daily activities, determined in turn by other characteristics such as family structure, urban structure and land use patterns.

As to family structure, single and divorced persons living alone are more likely to be victims of violent crimes and burglary (Felson and Cohen, 1980; Messner and Tardiff, 1986; Sampson and Wooldredge, 1987; Sampson and Laurtisen, 1993; Kposowa et al., 1994; Breault and Kposowa, 1997; Glaeser and Sacerdote, 1999) because of the decreased levels of guardianship at home, the increased proximity to offenders, the lower level of guardianship in a community, or finally because of the mutually reinforcing effects of marital dissolution and poverty. According to Felson (2002), another important determinant of crime is given by the degree of female involvement in the labor force and the consequent reduced supervision of teenagers.

The effect of population density - the most commonly used measure of urban structure - on crime is not clear: a higher density might produce a higher number of potential victims and offenders in an area, while, at the same time, it can cause the presence of a higher number of guardians (Cahill, 2005). The results of the previous studies are therefore contrasting.

Land use patterns, finally, may determine which human activities can be undertaken in an area - commercial, industrial, residential, recreational - and hence represent a good predictor of the kind of criminal activity most likely to happen

(Wikstrom, 1991). For example, areas with a higher prevalence of commercial uses will more likely have higher rate of larceny and car vehicle thefts, while residential areas are more likely to be burglarized (Cahill, 2005). According to Groff and La Vigne (2001), moreover, characteristics such as proximity to bus stops are very good predictors of the rate of residential burglary in an area, as they increase the “visibility” of the targets.

2.4 Limitations of previous studies and Contribution to the analysis

The unit of analysis used in the literature in order to analyze the relationship between inequality and crime is quite large: most of the studies have used data for countries, states or large metropolitan areas, while the appropriate geographical unit of analysis for crime may be much smaller because: the determinants of crime might not be the same across such far and different contexts; definitions of crimes may vary from a country (or state) to another; and, in order to account for the possibility for criminals to travel at a negligible cost to undertake the criminal action, it is more likely that this happens in smaller geographical units rather than across states or countries.

Even though *there are* studies on crime in the US that used a small unit of analysis, they did not address the issue of local inequality and crime. Moreover, they used as dependent variable the *rate* of crime, given by the number of crime per 100,000 people, yet such indicator is suitable for a larger unit of analysis, while for smaller unit of analysis *count* models are appropriate because a high number of observations has crime count/rate equal to zero; therefore, the distribution for each crime is skewed to the left, but with a long tail as there are also neighborhoods with high rates of crime.

Although a study undertaken by Demombynes and Özler (2005) has addressed the above mentioned limitations of the literature, the median size of the chosen unit of

analysis - 227 square miles - is still too big to consider them as a “neighborhood”. In this thesis, I attempt to address this limitation by using Census Block Group⁵ as the unit of analysis, with a mean size of 15.7 square kilometers and an average population of 1,185.

By using this unit, criminals are allowed to travel at a negligible cost in order to achieve higher returns from crime, and hence markets for criminal activities are allowed to be “open”.

Moreover, this study *does* address the issue of local inequality and crime by means of a Count Regression Model, followed by a test for model specification aimed to discover whether, and in which direction, results are affected by the specification of the model.

⁵ A Census Block Group is a geographical unit used by the United States Census Bureau which is between the Census Tract - defined below - and the Census Block. More specifically, a Census Block Group (BG) is “a cluster of census blocks having the same first digit of their four-digit identifying numbers within a census tract”. BGs generally contain between 600 and 3,000 people, with an optimum size of 1,500 people. Census Tracts, in turn, are “small, relatively permanent statistical subdivisions of a county” that “generally have between 1,500 and 8,000 people, with an optimum size of 4,000 people. When first delineated, Census Tracts are designed to be homogeneous with respect to population characteristics, economic status, and living conditions. The spatial size of census tracts varies widely depending on the density of settlement. Census tract boundaries are delineated with the intention of being maintained over many decades so that statistical comparisons can be made from decennial census to decennial census. However, physical changes in street patterns caused by highway construction, new developments, and so forth, may require occasional boundary revisions. In addition, census tracts occasionally are split due to population growth or combined as a result of substantial population decline”. (http://www.census.gov/geo/www/cob/tr_metadata.html; last accessed: May 13, 2009).

3. Data and Empirical strategy

3.1 Data

3.1.1 The study area

In order to test the generalizability of the results across different urban contexts, the analyses of the local determinants of crime have been undertaken in three U.S. cities that, while showing similar population sizes and levels of crime, are at the same time characterized by very different socio-economic and geographic conditions (Cahill, 2005). Namely, the study area includes the cities of Tucson, Arizona, Portland, Oregon, and Nashville, Tennessee.

Located in Southwest of the U.S., only 60 miles north of the Mexican border, the city of Tucson counted, according to the U.S. Census of the Population, almost 490,000 people in 2000, with a yearly growth rate in the 10-year period 1990-2000 of 2% (table 5.1), hence higher than the average growth rate of the U.S. but lower than the growth rate of Arizona. The population density was 965/km², and its metropolitan area included almost 850,000 residents. The city downtown is not densely developed, therefore lacking attractiveness for economic or recreational activities, and the city growth is mostly outward. The city of Tucson hosts a very large Latin American community, which accounts for more than one-third of the total population (more than 80% in South Tucson, an enclave located south of downtown), while the African American population is very small (less than 5% of the total population). About 14% of the households had a female householder with no husband present, and nearly 32% were made up of individuals. The

median household income was nearly \$31,000, and the median income for a family was about \$37,000; the per capita income for the city was \$16,322. About 14% of families and 18% of the population were living below the poverty line, while 3.6% of the population over 16 was unemployed. The main economic activities are represented by the military industry, the University of Arizona, which is currently the second largest employer in the city, and the tourist industry, as Tucson is the “nest” of the so-called “snow-birds”, i.e. people who reside in States with colder climate and move to Tucson during the winter. Finally, about 23% of the population over 25 has a Bachelor’s degree or higher. As to the criminal activities, the rate of property crime per 100,000 people is 8,215, and the rate of violent crime is 933 (tables 3.2 and 3.3).

Portland, located in Northwest Pacific region of the US, counted nearly 530,000 people in 2000, with a growth rate slightly higher than 2% per year in the previous decade. The population density was $1,518/\text{km}^2$, and its metropolitan area included almost two million residents. The city growth is mainly inward, and the downtown is a very affluent area; the city center is also divided in distinct sectors by a system of highways, railways and by the Willamette River. Both the African American and the Latin American populations are small: in total they only represent the 13% of the population. About 11% of the households had a female householder with no husband present, and nearly 35% were made up of single persons. The median household income was slightly higher than \$40,000, while the median income for a family was about \$50,000; the per capita income for the city was \$22,643. About 8% of families and 13% of the population were living below the poverty line, while 4% of the population over 16 was unemployed.

Table 3.1 - Socio Economic characteristics (in 2000)

	Tucson	Portland	Nashville
Total population	486'699	529'121	545'524
Yearly Growth rate (1990-2000)	2.0%	2.1%	1.2%
Population density (people/km ²)	965	1'518	438
Metropolitan area population	843'746	1'927'881	1'311'789
% African American	4.3%	6.6%	26.8%
% Hispanic or Latino	35.7%	6.8%	4.7%
% Female householder (no husband)	13.8%	10.8%	14.6%
% 1-member households	32.3%	34.6%	33.8%
Median household income	30'981	40'146	39'232
Median family income	37'344	50'271	48'448
Per capita income	16'322	22'643	22'018
% Families below poverty line	13.7%	8.5%	10.2%
% Individuals below poverty line	18.4%	13.1%	13.3%
% Over 16 unemployed	3.6%	4.5%	3.6%
Population over 25 with a Bachelor's Degree or higher	22.9%	32.6%	29.7%

Source: U.S. Census Bureau

Table 3.2 - Property crime rates per 100'000 people in 2000

	Crime rate per 100'000 people			
	Property Crime	Burglary	Larceny-Theft	Motor Vehicle Theft
Tucson	8'215	1'381	5'619	1'215
Portland	6'661	1'051	4'719	891
Nashville	7'184	1'382	4'839	963

Source: Bureau of Justice Statistics (<http://bjsdata.ojp.usdoj.gov/dataonline>)

Table 3.3: Violent crime rates in the cities under study in 2000

	Crime rate per 100'000 people				
	Violent Crime	Murder and non-negligent manslaughter	Forcible rape	Robbery	Aggravated assault
Tucson	933	12	73	297	551
Portland	1'077	4	70	273	730
Nashville	1'623	13	73	407	1'130

Source: Bureau of Justice Statistics (<http://bjsdata.ojp.usdoj.gov/dataonline>)

The High-tech industry and the freight port represent the two most important economic activities taking place in the city, followed by the steel industry. About 33% of the population over 25 has a Bachelor's degree or higher. As to the criminal activities, the rate of property crime per 100,000 people is 6,661, and the rate of violent crime is 1,077 (tables 3.2 and 3.3).

Finally, Nashville counted about 545,000 people in 2000, with a growth rate of only 1.2% in the decade 1990-2000 and a population density of 438/km²; its metropolitan area included over 1.3 million residents. The city is divided in two parts by the Cumberland River and is growing outward, with a poorly developed downtown surrounded by a system of highways, where the population is mostly African American. Nashville, in fact, hosts a big African American community: more than 25% of the total population is black, while the Latino population is small and does not reach the 5%. About 15% of the households had a female householder with no husband, and nearly 34% were made up of single persons. The median household income was slightly higher than \$39,000, while the median income for a family was about \$48,500; the per capita income for the city was \$22,018. About 10% of families and 13% of the population were living below the poverty line, while 3.6% of the population over 16 was unemployed. The health care industry, the automotive industry and the music industry represent Nashville's main economic activity. The rate of property crime per 100,000 people is 7'184, and the rate of violent crime is 1'623 (tables 3.2 and 3.3).

3.1.2 Dependent Variables

Data on crime have been gathered for eight categories of crime - burglary, vehicle theft and larceny; aggravated-, simple- and sexual-assault; robbery and homicide - from

Tucson and South Tucson Police Departments, Portland Police Bureau, and Metro Nashville Police Department, for the 5-year period 1998-2002. According to FBI classification of crime, three of them - burglary, vehicle theft and larceny - fall in the category of “property crime”, while aggravated assault, simple assault and sexual assault fall in the category of “violent crime”; economic and sociological theories have different implications for the two categories of crime. Robbery and homicide, on the other hand, are characterized by both violence and pecuniary gain, therefore representing two distinct categories of crime (Demombynes and Özler, 2005). Frequencies of crime have been aggregated to block groups and averaged over the five years (descriptive statistics are presented in table 3.4) in order to account for anomalous values eventually occurred in particular years.

Rates of crime per 1'000 residents have then been computed using data from the 2000 U.S. Census of the population. Finally, seventeen block groups - representing the 1.3% of the total number of Block Groups - have been excluded from the analysis because of the lack of availability of crime data. In total, 1'322 block groups have been included in the study - 417 in Tucson, 456 in Portland and 449 in Nashville. Definitions of crime, as well as of the explanatory variables, are provided in Appendix A.

Table 3.4 - Frequencies and rates of crimes per 100'000 residents in the block groups

	<u>Overall</u> (N = 1'322)				<u>Tucson</u> (N = 417)				<u>Portland</u> (N = 456)				<u>Nashville</u> (N = 449)			
	<u>Mean</u>	<u>Std dev.</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Std dev.</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Std dev.</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Std dev.</u>	<u>Min</u>	<u>Max</u>
Freq. of Burglary	15	11	0	115	15	11	0	115	13	10	0	112	15	11	0	82
Freq. of Vehicle Theft	12	12	0	112	13	13	0	83	11	11	0	112	11	11	0	95
Freq. of Larceny	58	75	0	975	69	82	0	702	54	73	0	911	53	70	1	975
Freq. of Aggravated assault	9	11	0	122	5	6	0	95	8	9	0	101	13	15	0	122
Freq. of Simple assault	23	26	0	272	28	25	0	137	11	11	0	117	30	31	0	272
Freq. of Sexual assault	1	2	0	57	1	1	0	6	1	1	0	6	1	3	0	57
Freq. of Robbery	4	6	0	80	3	4	0	38	3	6	0	80	6	8	0	53
Freq. of Homicide	0.1	0.2	0	2	0.1	0.2	0	2	0.1	0.1	0	1	0.2	0.3	0	2
Rate of Burglary	1732	3702	0	83333	1879	3652	0	70000	1335	1913	0	30000	1998	4904	0	83333
Rate of Vehicle Theft	1262	2128	0	38947	1463	1988	0	29167	1014	1214	0	15169	1327	2844	0	38947
Rate of Larceny	6023	8882	0	89032	7573	10207	0	76199	5223	8028	0	89032	5396	8194	119	77335
Rate of Aggravated assault	1025	2920	0	72126	564	899	0	10000	770	1223	0	15000	1713	4707	0	72126
Rate of Simple assault	2526	4733	0	96332	3097	3469	0	35116	1028	1907	0	32500	3521	6900	0	96332
Rate of Sexual assault	110	689	0	20000	103	504	0	10000	63	173	0	2500	164	1063	0	20000
Rate of Robbery	533	1736	0	42047	387	664	0	5833	292	718	0	11679	913	2783	0	42047
Rate of Homicide	14	51	0	1111	12	22	0	176	5	14	0	171	24	84	0	1111

Source: Author's own calculations on data provided by the Police Departments of the three cities under observation

3.1.3 Explanatory Variables

The source of the Block Groups' economic and structural information is the 2000 U.S. Census of the Population.

In order to create the Index of Concentration at the Extremes, described in section 2, we consider “affluent” families those with an income higher than \$50'000 (Sampson and Morenoff, 2004; Cahill, 2005) and “poor” families those with an income lower than \$15'000 (Cahill, 2005). Descriptive statistics are provided in table 3.5. As it has been earlier discussed, in the literature ICE has been found negatively correlated with crime; therefore, neighborhoods characterized by very low values of ICE are expected to show higher crime rates.

We also use mean per capita income as a proxy for the economic returns from crime (Ehrlich, 1973) in each Block Group, and unemployment rate in the “criminal catchment area” - given by the Block Group under observation and all the bordering neighborhoods - in order to control for the opportunity cost of crime (Demombynes and Özler, 2005): the lower the unemployment rate, the higher will be the opportunities for residents to be involved in legitimate activities. Moreover, in order to test for the “criminals travel” hypothesis, we introduce a dummy variable named “Richest”, which indicates whether the Block Group is the richest neighborhood in the criminal catchment area (Demombynes and Özler, 2005). We also considered that “richest” Block Groups bordering neighborhoods not included in the analysis⁶ might not be the richest ones in case that the excluded block groups have a higher mean per capita income, and might hence display a lower level of crime if compared to the “true” richest neighborhoods.

⁶The three cities under observation are part of larger metropolitan areas which neighborhoods are not included in the analysis.

Therefore, we introduced a new dummy variable, which is equal to 1 whenever a “richest” neighborhood borders on a block group not included in the analysis and 0 otherwise, and that might therefore be interpreted as an interaction term between the two dummies “Richest” and “Peripheral”. We expect this interaction term to have a negative coefficient.

In order to test if sociological theories explain variations in crime level across neighborhoods better than economic theories, we introduce in the analysis explanatory variables consistent with the Social Control-Disorganization theory - poverty, percent of single-parent families, residential stability, and racial heterogeneity - and with the Routine Activities theory - population density, percent of single-member households, women participation in the labor force, land use patterns, and distance of each block group to its city’s downtown⁷.

Poverty is measured as the percent of families living below the poverty line; a description of how the poverty line is calculated is provided in the appendix, in the table A.1. The percent of single-parent families is given by the share of the families with only one parent and at least one child under 18 on the total population, while residential stability is measured as the percent of population who lived in 2000 in the same house as in 1995 (Cahill, 2005). Racial heterogeneity, finally, is given by $1 - \sum p_i^2$, where p_i is the proportion of the i^{th} racial group in the population (Sampson and Groves, 1989). This index ranges from zero to one, with zero indicating no heterogeneity and one standing for maximum heterogeneity.

As to the measures consistent with the routine activities theory, population density is defined as the number of residents per square kilometer, while women participation in

⁷ An exhaustive definition of all the variables included in the study is provided in Appendix A.

the labor force (Felson, 2002) is given by the percentage of women who did not work in 1999. The relevant land use patterns are described by the percent of land put towards commercial uses (Cahill, 2005), while the distance of each neighborhood to downtown measure, a proxy for the availability of targets/offenders of an area, is measured in miles. We also introduced the total population - for the count model - and the percent of adult people in a neighborhood (Demombynes and Özler, 2005) as control variables, besides two city dummies for Portland and Nashville in order to account for factors specific of each city⁸.

According to Groff and La Vigne (2001), moreover, some characteristics of a place such as the presence of a bus stop might affect the odds of an area to be burglarized because of its increased visibility to burglars. Accordingly, we introduced the dummy “Bridge”, which is equal to 1 for neighborhoods containing or bordering on a bridge and zero otherwise.

Finally, in order to account for the effects of education on crime (Ehrlich 1975, Lochner, 2004) we included a new explanatory variable given by the percentage of people over 25 with graduate degree.

3.2 Empirical strategy

The first aim is to test whether economic or sociological theories better explain variations of crime levels across space. In order to do so, I regress the count of criminal events on explanatory variables consistent with both theories. Namely, the variables included in the “base model” and consistent with the economic theories are ICE a

⁸ For instance, differences in the rate of expenditures in Police protection per resident, or in the rate of full-time equivalent employees in Police per resident, both representing a proxy for the cost of criminal activities not included in the analysis for lack of data at the Block Group level.

Table 3.5 - Socio-economic characteristics of the observed Block Groups

	<u>Overall</u>				<u>Tucson</u>				<u>Portland</u>				<u>Nashville</u>			
	<u>Mean</u>	<u>Std. dev.</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Std. dev.</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Std. dev.</u>	<u>Min</u>	<u>Max</u>	<u>Mean</u>	<u>Std. dev.</u>	<u>Min</u>	<u>Max</u>
ICE	0.28	0.31	-1.00	1.00	0.15	0.29	-0.76	0.90	0.38	0.25	-0.54	1.00	0.30	0.34	-1.00	1.00
ICE catchment	0.28	0.24	-0.57	1.00	0.15	0.20	-0.29	0.64	0.38	0.17	-0.07	0.084	0.30	0.27	-0.57	1.00
Income_ 000	21.0	11.1	2.6	107.9	17.1	7.8	3.6	61.7	23.4	10.6	7.8	77.4	22.1	13.2	2.6	107.9
% Below Poverty Line	15.0	12.7	0.0	82.1	19.1	13.5	0.0	63.4	12.2	9.2	0.0	55.2	13.9	14.1	0.0	82.1
Unemploym_Catchm	4.0	1.9	0.2	16.3	3.9	1.5	0.7	10.4	4.3	1.8	1.0	14.3	3.9	2.2	0.2	16.3
Total Population_000	1.2	0.9	0.002	11.2	1.2	1.0	0.002	11.2	1.2	0.5	0.002	3.4	1.2	1.0	0.02	8.1
Density	199.5	143.7	0.3	1942.8	196.5	137.9	0.5	1942.8	267.7	139.8	1.6	1112.7	133.0	119.3	0.3	989.0
% Single-Parent	17.8	12.0	0.0	100.0	18.8	9.6	0.0	58.7	16.1	10.9	0.0	100.0	18.7	14.5	0.0	80.8
% Adult	65.8	9.9	18.9	100.0	63.8	10.4	18.9	100.0	68.0	8.8	22.2	100.0	65.5	10.1	34.1	99.6
% African	13.4	22.3	0.0	98.6	3.9	3.7	0.0	29.4	7.1	11.4	0.0	56.0	28.6	31.0	0.0	98.6
% Latino	14.5	20.3	0.0	100.0	34.4	25.5	0.0	100.0	6.4	5.3	0.0	44.5	4.3	6.8	0.0	58.9
Heterogeneity	0.3	0.2	0.0	0.7	0.4	0.2	0.0	0.7	0.3	0.2	0.0	0.7	0.3	0.2	0.0	0.7
Distance Downtown	4.1	3.0	0.0	16.0	4.2	3.2	0.0	16.0	4.2	2.7	0.1	11.8	4.0	3.0	0.1	14.1
% Over25 Graduate	33.9	20.3	0.0	100.0	30.7	18.6	0.0	84.7	39.1	19.5	3.8	91.7	31.7	21.7	0.0	100.0
% Commercial Uses	12.2	17.0	0.0	100.0	18.9	18.8	0.0	100.0	6.9	10.8	0.0	81.9	11.4	18.2	0.0	100.0
% 1-Member Househ.	31.9	14.1	0.0	91.7	31.4	14.6	0.0	84.4	31.8	14.1	8.3	91.7	32.4	13.6	0.0	84.9
% Same House	46.8	15.6	2.4	87.2	45.3	17.3	2.4	86.7	46.3	13.2	5.8	79.3	48.6	15.9	5.2	87.2
% Females Not Work	40.3	13.1	0.0	100.0	44.0	13.4	9.4	86.8	36.4	10.3	7.1	76.6	40.8	14.2	0.0	100.0

Source: Author's own calculations on data from the 2000 U.S. Census of the Population

proxy for inequality - per capita income, representing a proxy for the returns from crime, and the unemployment rate, representing a proxy for the opportunity cost of criminal activities. Variables consistent with sociological theories, on the other hand, are: population density, percentage of single-parent families, heterogeneity index, percentage of African American and percentage of adult people. I also control for the total population and include two dummy variables for the cities of Nashville and Portland.

Secondly, I want to test what we call the “criminals travel” hypothesis, according to which wealthier neighborhoods in an area are expected to experience higher level of crime (Demombynes and Özler, 2005). Therefore, the base-model also contains the “Richest” dummy, which is equal to 1 for Block Groups that are the richest in their criminal catchment area and 0 otherwise.

After rejecting a Poisson regression model for the presence of overdispersion, I estimate a negative binomial regression model, with crime *count* as the dependent variable (Demombynes and Özler, 2005). I also estimate the models by OLS to test the sensitivity of results to the choice of the model; in this case, the dependent variable is rates of crime rather than count of crime, consistent with past studies.

I then run a second regression model in which I substitute an indicator of the level of poverty in an area for the income indicator, in order to test whether poverty is a better predictor of crime than the absolute wealth of an area. Thirdly, I test the routine activity theory by including in the model other explanatory variables consistent with it. Finally, I examine whether it is inequality within each Block Group or rather inequality in a wider area - the “criminal catchment area” - that is more strongly related with the level of crime, by repeating the analyses with the new indicator of inequality in the base-model.

4. Results

4.1 Main Results

The following figures show scatter plots of count of property and violent crime versus ICE (fig. 4.1 - 4.6), per capita income (fig. 4.7 - 4.12) and unemployment in the catchment area (4.13 - 4.18). Overall, both ICE and income appear to be negatively correlated with crime, without controlling for total population and other characteristics. On the other hand, the level of unemployment appears to be strongly and positively correlated with the level of crime.

Fig. 4.1: Count of Residential burglary and ICE

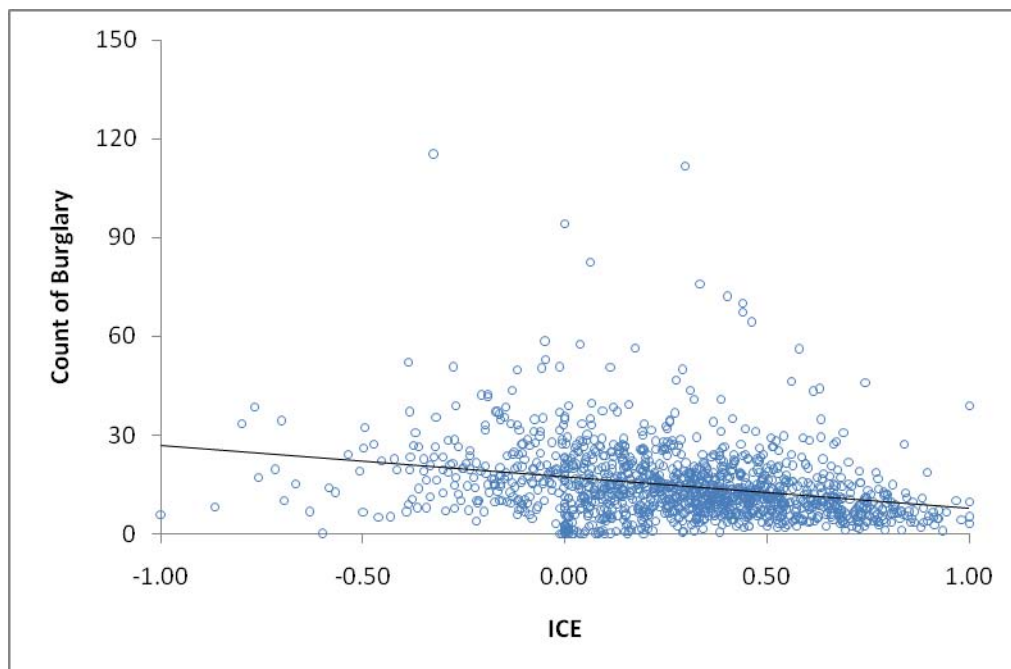


Fig. 4.2: Count of Vehicle theft and ICE

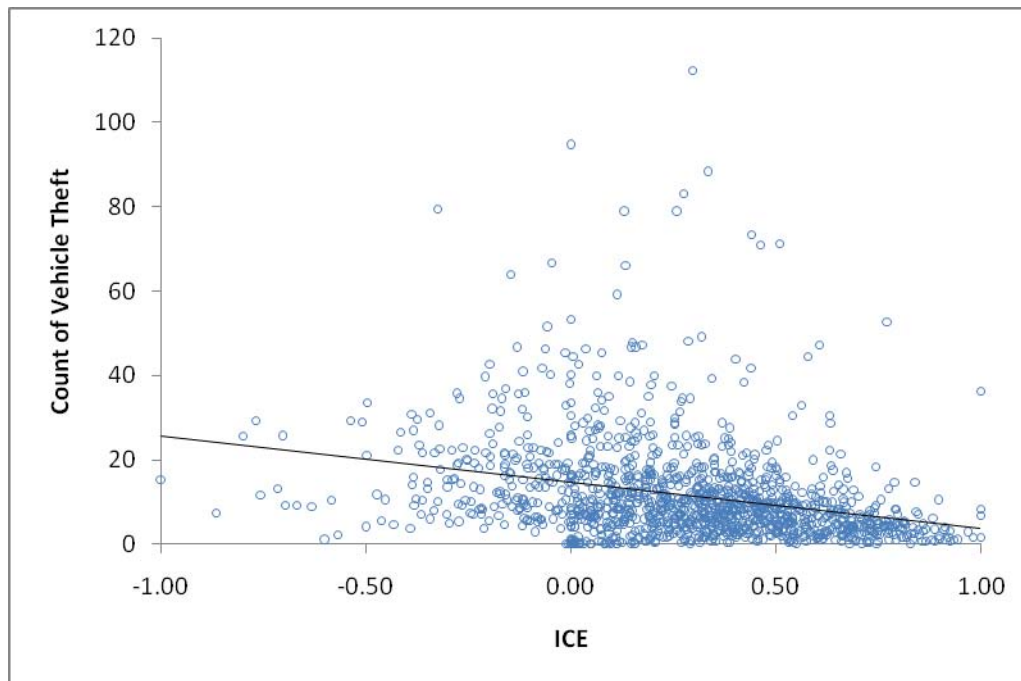


Fig. 4.3: Count of Larceny and ICE

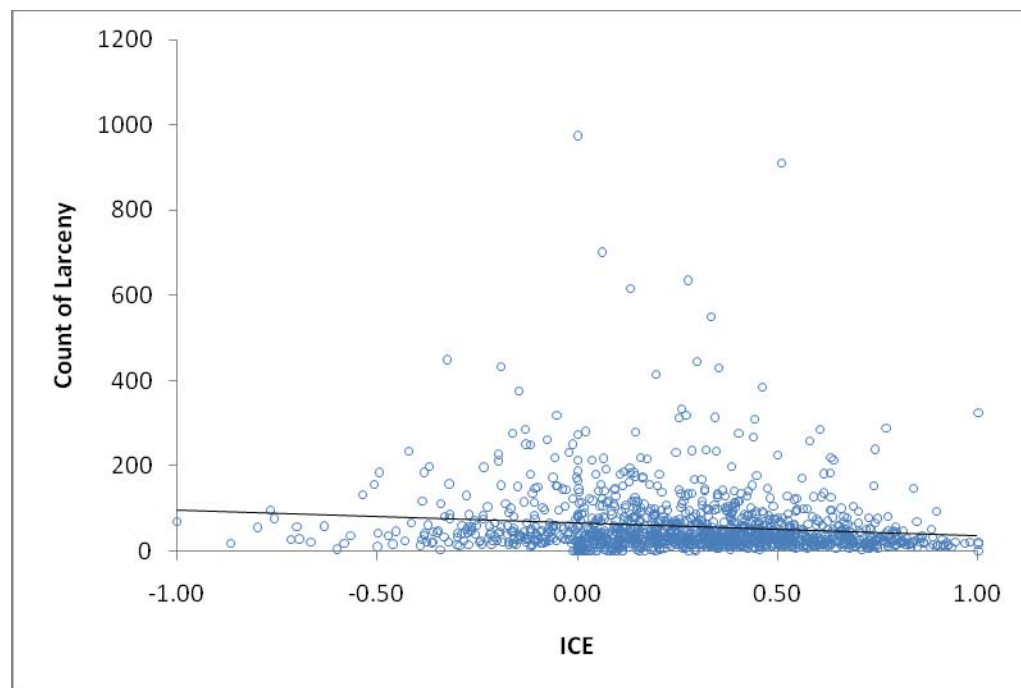


Fig. 4.4: Count of Aggravated assault and ICE

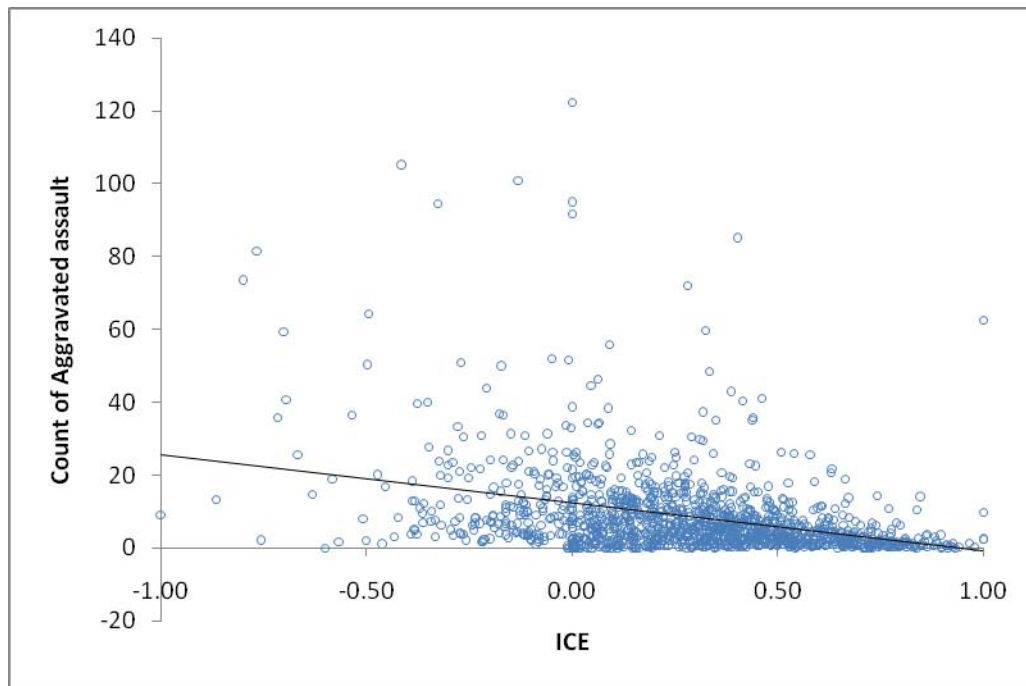


Fig. 4.5: Count of Simple Assault and ICE

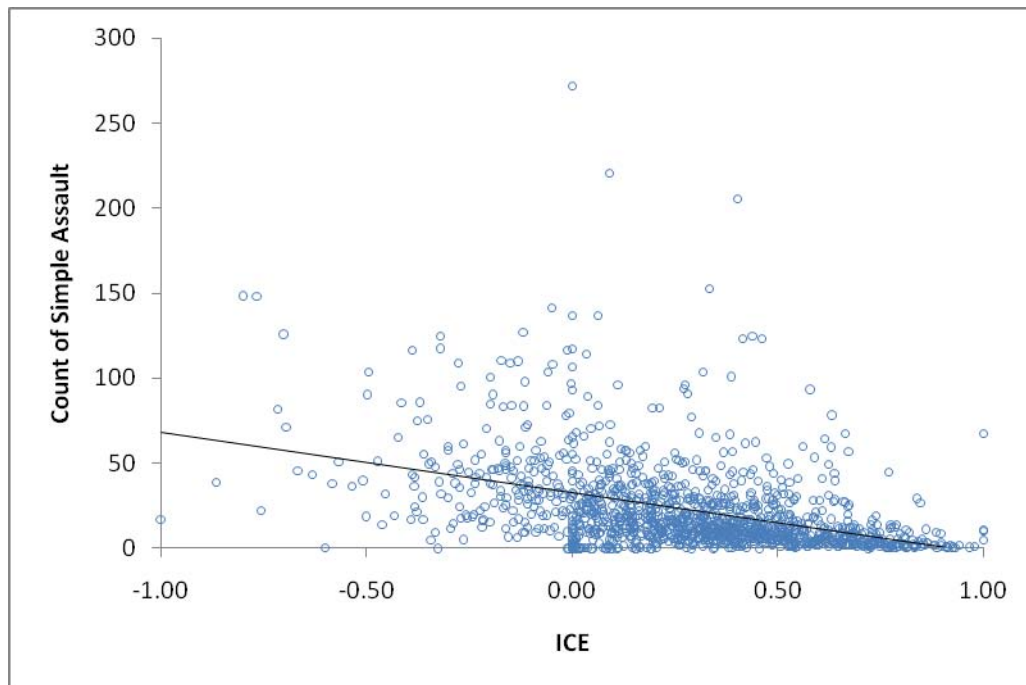


Fig. 4.6: Count of Sexual assault and ICE

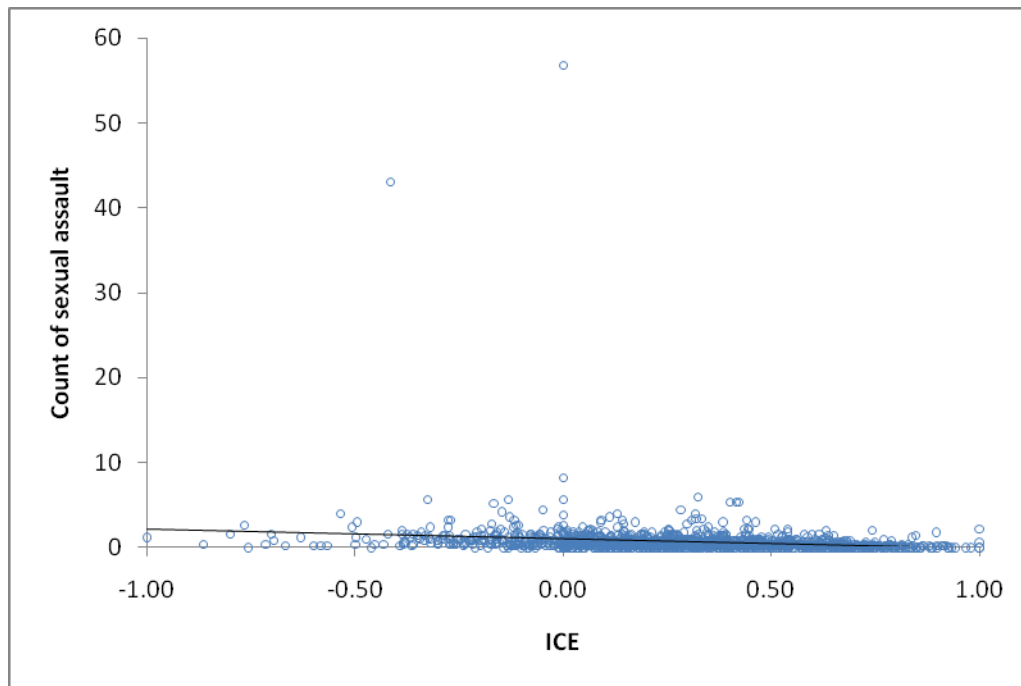


Fig. 4.7: Count of Residential burglary and Per capita income (in \$000)

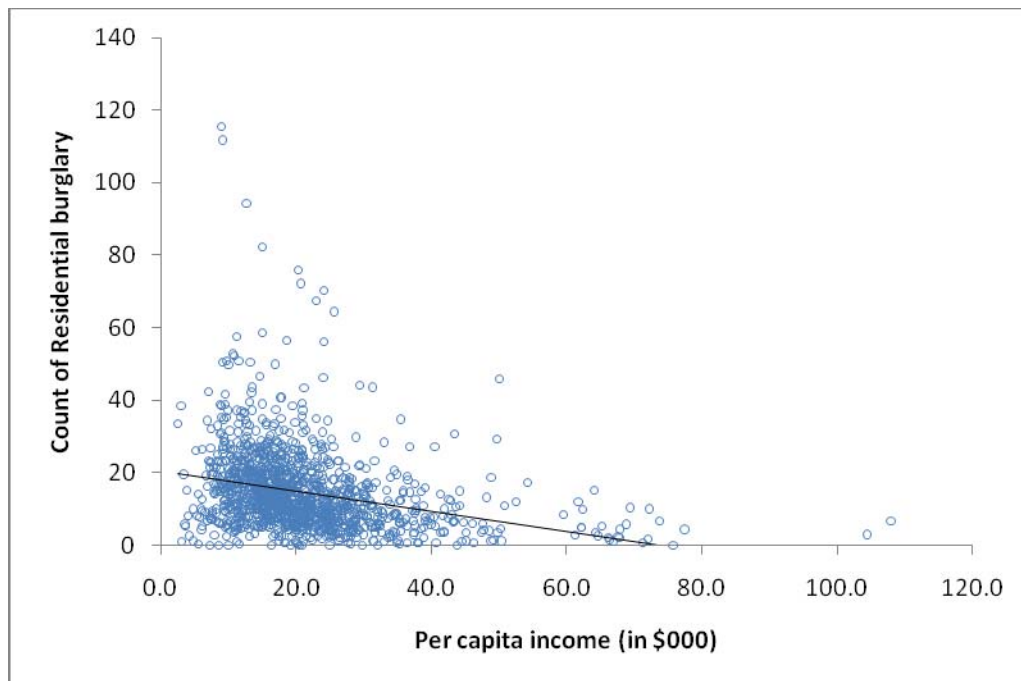


Fig. 4.8: Count of Vehicle theft and Per capita income (in \$000)

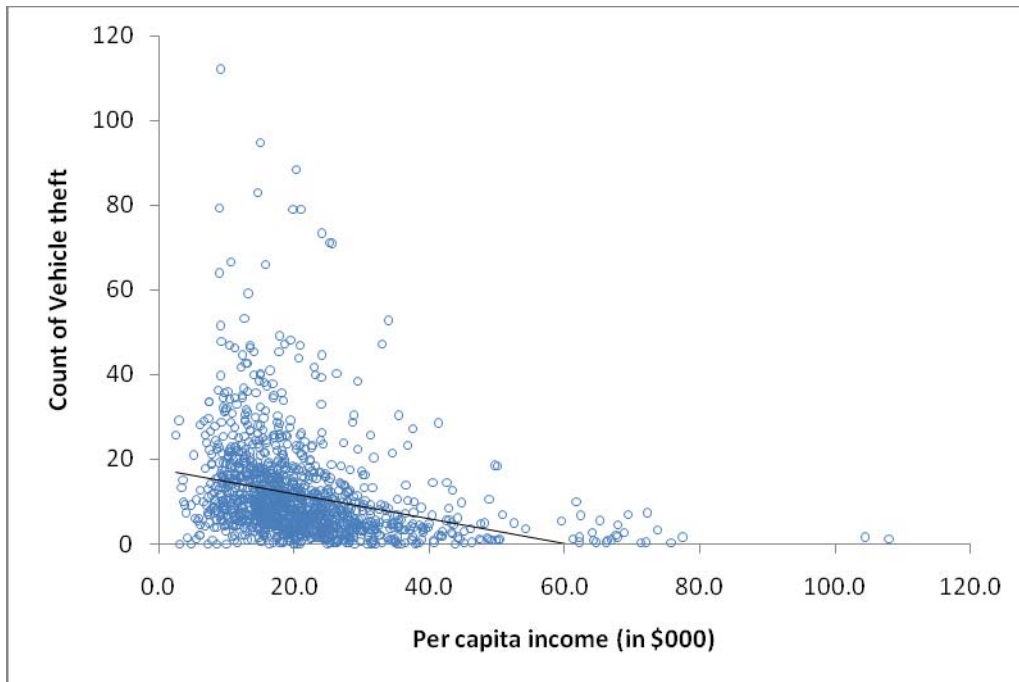


Fig. 4.9: Count of Larceny and Per capita income (in \$000)

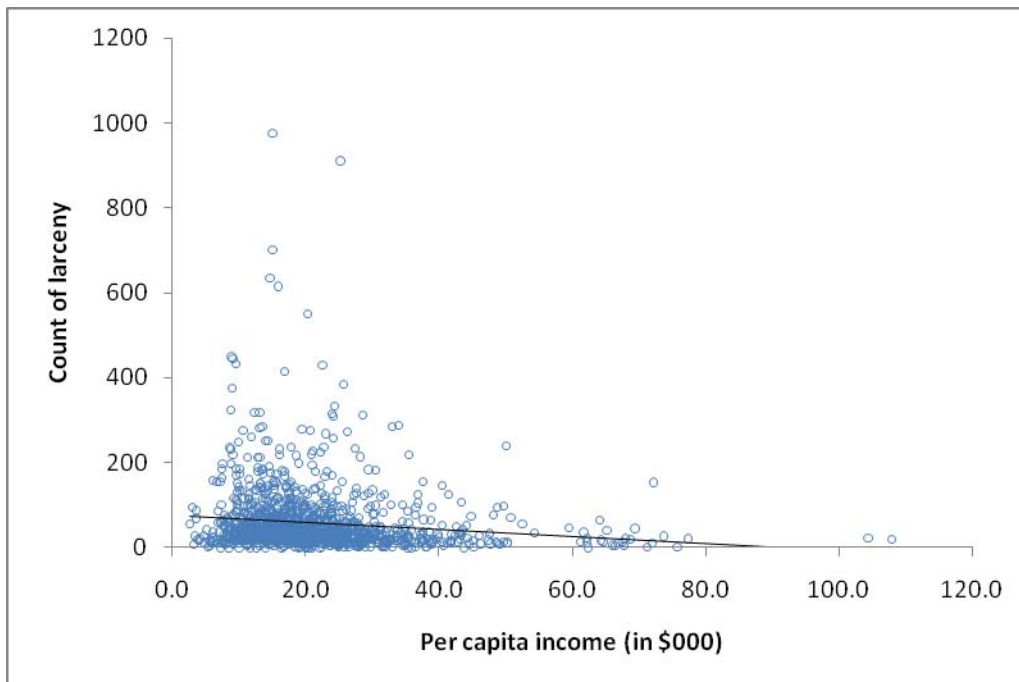


Fig. 4.10: Count of Aggravated assault and Per capita income (in \$000)

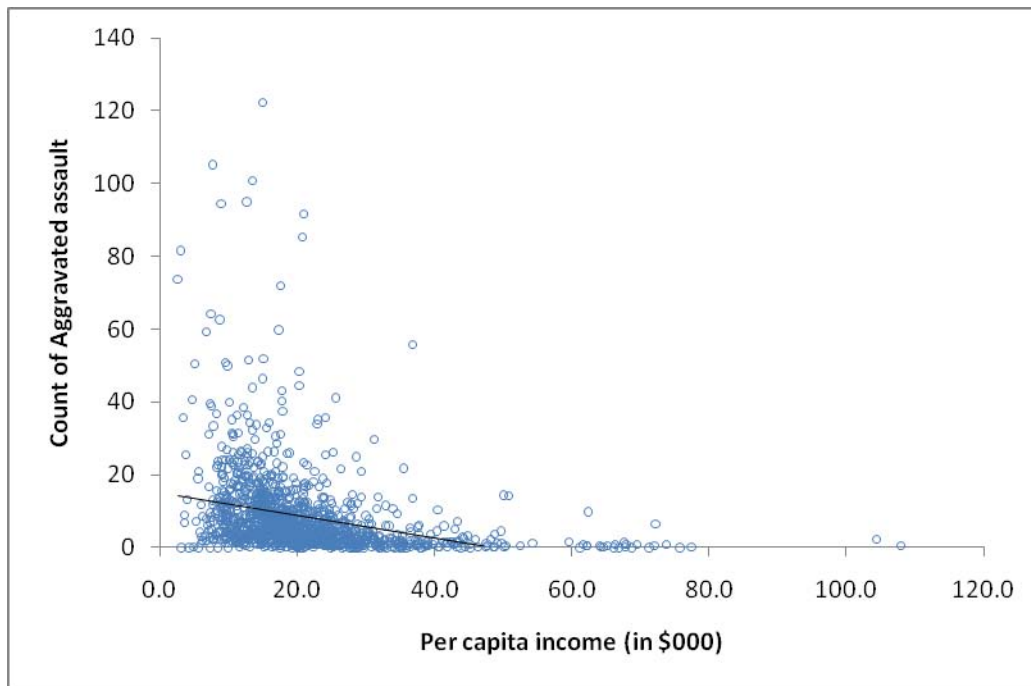


Fig. 4.11: Count of Simple assault and Per capita income (in \$000)

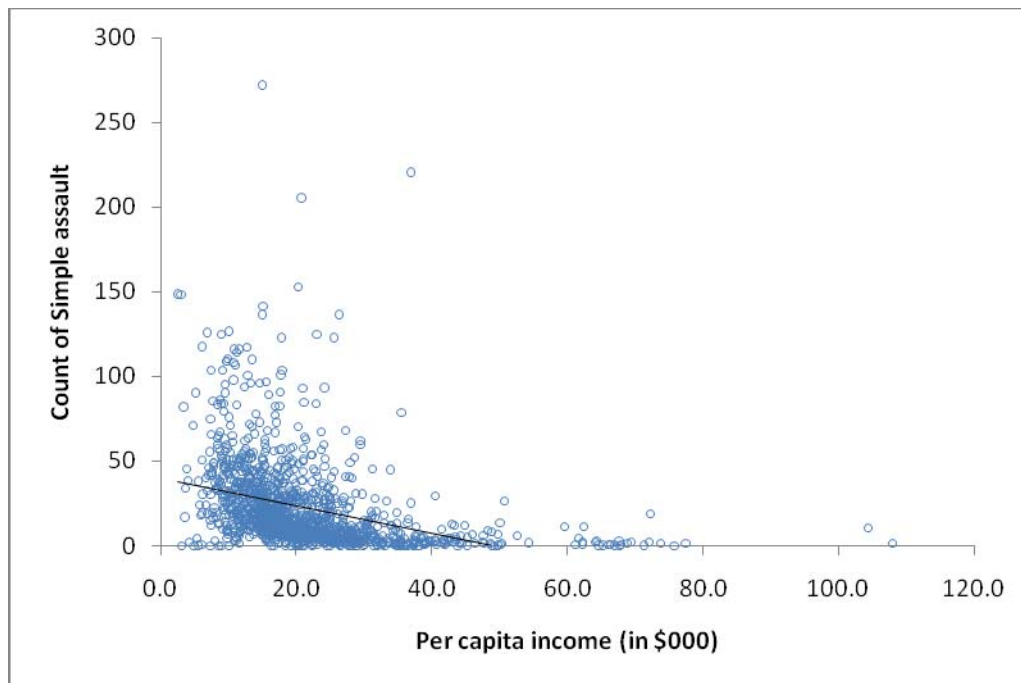


Fig. 4.12: Count of Sexual assault and Per capita income (in \$000)

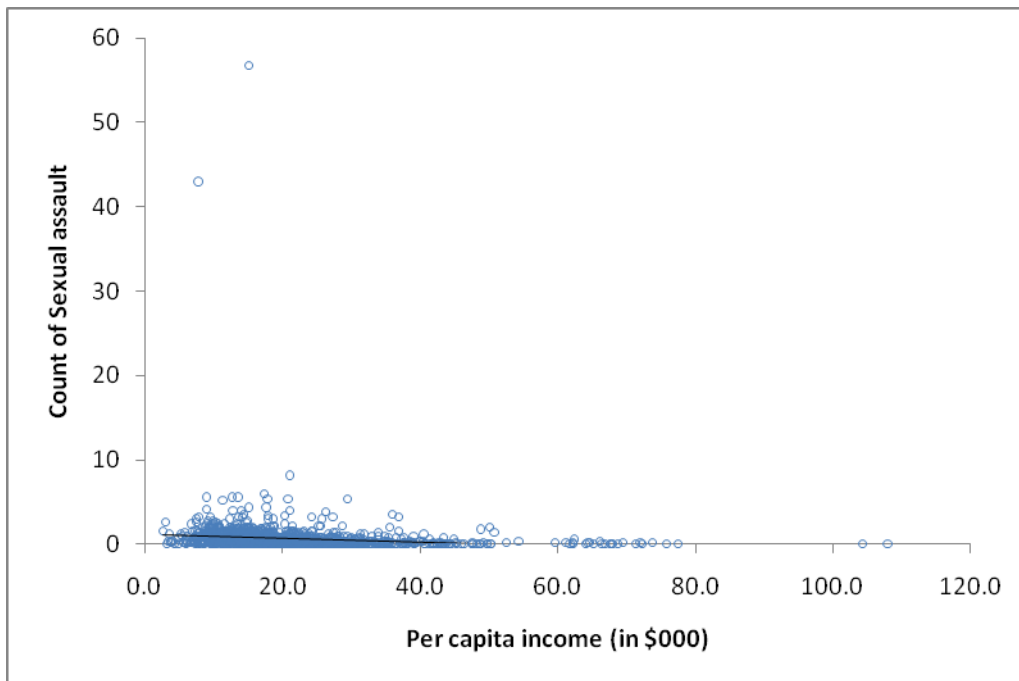


Fig. 4.13: Count of Residential burglary and Unemployment in catchment area

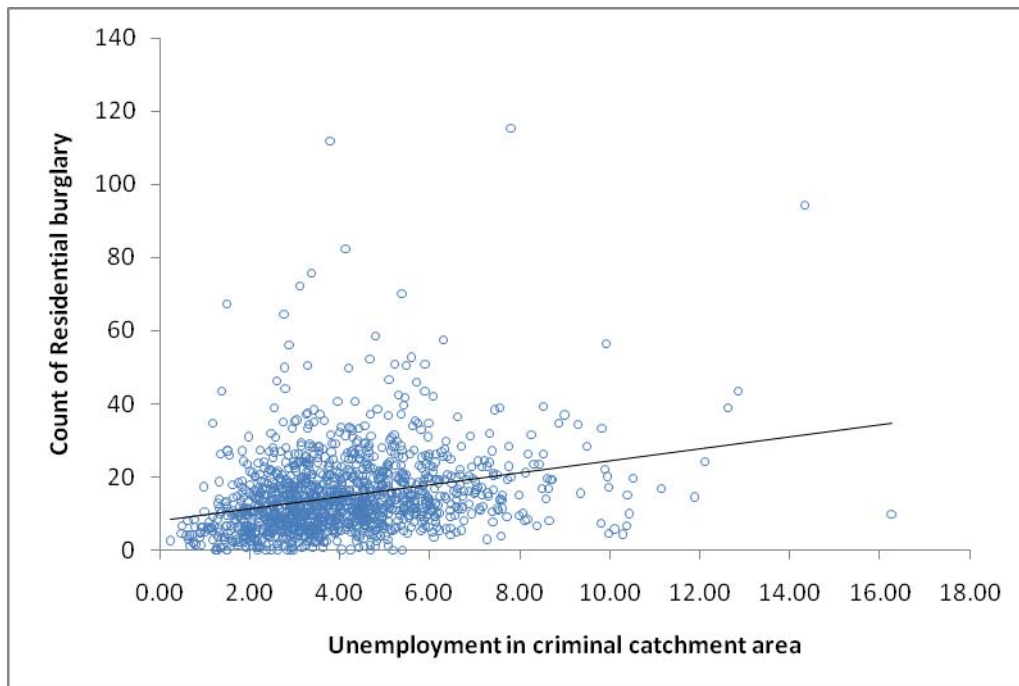


Fig. 4.14: Count of Vehicle theft and Unemployment in catchment area

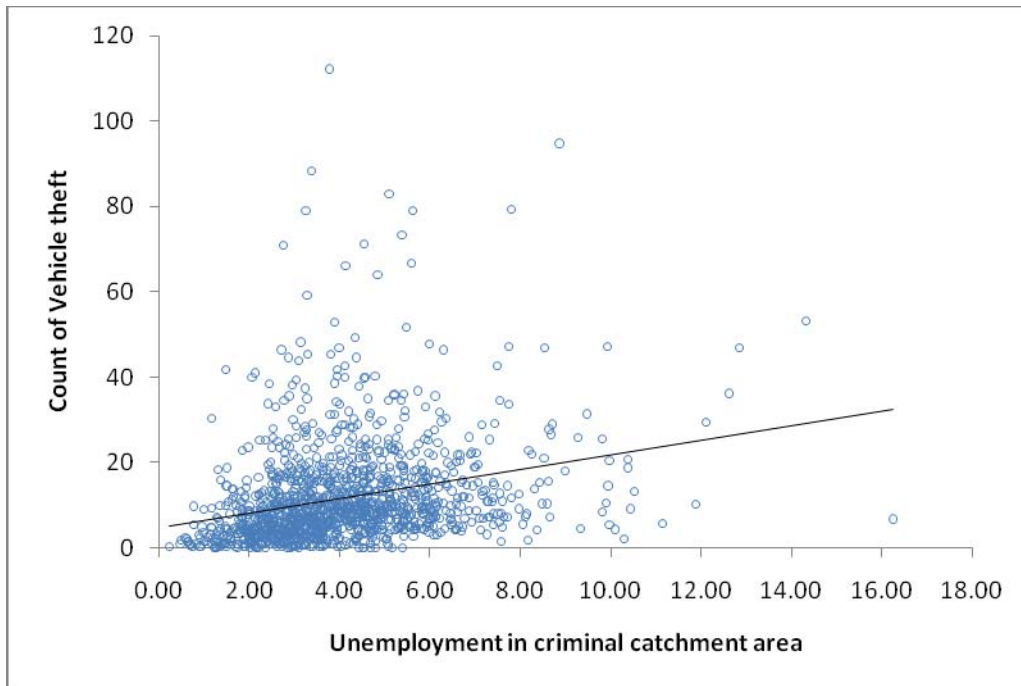


Fig. 4.15: Count of Larceny and Unemployment in catchment area

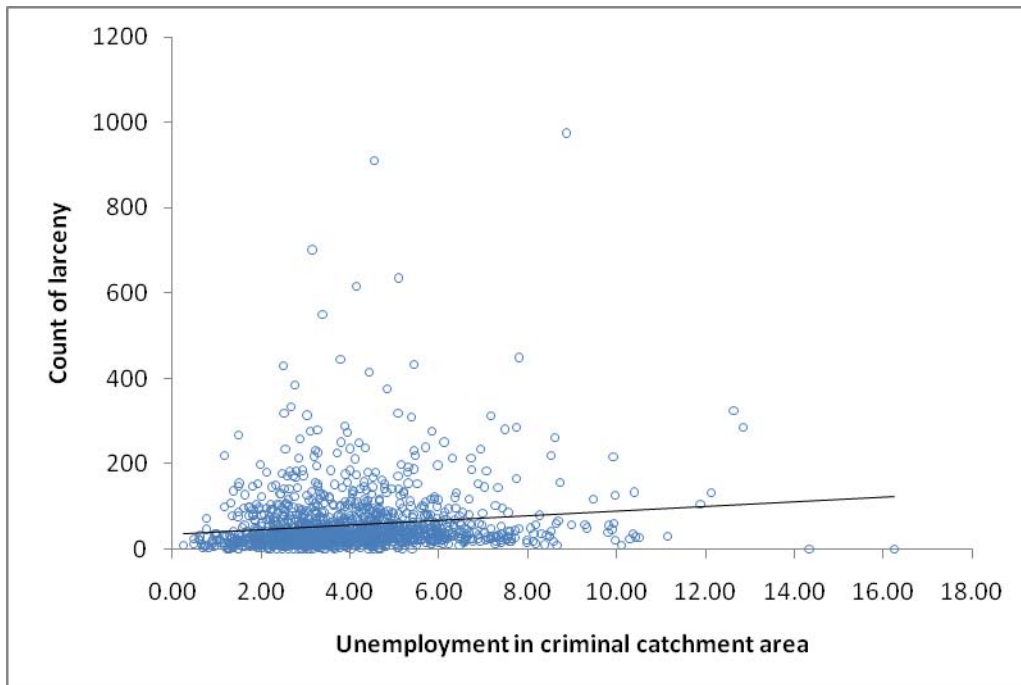


Fig. 4.16: Count of Aggravated assault and Unemployment in catchment area

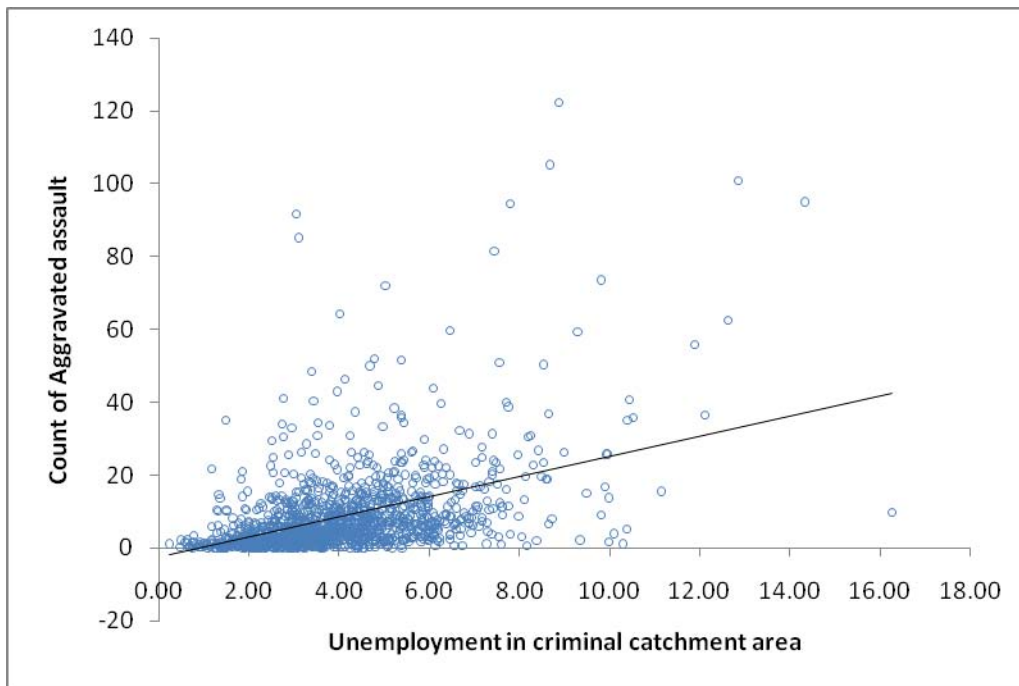


Fig. 4.17: Count of Simple assault and Unemployment in catchment area

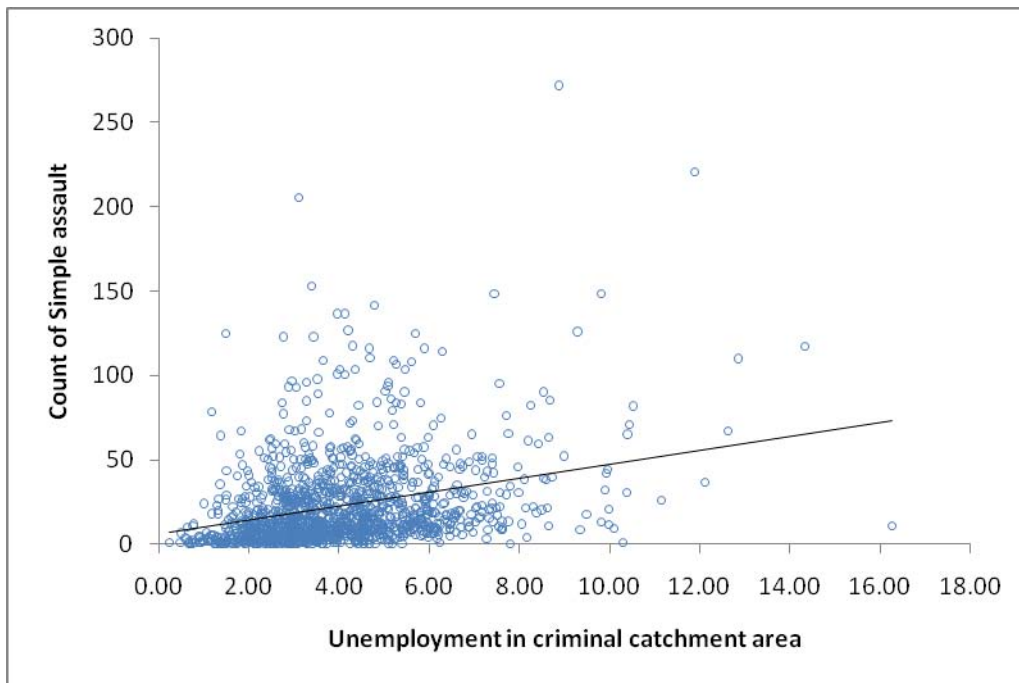
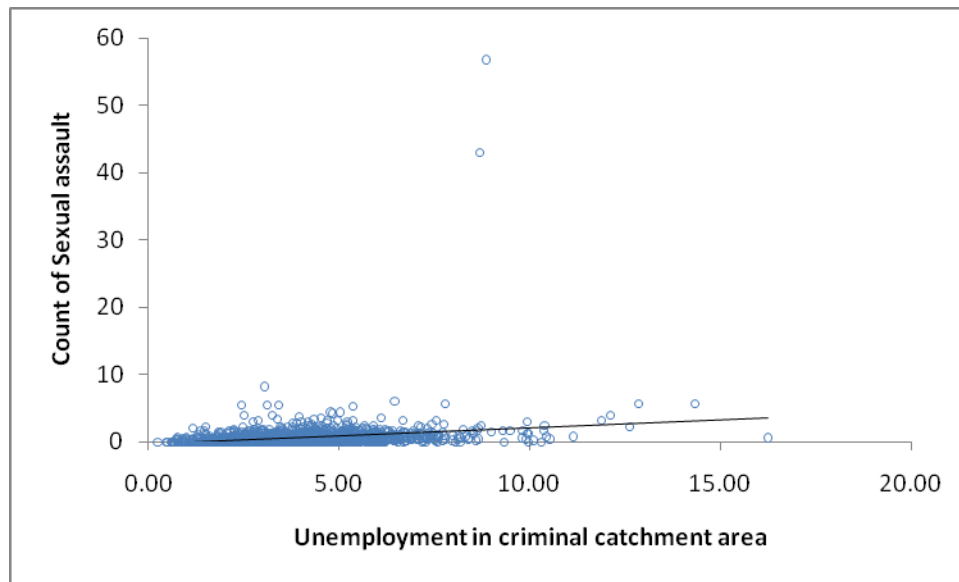


Fig. 4.18: Count of Sexual assault and Unemployment in catchment area



The results of the negative binomial regression base model for property and violent crime are presented in table 4.1. It is to be noted that none of the variables are in the logarithmic form; therefore, none of the coefficients can be interpreted as elasticity.

The Index of Concentration at the Extremes (ICE) is significantly and negatively correlated with the levels of both property and violent crime - except burglary - consistent with previous studies that used this indicator. Therefore, evidence seems to support sociological, rather than economic, theories in explaining the relationship between crime and local inequality. The ICE indicator is also significantly correlated with the count of robberies in a neighborhood (table 4.2), but it has not been found related with the number of homicides, as opposed to the findings of previous studies (Morenoff et al., 2001; Sampson and Morenoff, 2004). However, as it is discussed later, this discrepancy is probably due to a different specification of the model.

Per capita income also shows a significant and negative correlation with the level

of burglary, vehicle theft, aggravated assault and simple assault, therefore confirming the theoretical view according to which the higher the wealth of a neighborhood, the higher the level of protection from crime (Chiu and Madden, 1998). However, the income indicator is positively related with the count of larceny, sexual assault, robbery and homicide, yet it is not significant. Finally, the quadratic relationship between income and violent crime (Demombynes and Özler, 2005) is almost never supported by our data.

Table 4.1 - Negative binomial regressions, base model

	Property crime			Violent crime		
	Burglary	Vehicle theft	Larceny	Aggravated assault	Simple assault	Sexual assault
Constant	1.302*** (0.133)	0.938*** (0.173)	1.996*** (0.192)	0.317* (0.192)	1.946*** (0.179)	-3.571*** (0.380)
ICE	-0.056 (0.085)	-0.396*** (0.112)	-0.379*** (0.125)	-0.773*** (0.117)	-0.533*** (0.110)	-1.057*** (0.208)
Per capita Income (\$000)	-0.008*** (0.002)	-0.012*** (0.003)	0.003 (0.003)	-0.019** (0.009)	-0.016** (0.007)	0.028 (0.019)
(Per capita Income) ²				-3.2e-05 (1.2e-04)	-2.31e-06 (8.0e-05)	-0.001* (3.0e-04)
Unemployment in Catchment area	0.082*** (0.010)	0.086*** (0.014)	0.093*** (0.016)	0.146*** (0.012)	0.132*** (0.012)	0.152*** (0.021)
Richest block group	0.008 (0.045)	0.028 (0.061)	-0.075 (0.066)	0.043 (0.063)	0.023 (0.058)	-0.086 (0.129)
Total Population (in 000 residents)	0.358*** (0.019)	0.393*** (0.027)	0.429*** (0.032)	0.334*** (0.023)	0.414*** (0.025)	0.279*** (0.032)
Population density	-0.001*** (1.2e-04)	-0.001*** (1.5e-04)	-0.001*** (1.6e-04)	-0.001*** (1.6e-04)	-0.001*** (1.5e-04)	-0.001*** (3.0e-04)
Percentage Single-parent families	0.007*** (0.002)	0.005** (0.002)	0.001 (0.003)	0.001 (0.002)	0.007*** (0.002)	-0.002 (0.004)
Percentage Adult	0.008*** (0.002)	0.012*** (0.002)	0.019*** (0.002)	0.002 (0.002)	0.003 (0.002)	0.027*** (0.004)
Percentage African	5.2e-04 (0.001)	0.001 (0.001)	-0.003* (0.001)	0.003*** (0.001)	3.0e-04 (0.001)	0.007*** (0.002)
Heterogeneity Index	0.541*** (0.109)	0.633*** (0.149)	0.623*** (0.172)	1.204*** (0.140)	1.082*** (0.139)	1.130*** (0.252)
Portland	-0.071* (0.042)	0.022 (0.056)	-0.194*** (0.064)	0.825*** (0.059)	-0.773*** (0.053)	0.026 (0.113)
Nashville	-0.007 (0.046)	-0.211*** (0.063)	-0.246*** (0.070)	1.062*** (0.063)	0.157*** (0.056)	0.062 (0.124)
Pseudo R ²	0.078	0.070	0.036	0.148	0.117	0.150
Observations	1,322	1,320	1,313	1,321	1,319	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

The coefficients of the level of unemployment in the criminal catchment area are always significant and positively associated with crime level for all kinds of crime, therefore showing the goodness of this indicator as a predictor for crime level in an area (Lin, 2008). This is one of the most powerful results of this study, as this relationship is robust to changes of model specification and of unit of analysis for all the considered kinds of crime. This result is also interesting because the unemployment rate represents the only proxy for the opportunity costs of crime included in this study: measures of direct costs of crime, in fact, were not included due to lack of data at a local scale.

Table 4.2 - Negative binomial regressions - robbery and homicide

	Robbery	Homicide
Constant	-1.153*** (0.252)	-2.827*** (0.875)
ICE	-0.673*** (0.158)	-0.675 (0.479)
Per capita Income (\$000)	-0.006 (0.005)	-0.020 (0.038)
(Per capita Income) ²		1.5e-04 (5.1e-04)
Unemployment in Catchment area	0.138*** (0.018)	0.140*** (0.050)
Richest block group	-0.033 (0.089)	0.103 (0.283)
Total Population (in 000 residents)	0.228*** (0.033)	0.239*** (0.068)
Population density	-0.001*** (2.2e-04)	-0.001 (0.001)
Percentage Single- parent families	0.002 (0.003)	-0.003 (0.009)
Percentage Adult	0.016*** (0.003)	-0.006 (0.009)
Percentage African	0.004** (0.002)	0.012*** (0.005)
Heterogeneity Index	1.378*** (0.203)	1.241** (0.557)
Portland	0.083 (0.085)	-0.385 (0.286)
Nashville	0.697*** (0.090)	0.110 (0.287)
Pseudo R ²	0.095	0.132
Observations	1,321	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

As to the dummy variable indicating whether a block group is the richest in the criminal catchment area, we found no significant association between it and the level of all types of crime; however, this can be due to higher levels of protection from crime in richer areas or to an inaccurate definition of “criminal catchment area” itself. According to Demombynes and Özler (2005), in fact, criminals travel in order to commit a crime whenever they can do so at a negligible cost. Since we are using Block Groups as unit of analysis, which have an average size of 15.7 square kilometers - equivalent to a circular area with a range of 2.2 kilometers - we might think of criminals as capable to move beyond the bordering groups in order to commit crime without affording a relevant cost. Therefore, “richest” neighborhoods might not be the richest any longer if the range of action of criminals is wider than it is supposed in this study. As it is later discussed, a further step in the analysis would be therefore represented by the definition of the “range of activity of criminals” and of the maximum distance beyond which the costs of criminal activity start to be relevant.

Among the other indicators, population density is always negatively associated with the level of all criminal activities, except with homicide. This result, therefore, supports the hypothesis according to which the more people in an area the more control on things.

Family disruption, measured as the percentage of single-parent families with at least a child under 18, is significant and positively associated with the levels of burglary, vehicle theft and simple assault. The index of racial heterogeneity is significant and positively correlated with all kinds of crime, thereby confirming this indicator as a good predictor of crime at a neighborhood level (Demombynes and Özler, 2005), and the

percentage of African Americans is significant and positively correlated with the levels of aggravated assault, sexual assault, robbery and homicide.

Finally, one might expect the geographical dummies “Portland” and “Nashville” to be insignificant as we are trying to generalize the findings related with the determinants of crime at a neighborhood level to at least a national level. However, there might be other variables influencing crime not included in the analysis and that might explain the differences in crime levels across the three cities.

Table 4.3, for instance, shows the different levels of expenditures in police protection and the different number of employees in police protection in the three cities under study, representing different costs of criminal activities. However, we could not include such indicators in the analysis for lack of data at the Block Group level.

Table 4.3 - Number of full-time equivalent employees and average expenditures for Police protection in 1998-2002 in Tucson, Portland and Nashville

	Avg. rate of full-time equivalent employees in police protection per 100'000 residents	Avg. expenditures for Police Protection
Tucson AZ	244.4	181.6
Portland, OR	279.8	206.0
Nashville, TN	327.1	199.6

Source: Author's own calculations on data provided by the Bureau of Justice Statistics

In order to test the robustness of the results to the specification of the model, I also ran an OLS regression model using crime rates - in terms of crime per 1,000 residents - in place of crime counts as dependent variable. The results, shown in tables 4.4 and 4.5, are not completely unaffected by the change in model specification. The income inequality indicator is again negatively correlated with all kinds of crime, but this time it is also significant for burglary and homicide, consistent with the findings of previous studies on homicides in Chicago neighborhoods undertaken by Morenoff et al.

(2001) and Sampson and Morenoff (2004), who estimated an OLS model. However, as it has been previously discussed, the OLS is not an estimation method suitable for small unit of analysis, given the high number of observations with no crime, and hence the results of the Negative Binomial Regression model are more reliable.

Table 4.4 - OLS regressions, base model

	Property crime			Violent crime		
	Burglary	Vehicle theft	Larceny	Aggravated assault	Simple assault	Sexual assault
Constant	-40.191*** (8.336)	-10.595** (4.832)	-85.217*** (20.342)	-26.071*** (7.381)	-39.480*** (11.389)	-9.406*** (1.793)
ICE	-18.573*** (5.100)	-9.456*** (2.944)	-32.038*** (12.275)	-16.677*** (4.264)	-36.570*** (6.595)	2.764*** (1.044)
Per capita Income (\$000)	0.055 (0.132)	0.037 (0.076)	0.911*** (0.317)	0.355 (0.279)	1.205*** (0.431)	0.131* (0.068)
(Per capita Income) ²				-0.003 (0.003)	-0.009** (0.005)	-0.001* (0.001)
Unemployment in Catchment area	1.966*** (0.657)	2.479*** (0.379)	11.832*** (1.658)	3.505*** (0.528)	7.249*** (0.817)	0.256** (0.129)
Richest block group	11.704*** (2.894)	0.337 (1.676)	6.824 (6.918)	-0.666 (2.323)	-1.494 (3.599)	1.560*** (0.568)
Population density	-0.064*** (0.008)	-0.039*** (0.004)	-0.178*** (0.018)	-0.033*** (0.006)	-0.069*** (0.009)	-0.007*** (0.001)
Percentage Single-parent families	0.410*** (0.118)	0.134** (0.068)	0.671** (0.286)	0.010 (0.094)	0.344** (0.145)	0.074*** (0.023)
Percentage Adult	0.961*** (0.102)	0.341*** (0.060)	1.805*** (0.248)	0.330*** (0.082)	0.565*** (0.128)	0.128*** (0.020)
Percentage African	-0.084 (0.064)	-0.033 (0.037)	-0.378** (0.153)	0.053 (0.050)	-0.087 (0.078)	-0.013 (0.012)
Heterogeneity Index	-10.759 (6.879)	-0.067 (3.977)	31.080* (16.503)	1.748 (5.572)	6.301 (8.635)	-0.766 (1.364)
Portland	-1.260 (2.733)	-1.954 (1.574)	-17.046*** (6.530)	3.703* (2.185)	-16.383*** (3.372)	-0.193 (0.535)
Nashville	-1.243 (3.020)	-2.393 (1.742)	-22.723*** (7.208)	9.226*** (2.387)	4.053 (3.687)	0.342 (0.584)
Adjusted R ²	0.133	0.129	0.150	0.129	0.211	0.064
Observations	1,322	1,320	1,313	1,321	1,319	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Other changes due to the change in model specification are the following: the coefficient of per capita income becomes positive, and significant for larceny, simple assault and robbery; the percentage of single-parent families becomes significant also for

larceny, sexual assault and homicide; finally, the heterogeneity index and the percentage of African American are almost never significant, as opposed to the findings of the previous specification.

Table 4.5 - OLS regressions, base model - robbery and homicide

	Robbery	Homicide
Constant	-18.336*** (3.985)	-0.199 (0.132)
ICE	-7.270*** (2.421)	-0.170** (0.077)
Per capita Income (\$000)	0.125** (0.063)	0.003 (0.005)
(Per capita Income) ²		-2.7e-05 (5.5e-05)
Unemployment in Catchment area	1.925*** (0.312)	0.034*** (0.009)
Richest block group	-0.372 (1.377)	0.064 (0.042)
Population density	-0.021*** (0.004)	-4.3e-4*** (1.1e-4)
Percentage Single- parent families	0.008 (0.056)	0.006*** (0.002)
Percentage Adult	0.253*** (0.049)	0.003* (0.001)
Percentage African	0.013 (0.030)	0.001 (0.001)
Heterogeneity Index	3.806 (3.266)	-0.159 (0.100)
Portland	-0.337 (1.297)	-0.030 (0.039)
Nashville	4.046*** (1.434)	0.066 (0.043)
Adjusted R ²	0.111	0.089
Observations	1,321	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

To assess if poverty is a better predictor of the level of crime than the mean per capita income in a neighborhood, tables 4.6 and 4.7 show the results of the regression models in which we substituted the former indicator for the latter: for larceny, sexual assault and robbery the poverty indicator is a better predictor of the level of crime in an area, as it is significantly related with the count of criminal events, while the income

indicator was not. Nonetheless, poverty may have a more complicated relationship with the count of sexual assaults: the negative sign of the coefficient might be interpreted, for example, as an indicator of higher levels of under-reporting in poorer neighborhoods. Further investigations, however, are necessary in order to better understand the effects of poverty on the level of sexual assaults.

Table 4.6 - Negative Binomial regressions, poverty vs. income

	Property crime			Violent crime		
	Burglary	Vehicle theft	Larceny	Aggravated assault	Simple assault	Sexual assault
Constant	1.045*** (0.129)	0.609*** (0.168)	1.819*** (0.186)	-0.069 (0.171)	1.599*** (0.163)	-2.984*** (0.314)
ICE	0.070 (0.092)	-0.326*** (0.121)	0.038 (0.138)	-0.873*** (0.119)	-0.549*** (0.116)	-1.326*** (0.200)
Percentage below poverty line	0.009*** (0.002)	0.009*** (0.002)	0.014*** (0.003)	0.006*** (0.002)	0.007*** (0.002)	-0.014*** (0.004)
Unemployment in Catchment area	0.077*** (0.010)	0.085*** (0.014)	0.078*** (0.016)	0.151*** (0.013)	0.135*** (0.012)	0.161*** (0.021)
Richest block group	-0.040 (0.043)	-0.048 (0.057)	-0.074 (0.063)	-0.077 (0.059)	-0.076 (0.054)	-0.099 (0.119)
Total population (in 000 residents)	0.358*** (0.019)	0.398*** (0.027)	0.432*** (0.032)	0.338*** (0.024)	0.422*** (0.026)	0.275*** (0.032)
Population density	-0.001*** (1.2e-04)	-0.001*** (1.5e-04)	-0.001*** (1.6e-04)	-0.001*** (1.7e-04)	-0.001*** (1.5e-04)	-0.001*** (3.0e-04)
Percentage Single-parent families	0.006*** (0.002)	0.004* (0.002)	-1.0e-04 (0.003)	-2.3e-04 (0.002)	0.007*** (0.002)	-4.5e-04 (0.004)
Percentage Adult	0.007*** (0.002)	0.011*** (0.002)	0.019*** (0.002)	-2.4e-04 (0.002)	3.5e-04 (0.002)	0.025*** (0.004)
Percentage African	0.001 (0.001)	0.002 (0.001)	-0.003** (0.001)	0.004*** (0.001)	0.001 (0.001)	0.006*** (0.002)
Heterogeneity Index	0.706*** (0.102)	0.859*** (0.139)	0.625*** (0.160)	1.543*** (0.130)	1.361*** (0.127)	1.231*** (0.233)
Portland	-0.063 (0.042)	0.019 (0.056)	-0.184*** (0.063)	0.810*** (0.059)	-0.784*** (0.053)	0.024 (0.109)
Nashville	-0.002 (0.046)	-0.216*** (0.062)	-0.235*** (0.069)	1.050*** (0.064)	0.145*** (0.056)	0.044 (0.122)
Pseudo R ²	0.079	0.070	0.038	0.145	0.115	0.153
Observations	1,322	1,320	1,313	1,321	1,319	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table 4.7 - Negative Binomial regressions, poverty vs. income - robbery and homicide

	Robbery	Homicide
Constant	-1.446*** (0.244)	-3.347*** (0.751)
ICE	-0.416** (0.168)	-0.541 (0.478)
Percentage below poverty line	0.013*** (0.003)	0.012 (0.009)
Unemployment in Catchment area	0.126*** (0.018)	0.131*** (0.050)
Richest block group	-0.077 (0.084)	0.039 (0.261)
Total population (in 000 residents)	0.227*** (0.033)	0.243*** (0.067)
Population density	-0.001*** (2.2e-04)	-0.001 (0.001)
Percentage Single-parent families	0.001 (0.003)	-0.006 (0.010)
Percentage Adult	0.015*** (0.003)	-0.006 (0.009)
Percentage African	0.005*** (0.002)	0.014*** (0.005)
Heterogeneity Index	1.510*** (0.187)	1.385*** (0.515)
Portland	0.098 (0.084)	-0.407 (-0.280)
Nashville	0.707*** (0.089)	0.082 (0.284)
Pseudo R ²	0.096	0.134
Observations	1,321	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

The third model, finally, is a Negative Binomial Regression model in which we included other explanatory variables consistent with the routine activities theory; the results are shown in tables 4.8 and 4.9.

The distance of each Block Group to its own city downtown is significant and negatively correlated with property crime and robbery, and slightly significant for aggravated assault and homicide. This means that, even controlling for income inequality, mean income and other socio-economic characteristics, we might expect higher rates of property crime in the city downtown than in periphery. Geography, therefore, matters in

the explanation of criminal phenomena. This conclusion is confirmed by the significance of the percentage of land under commercial uses of a neighborhood, which is significant and positively correlated with all categories of crime, even though for homicide it is only significant at ten percent level.

The percentage of 1-member households is also a strong predictor of high levels of both property and violent crime. as well as the indicator of residents' mobility: for both property and violent crime, the higher the percentage of people living in the same house as five years before, the lower the level of criminal events. Women participation in the labor force, on the other side, does not seem to be a good predictor of crime level but for simple assault.

The dummy variable indicating the presence of a bridge in a neighborhood, and hence a higher visibility of targets in that area, is significant and positively correlated with the level of all kinds of crime but robbery, therefore confirming Groff and La Vigne's (2001) hypothesis.

The sign of the interaction term "peripheral*richest" is negative, as we expected - even though it is not significant for larceny and homicide - confirming the fact that the level of crime in peripheral neighborhoods might be higher if we included in the analysis also their bordering neighborhoods that are not under observation in this study.

Finally, the level of higher education is significant and negatively correlated with the level of all kinds of crime but sexual assault, confirming the findings of Ehrlich's (1975) study.

Table 4.8 - Negative Binomial regressions, expanded model

	Property crime			Violent crime		
	Burglary	Vehicle theft	Larceny	Aggravated assault	Simple assault	Sexual assault
Constant	1.985*** (0.246)	1.470*** (0.313)	2.563*** (0.355)	0.635* (0.327)	2.517*** (0.316)	-3.498*** (0.601)
ICE	0.218** (0.092)	0.248** (0.119)	0.496*** (0.129)	-0.186 (0.121)	0.034 (0.115)	-0.550*** (0.215)
Per capita Income (\$000)	-0.005* (0.003)	-0.007* (0.004)	0.002 (0.003)	-0.009 (0.009)	-0.008 (0.008)	0.006 (0.021)
(Per capita Income) ²				-1.4e-06 (1.2e-04)	6.4e-05 (8.2e-05)	-2.2e-04 (3.1e-04)
Unemployment in Catchment area	0.052*** (0.010)	0.043*** (0.013)	0.049*** (0.016)	0.100*** (0.012)	0.089*** (0.012)	0.102*** (0.023)
Richest block group	0.064 (0.047)	0.087 (0.060)	-0.049 (0.064)	0.069 (0.063)	0.017 (0.058)	0.075 (0.137)
Total population (in 000 residents)	0.372*** (0.020)	0.408*** (0.025)	0.462*** (0.030)	0.369*** (0.022)	0.416*** (0.024)	0.296*** (0.034)
Population density	-0.001*** (1.3e-04)	-0.001*** (1.5e-04)	-0.001*** (1.6e-04)	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)	-0.001*** (3.2e-04)
Percentage Single-parent families	0.007*** (0.002)	0.007*** (0.002)	0.005* (0.003)	0.004* (0.002)	0.009*** (0.002)	0.005 (0.004)
Percentage Adult	0.003 (0.002)	0.004 (0.003)	0.005 (0.003)	-2.8e-04 (0.003)	-0.003 (0.003)	0.016*** (0.005)
Percentage African	0.001 (0.001)	0.003** (0.001)	-0.001 (0.001)	0.006*** (0.001)	0.003*** (0.001)	0.009*** (0.002)
Heterogeneity Index	0.389*** (0.113)	0.468*** (0.147)	0.549*** (0.164)	0.861*** (0.136)	0.882*** (0.135)	1.081*** (0.280)
Distance to downtown	-0.030*** (0.006)	-0.023*** (0.008)	-0.029*** (0.009)	-0.014* (0.008)	-1.3e-04 (0.007)	0.026 (0.017)
Percentage over 25 Graduate	-0.007*** (0.001)	-0.011*** (0.002)	-0.008*** (0.002)	-0.015*** (0.002)	-0.016*** (0.002)	-0.003 (0.003)
Percentage Commercial Uses	0.003*** (0.001)	0.009*** (0.001)	0.015*** (0.001)	0.010*** (0.001)	0.008*** (0.001)	0.009*** (0.002)
Percentage 1-Member Househ.	0.007*** (0.001)	0.012*** (0.002)	0.015*** (0.002)	0.008*** (0.002)	0.011*** (0.002)	0.015*** (0.003)
Percentage Same House as 1995	-0.002* (0.001)	-0.006*** (0.002)	-0.006*** (0.002)	-0.004** (0.002)	-0.004** (0.002)	-0.001 (0.003)
Percentage Female did not work	-0.002 (0.001)	0.003 (0.002)	0.002 (0.002)	-1.7e-04 (0.002)	-0.004** (0.002)	0.004 (0.003)
Bridge	0.238*** (0.075)	0.396*** (0.094)	0.406*** (0.107)	0.204** (0.090)	0.200** (0.092)	0.356** (0.150)
Peripheral*Richest	-0.382*** (0.104)	-0.582*** (0.138)	-0.223 (0.136)	-0.531*** (0.148)	-0.304** (0.124)	-0.598* (0.344)
Portland	-0.065 (0.043)	0.070 (0.055)	-0.091 (0.060)	0.865*** (0.058)	-0.766*** (0.052)	0.110 (0.119)
Nashville	-0.074 (0.048)	-0.309*** (0.062)	-0.302*** (0.067)	0.889*** (0.063)	-0.028 (0.056)	-0.072 (0.129)
Pseudo R ²	0.092	0.101	0.063	0.178	0.140	0.183
Observations	1,322	1,320	1,313	1,321	1,319	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table 4.9 - Negative binomial regressions, expanded model - robbery and homicide

	Robbery	Homicide
Constant	0.373 (0.452)	-2.132 (1.388)
ICE	0.144 (0.175)	-0.249 (0.507)
Per capita Income (\$000)	-0.005 (0.006)	0.003 (0.044)
(Per capita Income) ²		-3.0e-05 (5.9e-04)
Unemployment in Catchment area	0.079*** (0.018)	0.085 (0.052)
Richest block group	0.059 (0.089)	0.059 (0.312)
Total Population (in 000 residents)	0.327*** (0.033)	0.288*** (0.073)
Population density	-0.001*** (2.2e-04)	-5.7e-05 (6.6e-04)
Percentage Single- parent families	0.006* (0.003)	-0.002 (0.010)
Percentage Adult	0.003 (0.004)	-0.009 (0.012)
Percentage African	0.006*** (0.002)	0.012** (0.005)
Heterogeneity Index	0.976*** (0.204)	0.691 (0.623)
Distance Downtown	-0.066*** (0.012)	-0.077* (0.044)
% Over 25 Graduate	-0.012*** (0.003)	-0.016* (0.009)
% Commercial Uses	0.016*** (0.002)	0.009* (0.005)
% 1-Member Househ.	0.014*** (0.003)	-2.7e-04 (0.008)
% Same House	-0.004 (0.003)	-0.003 (0.007)
% Female Not Work	0.001 (0.002)	0.001 (0.008)
Bridge	0.082 (0.131)	0.701** (0.313)
Peripheral*Richest	-0.836*** (0.233)	-0.114 (0.659)
Portland	0.271*** (0.085)	-0.320 (0.309)
Nashville	0.597*** (0.091)	0.030 (0.311)
Pseudo R ²	0.133	0.151
Observations	1,321	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

4.2 Inequality within Block Groups vs. Inequality in Catchment Area

According to Wang and Arnold (2008) income inequality measures used in the literature such as Gini Index, Atkinson index and ICE “measure inequality within a region and do not take into account any surrounding regions”, while “the perception of inequality (...) is derived (...) also from neighboring areas” (p. 261).

In order to test this hypothesis, we repeated the same analysis shown in table 4.1 and 4.2 but substituting ICE in criminal catchment area⁹ - obtained by averaging the ICE of the block groups of each catchment area - for ICE in Block Groups; all the other explanatory variables, however, except the level of unemployment, are still referred to each single Block Group. Results are shown in tables 4.10 and 4.11.

For residential burglary and homicide, the indicator of inequality in the criminal catchment area is a better indicator than ICE in the block groups, as the former is significant and negatively correlated with the level of criminal counts. Moreover, for aggravated assault and robbery, after the introduction of the inequality indicator in the criminal catchment area, the positive relationship between the percentage of African American and the count of crime becomes non-significant, while for homicide it is only significant at 10%. This means that the positive relationship between the percentage of African American and the level of crime in a neighborhood is strongly mitigated by the level of inequality in neighboring areas.

⁹ As previously discussed, the “Criminal catchment area” is given by the Block group under observation along with all the Block groups bordering on it.

Table 4.10 - Testing for ICE in catchment area

	Property crime			Violent crime		
	Burglary	Vehicle theft	Larceny	Aggravated assault	Simple assault	Sexual assault
Constant	1.399*** (0.131)	1.027*** (0.171)	2.027*** (0.192)	0.313 (0.191)	1.948*** (0.179)	-3.569*** (0.378)
ICE in catchment area	-0.466*** (0.119)	-0.992*** (0.161)	-0.646*** (0.188)	-1.284*** (0.162)	-0.833*** (0.155)	-1.411*** (0.304)
Per capita Income (\$000)	-0.005** (0.002)	-0.009*** (0.003)	0.003 (0.003)	-0.018** (0.009)	-0.016** (0.007)	0.020 (0.018)
(Per capita Income) ²				-7.9e-06 (1.1e-04)	1.4e-05 (7.9e-05)	-4.2e-04 (2.9e-04)
Unemployment in Catchment area	0.067*** (0.011)	0.060*** (0.014)	0.077*** (0.017)	0.124*** (0.013)	0.116*** (0.013)	0.135*** (0.023)
Richest block group	-0.031 (0.046)	-0.053 (0.062)	-0.140** (0.068)	-0.062 (0.065)	-0.047 (0.060)	-0.194 (0.132)
Total population (in 000 residents)	0.367*** (0.019)	0.411*** (0.027)	0.435*** (0.032)	0.348*** (0.024)	0.424*** (0.026)	0.282*** (0.033)
Population density	-0.001*** (1.2e-04)	-0.001*** (1.5e-04)	-0.001*** (1.6e-04)	-0.001*** (1.6e-04)	-0.001*** (1.5e-04)	-0.001*** (3.0e-04)
Percentage Single-parent families	0.006*** (0.002)	0.005** (0.002)	0.002 (0.003)	0.003 (0.002)	0.009*** (0.002)	0.001 (0.004)
Percentage Adult	0.009*** (0.002)	0.013*** (0.002)	0.020*** (0.002)	0.004* (0.002)	0.004* (0.002)	0.029*** (0.004)
Percentage African	-1.8e-04 (0.001)	3.8e-05 (0.001)	-0.003** (0.001)	0.002 (0.001)	-0.001 (0.001)	0.005** (0.002)
Heterogeneity Index	0.506*** (0.108)	0.600*** (0.148)	0.627*** (0.171)	1.172*** (0.139)	1.063*** (0.138)	1.140*** (0.253)
Portland	0.005 (0.046)	0.145** (0.060)	-0.131* (0.070)	0.952*** (0.063)	-0.700*** (0.057)	0.144 (0.124)
Nashville	0.050 (0.048)	-0.104 (0.065)	-0.188** (0.074)	1.183*** (0.067)	0.229*** (0.059)	0.179 (0.132)
Pseudo R ²	0.079	0.073	0.036	0.151	0.117	0.149
Observations	1,322	1,320	1,313	1,321	1,319	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table 4.11 - Testing for ICE in catchment area - robbery and homicide

	Robbery	Homicide
Constant	-1.067*** (0.247)	-2.821*** (0.873)
ICE in catchment area	-1.490*** (0.225)	-1.587** (0.686)
Per capita Income (\$000)	-0.001 (0.005)	-0.013 (0.036)
(Per capita Income) ²		1.3e-04 (4.8e-04)
Unemployment in Catchment area	0.111*** (0.018)	0.104* (0.056)
Richest block group	-0.166* (0.091)	-0.035 (0.292)
Total population (in 000 residents)	0.254*** (0.033)	0.249*** (0.065)
Population density	-0.001*** (2.2e-04)	-0.001 (0.001)
Percentage Single-parent families	0.002 (0.003)	-0.001 (0.009)
Percentage Adult	0.017*** (0.003)	-0.004 (0.009)
Percentage African	0.002 (0.002)	0.010* (0.005)
Heterogeneity Index	1.308*** (0.201)	1.227** (0.562)
Portland	0.275*** (0.091)	-0.147 (0.316)
Nashville	0.853*** (0.094)	0.305 (0.306)
Pseudo R ²	0.098	0.136
Observations	1,321	1,322

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

5. Conclusions

5.1 Concluding Remarks and Public Policy Implications

In this thesis I have tested economic and sociological theories on crime and the hypothesis of “open markets” for criminal activities at a local scale in the U.S.

I have shown that local inequality, unemployment, racial heterogeneity, percentage of single-member households, low levels of education, land use patterns and geographic location of a neighborhood are all good predictors of the level of crime in an area.

As to the relationship between local income inequality and crime, evidence appears to be stronger for Sociological rather than Economic theories: even controlling for benefits and costs of crime, the proxy for inequality within each Block Group is significant for six of the eight considered kinds of crime. Furthermore, if we consider inequality in the catchment area, rather than inequality within each neighborhood, this new indicator is significant for all the categories of crime considered in the analysis.

The mean income of an area has a complicated relationship with crime, as it can be interpreted as a proxy for both higher returns from criminal activities - therefore displaying a positive correlation with crime - and, on the other hand, for higher levels of protection from crime. This study, however, has found this relationship to be significant only in terms of higher protection from Burglary, Car Theft and both aggravated and simple assaults in areas with higher mean income. Moreover, the data do not support the inverted U-shape pattern of the relationship between income and violent crime found by Demombynes and Özler (2005).

As to the hypothesis on “open market” for criminal activities, the level of crime in richer areas is not significantly higher than in the bordering ones. This is probably due to a wrong definition of the “criminal catchment area”, the size of which is probably underestimated by the inclusion of the sole neighboring block groups, as already discussed in chapter 4. Further investigations on the correct size of the criminal catchment area are, therefore, necessary.

The indicator for family disruption is significantly and positively correlated with the level of Burglary, Car Theft and Simple Assault. Population density, on the other side, acts in the direction of a reduction of the level of crime in an area, and can hence be interpreted as a proxy for the level of guardianship of an area.

As to the relationship between unemployment and crime, this relationship is everywhere positive and significant, and robust to the choice of the model and to of the unit of analysis, therefore showing the very important role played by unemployment in determining the level of crime in an area.

An interesting result is given by the significant and positive coefficient of the percentage of African American for violent crimes. Even if this result might lead to a conclusion that neighborhoods with higher concentrations of African Americans are more likely to display higher rates of violence, this conclusion is wrong. In fact, this explanatory variable becomes insignificant when the inequality indicator *among* neighborhoods is substituted for the indicator of inequality *within* the block groups. This means that African Americans tend to reside in areas characterized by a lower level of wealth than the neighboring areas, and that the higher rate of violence is due to the high level of inequality with the bordering areas, rather than to racial or ethnic issues.

Such result also proves that the criminal catchment area is a more appropriate unit of analysis for measuring inequality than single neighborhood.

The percentage of people below poverty line seems to be a better predictor of the level of crime in an area than mean per capita income, as it is significantly correlated with the level of all crimes but homicide. An increase in poverty acts in the direction of an increase in crime level, even though the opposite result is obtained for sexual assault. This is probably due to a higher rate of under-reporting of sex-related crimes in poorer areas, but further investigations are again necessary in order to have a better explanation of this result.

The percentage of single-member households is significant and positively related with the level of all crime but homicide, therefore confirming the hypothesis that people living alone are more at risk of being victimized.

There is, moreover, strong evidence in support of a spatial pattern of property crime and robbery, as it is testified by the significance and the negative sign of the distance to downtown indicator for such category of crimes. Besides downtowns' residents, people living in areas with high percentages of land under commercial uses are at higher risks of victimization as well.

Residential stability plays a role in the direction of a reduction in crime levels, even though it is not significant for burglary and sexual assault, while block groups served by a bridge show higher levels of all kinds of crime but robbery.

A higher percentage of people with higher level of education, finally, has a negative effect on the level of all kinds of crime except sexual assault.

As to the relevance of the present study in terms of public policy, it is to be said

that a sound understanding of the determinants of crime is required in order to design and implement effective policies aimed at combating crime.

The results of this study, for example, suggest that a greater effort towards an increase in the employment rate is the first solution that should be thought of by City Governments in order to combat crime. Business attraction, revitalization of downtown areas and similar activities will have, according to the finding of this study, great responses in terms of the reduction of crime rates.

A second important issue is that the apparent “racial” dimension of crime is actually due to segregation of people in more disadvantaged areas than to the mere racial or ethnic issues; therefore, more efforts should be directed towards “clusters” of disadvantaged people in terms of assistance policies.

Finally, in terms of prevention, besides the fact that higher levels of control are required in downtown and commercial areas, what is important to note is that the level of crime in a single neighborhood does not only depend on the socio-economic characteristics of the neighborhood itself, but also on the characteristics of the surrounding areas. Therefore, high levels of control are necessary also in areas in which the socio-economic characteristics do not predict high levels of crime, if in the bordering areas such characteristics predict high levels of crime.

5.2 Limitations

Crime misreporting represents an important problem in crime literature: if the number of reported crime is significantly different from the real number of offenses, then the correlation between socio-economic characteristics and crime would not be related with the true measure of crime.

To address this problem, Demombynes and Özler (2005) used the data of the 1998 South Africa's Victims of Crime Surveys (VCS) - in which information on the reporting of different categories of occurred criminal events was collected - in order to obtain *adjusted crime statistics* for residential burglary (p. 283): a Probit regression was then estimated in order to compute the probability that a crime was reported in each police precinct, using as explanatory variables the same socio-economic characteristics utilized in the previous analyses; the final statistics were obtained by multiplying the reported number of crime by the reciprocal of the estimated probability, showing results similar to those obtained with the data on reported crime.

In another study on crime in U.S. urban areas, Glaeser and Sacerdote (1999) also adjusted crime statistics - obtained by the Federal Bureau of Investigation's (FBI) Uniform Crime Report (UCR) - by using data from the U.S. National Crime Victimization Survey (NCVS) - administered by the Department of Justice's Bureau of Justice Statistics - for the UCR figures tend to "understate the extent of criminal activity if citizens underreport crimes to police" (p. 231). In order to do so, they estimated the ratio of reported offenses to actual offenses by city size, for underreporting is greater in larger than in smaller cities.

In our case, each of the three cities under observation has an approximate population of about 500'000 residents, hence we could expect similar underreporting rates in all the cities. However, other local socio-economic characteristics might influence the probability that a crime is reported to the Police (Demombynes and Özler, 2005); therefore other analyses will be required in order to address this problem, either by estimating the probability of a crime to be reported in each block group, or by using

NCVS data and NIBRS (National Incident-Based Reporting System) data.

Table 5.1 - Average underreporting in selected crime categories in the U.S. (1998-2002)

Crime Category	% Not Reported to the Police
Residential burglary	47%
Vehicle theft (completed)	7%
Aggravated Assault	41%
Simple Assault	56%
Sexual Assault	63%
Robbery	37%

Source: Authors' own calculations using data of the Bureau of Justice Statistics,

5.3 Future Research

As Wang and Arnold have pointed out, *cross-national research* and *studies across states* (p. 261) - which represent the bulk of the studies on inequality and crime given the greater availability of aggregate data - have found a significant relationship between inequality and crime, but studies at smaller geographical units (counties, metropolitan areas, neighborhoods) have yielded different - and often contrasting - results. Besides the fact that, for disadvantaged people, what really matters is the relative deprivation in comparison with the neighboring communities rather than with people living in other countries (Hipp, 2007), the point here is that the choice of the unit of analysis might affect the results of the research itself (Messner and Tardiff, 1986; Baden et al., 2007). Therefore, the next step in our research work will be a thorough analysis of the literature aimed to understand how the results obtained in previous studies are affected by the choice of the geographical unit. However, we have already replicated the analyses at the Census Tract level: results are shown in appendix C.

Future research will also further investigate the effects of local relative wealth on

crime over time. In order to do so, we will use a panel data, obtained by gathering information from both the 2000 and the 2010 U.S. Census of the Population and crime data referred to both 2000 and 2010, in order to see how changes in the level of income, unemployment and other socio-economic characteristics are reflected in changes in the level of crime.

Finally, further research is necessary in order to define more precisely the size of criminal catchment areas for each typology of crime, in order to understand to which extent criminals can travel “at a negligible cost” in order to undertake criminal activities.

Appendix A - Definitions of the Variables

Crimes

Frequency of crime	Average yearly number of criminal events occurred in the 5-year period 1998-2002 in each Block Group.
Rate of crime	Average yearly rate of criminal events per 1'000 people in the 5-year period 1998-2002 in each Block Group.
Aggravated assault	An unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault is usually accompanied by the use of a weapon or by other means likely to produce death or great bodily harm. Attempted aggravated assault that involves the display of—or threat to use—a gun, knife, or other weapon is included in this crime category because serious personal injury would likely result if the assault were completed. When aggravated assault and larceny-theft occur together, the offense falls under the category of robbery.
Burglary	Unlawful entry of a structure to commit a felony or theft. The use of force to gain entry is not required to classify an offense as a burglary. Burglary is categorized into three sub-classifications: forcible entry, unlawful entry where no force is used, and attempted forcible entry.
Homicide	Willful (non-negligent) killing of one human being by another. The classification of this offense is based solely on police investigation as opposed to the determination of a court, medical examiner, coroner, jury, or other judicial body. The following situations are not included in this offense classification: deaths caused by negligence, suicide, or accident; justifiable homicides; and attempts to murder or assaults to murder, which are scored as aggravated assaults.
Larceny	Unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another; attempts to do these acts are included in the definition. This crime category includes shoplifting, pocket-picking, purse-snatching, thefts from motor vehicles, thefts of motor vehicle parts and accessories, bicycle thefts, and so forth, in which no use of force, violence, or fraud occurs. Excluded from larceny-theft is motor vehicle theft, which is classified in a separate offense category; also excluded are crimes that involve embezzlement, confidence games, forgery, and worthless checks.
Robbery	The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear.
Sexual assault	A sexual assault has been committed when an individual engages in sexual activity without the explicit consent of the other individual involved. Sexual activity is any touching of a sexual or other intimate part of a person for the purpose of gratifying sexual desire of either party. This includes coerced touching of the actor by the victim as well as the touching of the victim by the actor, whether directly or through clothing. Sexual assault includes any forced act against one's will where sex is the weapon. Recent legislation also makes it a felony to engage in video voyeurism, secretly capturing images of another person in a private place without consent.
Simple assault	An unlawful physical attack by one person upon another where neither the offender displays a weapon, nor the victim suffers obvious severe or aggravated bodily injury involving apparent broken bones, loss of teeth, possible internal injury, severe laceration, or loss of consciousness.
Vehicle Theft	Theft or attempted theft of a motor vehicle. The offense includes the stealing of automobiles, trucks, buses, motorcycles, snowmobiles, etc. The taking of a motor vehicle for temporary use by persons having lawful access is excluded from this definition.

Explanatory Variables

Bridge	Dummy variable; it is equal to 1 when the Block Group under observation contains a bridge; it is equal to 0 otherwise.
Distance to downtown	Distance (in miles) to downtown from the Block Group under observation.
Heterogeneity index	Heterogeneity index = $\{1 - \sum p_i^2\}$, where p is the proportion of the i^{th} racial group.
ICE	Index of Concentration at the Extremes = $(\# \text{ of families w/income over } \$ 50'000 - (\# \text{ of families w/income less than } \$ 15'000)/(\text{total } \# \text{ of families})$.
ICE catchment	Index of Concentration at the Extremes in the Catchment Area, made up by the Block Group under observation and all the bordering Block Groups.
Per capita income (\$000)	Per capita income (in thousands dollars).
Percentage 1-Member Househ.	Percentage of households with only one member.
Percentage Adult	Percentage of adult population, given by: $\{(100) - (\text{percent under } 18) - (\text{percent over } 65)\}$.
Percentage African	Percentage of African American.
Percentage Below Poverty Line	Share of the total population living under the poverty line (see table A.1).
Percentage Commercial Uses	Percentage of land under commercial uses (land use data from each city obtained from Metro Nashville Government, Portland Metro Government and the Pima County Department of Transportation).
Percentage Female did not work	Percentage of females who did not work in 1999.
Percentage Over 25 Graduate	Percentage of people over 25 with college degree.
Percentage Same House as 1995	Percentage of people living in the same house as in 1995.
Percentage Single-Parent families	Percentage of families with only 1 parent and children under 18.
Peripheral*Richest	Dummy variable; it equals 1 when a Block Group that is the richest of its own catchment area is also surrounded by Block Groups not included in the study.
Population density	Number of residents per square kilometer in the Block Group under observation.
Richest	Dummy variable; it is equal to 1 if the Block Group under observation is the richest of the criminal catchment area, 0 otherwise.
Total Population (in 000 residents)	Number of residents (in thousands) in the Block Group under observation.
Unemployment in Catchment area	Share of the total population unemployed in the catchment area, given by the Block Group under observation and all the bordering Block Groups.

Table A.1 - Poverty thresholds in 2000 (in \$) by Size of Family and Number of Related Children Under 18

Size of family unit	Related children under 18 years								
	None	One	Two	Three	Four	Five	Six	Seven	Eight or more
One person (unrelated individual):									
<i>Under 65 years</i>	8,959								
<i>65 years and over</i>	8,259								
Two people									
<i>Householder under 65 years</i>	11,531	11,869							
<i>Householder 65 years and over</i>	10,409	11,824							
Three people	13,470	13,861	13,874						
Four people	17,761	18,052	17,463	17,524					
Five people	21,419	21,731	21,065	20,550	20,236				
Six people	24,636	24,734	24,224	23,736	23,009	22,579			
Seven people	28,347	28,524	27,914	27,489	26,696	25,772	24,758		
Eight people	31,704	31,984	31,408	30,904	30,188	29,279	28,334	28,093	
Nine people or more	38,138	38,322	37,813	37,385	36,682	35,716	34,841	34,625	33,291

Source: U.S. Census Bureau.

Appendix B

Table B.1 - Correlations between economic and sociological indicators

	ICE	ICE_catchment	Income	Poverty	Unemployment	Richest	% Single-parent	Heterogeneity
ICE	1.000							
ICE_catchment	-	1.000						
Income	0.649	0.660	1.000					
Poverty	-0.755	-0.666	-0.527	1.000				
Unemployment	-0.471	-0.553	-0.453	0.503	1.000			
Richest	0.153	0.018	0.303	-0.140	-0.033	1.000		
% Single-parent	-0.665	-0.581	-0.476	0.573	0.378	-0.133	1.000	
Heterogeneity	-0.449	-0.463	-0.557	0.391	0.351	-0.114	0.332	1.000

Appendix C - Tables of the results

Table C.1 - Neg.ve Binomial Estimates of Determinants of Residential Burglary in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	1.400*** (0.258)	1.049*** (0.235)	1.614*** (0.465)	1.451*** (0.260)	1.686*** (0.462)
ICE	0.097 (0.171)	0.475** (0.188)	0.420** (0.183)		
ICE catchment				-0.107 (0.236)	0.244 (0.240)
Income_000	-0.008** (0.004)		-0.007 (0.005)	-0.007* (0.004)	-0.007 (0.005)
% Below Poverty Line		0.022*** (0.004)			
Unemploym_Catchm	0.214*** (0.023)	0.180*** (0.024)	0.131*** (0.023)	0.205*** (0.026)	0.135*** (0.025)
Richest	-0.003 (0.075)	-0.026 (0.073)	0.033 (0.079)	-0.005 (0.075)	0.062 (0.079)
Total Population_000	0.282*** (0.015)	0.279*** (0.015)	0.291*** (0.014)	0.285*** (0.015)	0.294*** (0.014)
Density	-2.9e-04 (2.5e-04)	-4.6e-04* (2.5e-04)	-3.5e-04 (2.7e-04)	-2.9e-04 (2.5e-04)	-4.3e-04 (2.7e-04)
% Single-Parent	0.002 (0.004)	0.001 (0.004)	0.006 (0.004)	0.001 (0.003)	0.002 (0.003)
% Adult	0.007** (0.003)	0.005* (0.003)	0.002 (0.004)	0.008** (0.003)	0.002 (0.004)
% African	4.2e-04 (0.002)	1.6e-04 (0.002)	4.0e-04 (0.002)	3.6e-04 (0.002)	4.1e-04 (0.002)
Heterogeneity	0.198 (0.196)	0.408** (0.176)	0.193 (0.202)	0.184 (0.196)	0.208 (0.203)
Distance Downtown			-0.038*** (0.010)		-0.037*** (0.010)
% Over 25 Graduate			-0.007** (0.003)		-0.006* (0.003)
% Commercial Uses			0.002 (0.002)		0.002 (0.002)
% 1-Member Househ.			0.012*** (0.003)		0.012*** (0.003)
% Same House			0.004 (0.003)		0.005* (0.003)
% Female Not Work			0.001 (0.003)		7.9e-05 (0.003)
Bridge			0.192** (0.088)		0.210** (0.088)
Periphery*Richest			-0.231 (0.152)		-0.276* (0.151)
Portland	-0.200*** (0.074)	-0.154** (0.073)	-0.126* (0.075)	-0.161* (0.086)	-0.121 (0.085)
Nashville	0.068 (0.079)	0.083 (0.077)	0.002 (0.082)	0.095 (0.086)	0.005 (0.089)
Pseudo R ²	0.097	0.102	0.116	0.097	0.115

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.2 - Neg.ve Binomial Estimates of Determinants of Vehicle Theft in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	1.016*** (0.325)	0.488 (0.303)	1.401*** (0.541)	1.086*** (0.326)	1.578*** (0.535)
ICE	-0.240 (0.220)	-0.088 (0.246)	0.568** (0.229)		
ICE catchment				-0.590* (0.306)	-0.016 (0.295)
Income_000	-0.015*** (0.005)		-0.011* (0.007)	-0.014*** (0.005)	-0.010 (0.007)
% Below Poverty Line		0.016*** (0.006)			
Unemploym_Catchm	0.245*** (0.029)	0.231*** (0.031)	0.121*** (0.028)	0.220*** (0.033)	0.112*** (0.031)
Richest	0.126 (0.095)	0.073 (0.094)	0.194** (0.093)	0.097 (0.096)	0.212** (0.094)
Total Population_000	0.283*** (0.019)	0.288*** (0.019)	0.293*** (0.017)	0.286*** (0.019)	0.299*** (0.017)
Density	-3.1e-04 (3.0e-04)	-4.5e-04 (3.0e-04)	-3.6e-04 (3.1e-04)	-2.5e-04 (2.9e-04)	-4.4e-04 (3.1e-04)
% Single-Parent	-0.001 (0.005)	-0.002 (0.005)	0.005 (0.005)	7.0e-05 (0.004)	-2.4e-05 (0.004)
% Adult	0.012*** (0.004)	0.010*** (0.004)	0.001 (0.004)	0.013*** (0.004)	5.4e-04 (0.004)
% African	-4.2e-04 (0.002)	-1.1e-05 (2.2e-04)	0.001 (0.002)	-0.001 (0.002)	0.001 (0.002)
Heterogeneity	0.219 (0.255)	0.581** (0.232)	0.248 (0.244)	0.208 (0.254)	0.313 (0.245)
Distance Downtown			-0.036*** (0.011)		-0.030*** (0.012)
% Over 25 Graduate			-0.013*** (0.004)		-0.010*** (0.004)
% Commercial Uses			0.006*** (0.002)		0.006** (0.002)
% 1-Member Househ.			0.020*** (0.003)		0.020*** (0.003)
% Same House			-0.003 (0.003)		-0.002 (0.003)
% Female Not Work			0.008** (0.003)		0.005* (0.003)
Bridge			0.200* (0.105)		0.248** (0.106)
Periphery*Richest			-0.459** (0.183)		-0.488*** (0.181)
Portland	-0.145 (0.094)	-0.124 (0.094)	-0.017 (0.090)	-0.053 (0.110)	0.057 (0.103)
Nashville	-0.075 (0.102)	-0.085 (0.101)	-0.195* (0.100)	0.001 (0.112)	-0.132 (0.110)
Pseudo R ²	0.083	0.083	0.120	0.084	0.118

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.3 - Neg.ve Binomial Estimates of Determinants of Larceny in Census Tracts (N=420)

	(1)	(2)	(3)	(4)	(5)
Constant	2.414*** (0.370)	1.884*** (0.337)	3.009*** (0.607)	2.401*** (0.373)	3.401*** (0.595)
ICE	-0.105 (0.248)	0.722*** (0.275)	0.964*** (0.235)		
ICE catchment				-0.061 (0.350)	0.823*** (0.319)
Income_000	-0.003 (0.005)		-0.003 (0.007)	-0.003 (0.005)	-0.003 (0.007)
% Below Poverty Line		0.034*** (0.006)			
Unemploym_Catchm	0.257*** (0.033)	0.195*** (0.035)	0.117*** (0.031)	0.257*** (0.038)	0.132*** (0.034)
Richest	0.042 (0.108)	0.044 (0.104)	0.053 (0.101)	0.038 (0.108)	0.121 (0.102)
Total Population_000	0.277*** (0.022)	0.267*** (0.021)	0.296*** (0.018)	0.276*** (0.022)	0.299*** (0.019)
Density	-6.0e-05 (3.2e-04)	-3.1e-04 (3.2e-04)	1.7e-04 (3.2e-04)	-3.7e-05 (3.2e-04)	-2.9e-05 (3.3e-04)
% Single-Parent	-0.006 (0.005)	-0.007 (0.005)	0.001 (0.005)	-0.006 (0.005)	-0.006 (0.004)
% Adult	0.015*** (0.004)	0.015*** (0.004)	-0.003 (0.005)	0.015*** (0.004)	-0.005 (0.005)
% African	-0.004 (0.003)	-0.005** (0.003)	-0.003 (0.002)	-0.004 (0.003)	-0.003 (0.002)
Heterogeneity	0.148 (0.302)	0.356 (0.266)	0.344 (0.278)	0.151 (0.303)	0.355 (0.283)
Distance Downtown			-0.042*** (0.012)		-0.045*** (0.013)
% Over 25 Graduate			-0.009** (0.004)		-0.007* (0.004)
% Commercial Uses			0.011*** (0.003)		0.011*** (0.003)
% 1-Member Househ.			0.019*** (0.004)		0.017*** (0.004)
% Same House			-0.008** (0.003)		-0.007** (0.004)
% Female Not Work			0.012*** (0.004)		0.008** (0.003)
Bridge			0.398*** (0.115)		0.430*** (0.117)
Periphery*Richest			-0.273 (0.184)		-0.349* (0.185)
Portland	-0.392*** (0.109)	-0.335*** (0.105)	-0.230** (0.098)	-0.396*** (0.128)	-0.263** (0.112)
Nashville	-0.119 (0.118)	-0.090 (0.113)	-0.145 (0.109)	-0.121 (0.129)	-0.185 (0.120)
Pseudo R ²	0.045	0.050	0.078	0.045	0.076

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.4 - Neg.ve Binomial Estimates of Determinants of Aggravated Assault in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	0.075 (0.329)	-0.436 (0.273)	0.212 (0.563)	0.203 (0.331)	0.223 (0.565)
ICE	-0.544*** (0.206)	-0.379* (0.209)	-0.124 (0.205)		
ICE catchment				-0.646** (0.278)	-0.112 (0.256)
Income_000	-0.012 (0.015)		0.003 (0.018)	-0.020 (0.015)	0.001 (0.017)
Income_Square	-1.2e-04 (2.0e-04)		-2.0e-04 (2.2e-04)	-3.4e-05 (2.0e-04)	-1.8e-04 (2.2e-04)
% Below Poverty Line		0.018*** (0.005)			
Unemploym_Catchm	0.294*** (0.026)	0.273*** (0.027)	0.170*** (0.025)	0.270*** (0.029)	0.166*** (0.027)
Richest	0.199** (0.092)	0.127 (0.088)	0.159* (0.090)	0.161* (0.095)	0.150 (0.091)
Total Population_000	0.258*** (0.018)	0.266*** (0.017)	0.276*** (0.015)	0.257*** (0.018)	0.276*** (0.016)
Density	-2.7e-04 (2.9e-04)	-3.4e-04 (3.0e-04)	-6.5e-05 (2.9e-04)	-1.3e-04 (2.9e-04)	-4.2e-05 (2.9e-04)
% Single-Parent	-0.001 (0.004)	-0.003 (0.004)	0.002 (0.004)	0.002 (0.004)	0.003 (0.004)
% Adult	0.005 (0.004)	0.002 (0.003)	-0.002 (0.004)	0.005 (0.004)	-0.003 (0.004)
% African	0.002 (0.002)	0.003 (0.002)	0.005*** (0.002)	0.002 (0.002)	0.005*** (0.002)
Heterogeneity	0.842*** (0.223)	1.195*** (0.204)	0.764*** (0.211)	0.824*** (0.224)	0.762*** (0.212)
Distance Downtown			-0.021** (0.011)		-0.021* (0.011)
% Over 25 Graduate			-0.014*** (0.004)		-0.014*** (0.004)
% Commercial Uses			0.011*** (0.002)		0.011*** (0.002)
% 1-Member Househ.			0.013*** (0.003)		0.013*** (0.003)
% Same House			0.003 (0.003)		0.003 (0.003)
% Female Not Work			0.002 (0.003)		0.002 (0.003)
Bridge			0.197** (0.092)		0.193** (0.092)
Periphery*Richest			-0.514*** (0.184)		-0.499*** (0.185)
Portland	0.577*** (0.087)	0.606*** (0.087)	0.747*** (0.086)	0.640*** (0.101)	0.755*** (0.096)
Nashville	1.096*** (0.094)	1.107*** (0.094)	0.983*** (0.091)	1.147*** (0.103)	0.990*** (0.099)
Pseudo R ²	0.150	0.149	0.185	0.150	0.185

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.5 - Neg.ve Binomial Estimates of Determinants of Simple Assault in Census Tracts (N=421)

	(1)	(2)	(3)	(4)	(5)
Constant	1.707*** (0.327)	1.205*** (0.266)	2.595*** (0.537)	1.725*** (0.327)	2.529*** (0.535)
ICE	-0.042 (0.204)	0.297 (0.215)	0.383** (0.195)		
ICE catchment				-0.076 (0.276)	0.375 (0.244)
Income_000	-0.008 (0.015)		-0.006 (0.016)	-0.009 (0.014)	0.001 (0.016)
Income_Square	-1.8e-04 (1.9e-04)		-3.5e-05 (1.9e-04)	-1.7e-04 (1.8e-04)	-1.2e-04 (1.8e-04)
% Below Poverty Line		0.023*** (0.005)			
Unemploy_m_Catchm	0.283*** (0.027)	0.254*** (0.027)	0.138*** (0.024)	0.279*** (0.030)	0.152*** (0.026)
Richest	0.166* (0.090)	0.089 (0.086)	0.160* (0.083)	0.162* (0.092)	0.184** (0.084)
Total Population_000	0.294*** (0.018)	0.301*** (0.017)	0.311*** (0.015)	0.294*** (0.018)	0.312*** (0.015)
Density	-8.3e-05 (2.9e-04)	-1.7e-04 (3.0e-04)	-1.1e-04 (2.8e-04)	-6.9e-05 (2.9e-04)	-1.7e-04 (2.8e-04)
% Single-Parent	0.007* (0.004)	0.006 (0.004)	0.009** (0.004)	0.007* (0.004)	0.007* (0.003)
% Adult	0.002 (0.004)	-8.9e-04 (0.003)	-0.010** (0.004)	0.002 (0.004)	-0.010** (0.004)
% African	-0.001 (0.002)	-5.1e-04 (0.002)	0.003* (0.002)	-0.001 (0.002)	0.003* (0.002)
Heterogeneity	0.742*** (0.229)	1.134*** (0.207)	0.746*** (0.204)	0.740*** (0.229)	0.747*** (0.205)
Distance Downtown			-0.011 (0.010)		-0.012 (0.010)
% Over 25 Graduate			-0.017*** (0.003)		-0.017*** (0.003)
% Commercial Uses			0.009*** (0.002)		0.009*** (0.002)
% 1-Member Househ.			0.021*** (0.003)		0.020*** (0.003)
% Same House			0.002 (0.003)		0.002 (0.003)
% Female Not Work			-0.005 (0.003)		-0.005* (0.003)
Bridge			0.213** (0.090)		0.226** (0.089)
Periphery*Richest			-0.371** (0.160)		-0.420*** (0.158)
Portland	-1.016*** (0.083)	-0.991*** (0.082)	-0.849*** (0.077)	-1.006*** (0.096)	-0.885*** (0.087)
Nashville	0.229** (0.091)	0.227** (0.090)	0.042 (0.083)	0.236** (0.098)	0.014 (0.091)
Pseudo R ²	0.129	0.129	0.166	0.129	0.166

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.6 - Neg.ve Binomial Estimates of Determinants of Sexual Assault in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-2.697*** (0.519)	-2.839*** (0.424)	-2.636*** (0.919)	-2.642*** (0.516)	-2.553*** (0.891)
ICE	-1.023*** (0.306)	-1.113*** (0.307)	-0.391 (0.318)		
ICE catchment				-1.690*** (0.402)	-1.567*** (0.399)
Income_000	-0.001 (0.023)		-0.009 (0.029)	0.001 (0.023)	-0.007 (0.028)
Income_Square	-1.5e-04 (3.5e-04)		5.6e-05 (3.9e-04)	-1.7e-04 (3.6e-04)	8.2e-05 (3.9e-04)
% Below Poverty Line		1.6e-04 (0.007)			
Unemploym_Catchm	0.208*** (0.037)	0.215*** (0.040)	0.076* (0.039)	0.168*** (0.038)	0.037 (0.040)
Richest	0.243* (0.146)	0.215 (0.141)	0.252* (0.151)	0.124 (0.150)	0.123 (0.153)
Total Population_000	0.216*** (0.025)	0.221*** (0.025)	0.242*** (0.024)	0.223*** (0.025)	0.252*** (0.024)
Density	-0.001 (4.4e-04)	-5.4e-04 (4.5e-04)	-5.2e-04 (4.8e-04)	-2.8e-04 (4.4e-04)	-2.8e-04 (4.7e-04)
% Single-Parent	-0.009 (0.006)	-0.009 (0.006)	0.001 (0.006)	-0.004 (0.005)	7.8e-05 (0.006)
% Adult	0.031*** (0.005)	0.030*** (0.005)	0.014** (0.007)	0.031*** (0.005)	0.012* (0.006)
% African	0.010*** (0.003)	0.010*** (0.003)	0.012*** (0.003)	0.008*** (0.003)	0.011*** (0.003)
Heterogeneity	0.418 (0.327)	0.558* (0.302)	0.440 (0.347)	0.446 (0.325)	0.616* (0.343)
Distance Downtown			0.008 (0.019)		0.027 (0.020)
% Over 25 Graduate			-0.011* (0.006)		-0.008 (0.006)
% Commercial Uses			0.013*** (0.003)		0.012*** (0.003)
% 1-Member Househ.			0.024*** (0.005)		0.027*** (0.005)
% Same House			0.005 (0.005)		0.007 (0.005)
% Female Not Work			0.003 (0.006)		0.001 (0.005)
Bridge			0.098 (0.146)		0.165 (0.142)
Periphery*Richest			-0.629 (0.396)		-0.453 (0.392)
Portland	-0.202 (0.138)	-0.214 (0.139)	0.077 (0.143)	0.009 (0.156)	0.339** (0.157)
Nashville	-0.076 (0.149)	-0.088 (0.149)	-0.183 (0.149)	0.104 (0.161)	0.033 (0.157)
Pseudo R ²	0.170	0.169	0.224	0.173	0.232

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.7 - Neg.ve Binomial Estimates of Determinants of Robbery in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-0.859** (0.400)	-1.172*** (0.372)	-0.121 (0.706)	-0.848** (0.412)	-0.140 (0.703)
ICE	-0.810*** (0.261)	-0.218 (0.286)	-0.089 (0.287)		
ICE catchment				-0.768** (0.379)	-0.077 (0.368)
Income_000	-0.003 (0.007)		-0.010 (0.009)	-0.007 (0.007)	-0.010 (0.009)
% Below Poverty Line		0.027*** (0.007)			
Unemploym_Catchm	0.315*** (0.036)	0.260*** (0.037)	0.145*** (0.034)	0.298*** (0.039)	0.143*** (0.037)
Richest	0.138 (0.121)	0.110 (0.118)	0.137 (0.121)	0.095 (0.125)	0.130 (0.123)
Total Population_000	0.227*** (0.024)	0.220*** (0.023)	0.257*** (0.021)	0.226*** (0.024)	0.257*** (0.022)
Density	0.001** (4.1e-04)	0.001* (4.0e-04)	2.9e-04 (4.0e-04)	0.001** (4.1e-04)	3.1e-04 (4.0e-04)
% Single-Parent	-0.004 (0.006)	-0.006 (0.006)	0.005 (0.006)	0.001 (0.005)	0.005 (0.005)
% Adult	0.010** (0.005)	0.009* (0.005)	-0.009 (0.006)	0.010** (0.005)	-0.009 (0.006)
% African	0.001 (0.003)	0.001 (0.003)	0.002 (0.003)	0.001 (0.003)	0.002 (0.003)
Heterogeneity	0.695** (0.307)	0.776*** (0.278)	0.845*** (0.302)	0.690** (0.310)	0.842*** (0.303)
Distance Downtown			-0.058*** (0.015)		-0.058*** (0.016)
% Over 25 Graduate			-0.008 (0.005)		-0.008* (0.005)
% Commercial Uses			0.010*** (0.003)		0.010*** (0.003)
% 1-Member Househ.			0.028*** (0.004)		0.028*** (0.004)
% Same House			0.006 (0.004)		0.006 (0.004)
% Female Not Work			0.001 (0.004)		0.001 (0.004)
Bridge			0.114 (0.131)		0.110 (0.130)
Periphery*Richest			-0.325 (0.260)		-0.316 (0.261)
Portland	-0.154 (0.120)	-0.089 (0.119)	0.125 (0.118)	-0.109 (0.144)	0.129 (0.135)
Nashville	0.917*** (0.128)	0.942*** (0.126)	0.843*** (0.129)	0.956*** (0.141)	0.847*** (0.140)
Pseudo R ²	0.118	0.124	0.159	0.117	0.159

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.8 - Neg.ve Binomial Estimates of Determinants of Homicide in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-2.300** (1.126)	-2.934*** (0.932)	-3.199 (2.070)	-2.197* (1.128)	-3.188 (2.050)
ICE	-1.112* (0.667)	-0.784 (0.690)	-0.675 (0.742)		
ICE catchment				-0.661 (0.773)	0.095 (0.868)
Income_000	-0.019 (0.049)		0.027 (0.069)	-0.044 (0.045)	0.019 (0.069)
Income_Square	1.3e-04 (7.7e-04)		-3.8e-04 (0.001)	4.3e-04 (7.3e-04)	-3.1e-04 (0.001)
% Below Poverty Line		0.019 (0.014)			
Unemploym_Catchm	0.204*** (0.074)	0.173** (0.078)	0.156* (0.084)	0.196** (0.078)	0.162* (0.087)
Richest	0.049 (0.327)	-0.001 (0.320)	-0.214 (0.367)	0.028 (0.330)	-0.217 (0.372)
Total Population_000	0.204*** (0.047)	0.211*** (0.046)	0.237*** (0.050)	0.202*** (0.047)	0.238*** (0.050)
Density	-0.001 (0.001)	-0.001 (0.001)	3.6e-04 (0.001)	-4.2e-04 (0.001)	4.0e-04 (0.001)
% Single-Parent	-0.012 (0.013)	-0.015 (0.013)	-0.004 (0.015)	-0.002 (0.011)	0.003 (0.013)
% Adult	-0.004 (0.011)	-0.002 (0.011)	-0.003 (0.016)	-0.003 (0.011)	-0.004 (0.016)
% African	0.013** (0.006)	0.015*** (0.005)	0.011* (0.006)	0.013** (0.006)	0.011* (0.006)
Heterogeneity	1.077* (0.629)	1.214** (0.588)	0.656 (0.736)	1.013 (0.629)	0.564 (0.734)
Distance Downtown			-0.067 (0.046)		-0.079* (0.048)
% Over 25 Graduate			-0.011 (0.013)		-0.013 (0.013)
% Commercial Uses			0.010 (0.007)		0.012* (0.006)
% 1-Member Househ.			-0.003 (0.012)		-0.002 (0.012)
% Same House			0.006 (0.011)		0.004 (0.011)
% Female Not Work			0.007 (0.012)		0.009 (0.012)
Bridge			0.661** (0.284)		0.603** (0.280)
Periphery*Richest			0.018 (0.825)		0.008 (0.832)
Portland	-0.455 (0.322)	-0.447 (0.319)	-0.408 (0.354)	-0.473 (0.356)	-0.499 (0.393)
Nashville	0.113 (0.312)	0.075 (0.305)	0.104 (0.346)	0.117 (0.339)	0.020 (0.374)
Pseudo R ²	0.224	0.226	0.248	0.220	0.247

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.9 - Negative Binomial Estimates of Determinants of Residential Burglary in Block Groups (N=1'322)

	(1)	(2)	(3)	(4)	(5)
Constant	1.302*** (0.133)	1.045*** (0.129)	1.985*** (0.246)	1.399*** (0.131)	2.066*** (0.244)
ICE	-0.056 (0.085)	0.070 (0.092)	0.218** (0.092)		
ICE catchment				-0.466*** (0.119)	-0.155 (0.129)
Income_000	-0.008*** (0.002)		-0.005* (0.003)	-0.005** (0.002)	-0.003 (0.003)
% Below Poverty Line		0.009*** (0.002)			
Unemploym_Catchm	0.082*** (0.010)	0.077*** (0.010)	0.052*** (0.010)	0.067*** (0.011)	0.046*** (0.011)
Richest	0.008 (0.045)	-0.040 (0.043)	0.064 (0.047)	-0.031 (0.046)	0.056 (0.048)
Total Population_000	0.358*** (0.019)	0.358*** (0.019)	0.372*** (0.020)	0.367*** (0.019)	0.379*** (0.020)
Density	-0.001*** (1.2e-04)	-0.001*** (1.2e-04)	-0.001*** (1.3e-04)	-0.001*** (1.2e-04)	-0.001*** (1.3e-04)
% Single-Parent	0.007*** (0.002)	0.006*** (0.002)	0.007*** (0.002)	0.006*** (0.002)	0.005*** (0.002)
% Adult	0.008*** (0.002)	0.007*** (0.002)	0.003 (0.002)	0.009*** (0.002)	0.002 (0.002)
% African	5.2e-04 (0.001)	0.001 (0.001)	0.001 (0.001)	-1.8e-04 (0.001)	2.5e-04 (0.001)
Heterogeneity	0.541*** (0.109)	0.706*** (0.102)	0.389*** (0.113)	0.506*** (0.108)	0.401*** (0.113)
Distance Downtown			-0.030*** (0.006)		-0.025*** (0.006)
% Over 25 Graduate			-0.007*** (0.001)		-0.006*** (0.001)
% Commercial Uses			0.003*** (0.001)		0.002** (0.001)
% 1-Member Househ.			0.007*** (0.001)		0.007*** (0.001)
% Same House			-0.002* (0.001)		-0.002 (0.001)
% Female Not Work			-0.002 (0.001)		-0.003** (0.001)
Bridge			0.238*** (0.075)		0.248*** (0.075)
Periphery*Richest			-0.382*** (0.104)		-0.406*** (0.104)
Portland	-0.071* (0.042)	-0.063 (0.042)	-0.065 (0.043)	0.005 (0.046)	-0.016 (0.046)
Nashville	-0.007 (0.046)	-0.002 (0.046)	-0.074 (0.048)	0.050 (0.048)	-0.031 (0.050)
Pseudo R ²	0.078	0.079	0.092	0.079	0.092

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.10 - Neg.ve Binomial Estimates of Determinants of Vehicle Theft in Block Groups (N=1'320)

	(1)	(2)	(3)	(4)	(5)
Constant	0.938*** (0.173)	0.609*** (0.168)	1.470*** (0.313)	1.027*** (0.171)	1.600*** (0.310)
ICE	-0.396*** (0.112)	-0.326*** (0.121)	0.248** (0.119)		
ICE catchment				-0.992*** (0.161)	-0.425** (0.168)
Income_000	-0.012*** (0.003)		-0.007* (0.004)	-0.009*** (0.003)	-0.003 (0.004)
% Below Poverty Line		0.009*** (0.002)			
Unemploym_Catchm	0.086*** (0.014)	0.085*** (0.014)	0.043*** (0.013)	0.060*** (0.014)	0.030** (0.014)
Richest	0.028 (0.061)	-0.048 (0.057)	0.087 (0.060)	-0.053 (0.062)	0.057 (0.061)
Total Population_000	0.393*** (0.027)	0.398*** (0.027)	0.408*** (0.025)	0.411*** (0.027)	0.419*** (0.025)
Density	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)
% Single-Parent	0.005** (0.002)	0.004* (0.002)	0.007*** (0.002)	0.005** (0.002)	0.003 (0.002)
% Adult	0.012*** (0.002)	0.011*** (0.002)	0.004 (0.003)	0.013*** (0.002)	0.002 (0.003)
% African	0.001 (0.001)	0.002 (0.001)	0.003** (0.001)	3.8e-05 (0.001)	0.002* (0.001)
Heterogeneity	0.633*** (0.149)	0.859*** (0.139)	0.468*** (0.147)	0.600*** (0.148)	0.510*** (0.147)
Distance Downtown			-0.023*** (0.008)		-0.014* (0.008)
% Over 25 Graduate			-0.011*** (0.002)		-0.008*** (0.002)
% Commercial Uses			0.009*** (0.001)		0.008*** (0.001)
% 1-Member Househ.			0.012*** (0.002)		0.012*** (0.002)
% Same House			-0.006*** (0.002)		-0.004*** (0.002)
% Female Not Work			0.003 (0.002)		0.001 (0.002)
Bridge			0.396*** (0.094)		0.412*** (0.094)
Periphery*Richest			-0.582*** (0.138)		-0.601*** (0.136)
Portland	0.022 (0.056)	0.019 (0.056)	0.070 (0.055)	0.145** (0.060)	0.163*** (0.059)
Nashville	-0.211*** (0.063)	-0.216*** (0.062)	-0.309*** (0.062)	-0.104 (0.065)	-0.222*** (0.066)
Pseudo R ²	0.070	0.070	0.101	0.073	0.101

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.11 - Neg.ve Binomial Estimates of Determinants of Larceny in Block Groups (N=1'313)

	(1)	(2)	(3)	(4)	(5)
Constant	1.996*** (0.192)	1.819*** (0.186)	2.563*** (0.355)	2.027*** (0.192)	2.678*** (0.353)
ICE	-0.379*** (0.125)	0.038	0.496*** (0.129)		
ICE catchment				-0.646*** (0.188)	0.214 (0.193)
Income_000	0.003 (0.003)		0.002 (0.003)	0.003 (0.003)	0.004 (0.003)
% Below Poverty Line		0.014*** (0.003)			
Unemploym_Catchm	0.093*** (0.016)	0.078*** (0.016)	0.049*** (0.016)	0.077*** (0.017)	0.050*** (0.017)
Richest	-0.075 (0.066)	-0.074 (0.063)	-0.049 (0.064)	-0.140** (0.068)	-0.020 (0.065)
Total Population_000	0.429*** (0.032)	0.432*** (0.032)	0.462*** (0.030)	0.435*** (0.032)	0.470*** (0.030)
Density	-0.001*** (1.6e-04)	-0.001*** (1.6e-04)	-0.001*** (1.6e-04)	-0.001*** (1.6e-04)	-0.001*** (1.6e-04)
% Single-Parent	0.001 (0.003)	-1.0e-04 (0.003)	0.005* (0.003)	0.002 (0.003)	0.002 (0.003)
% Adult	0.019*** (0.002)	0.019*** (0.002)	0.005 (0.003)	0.020*** (0.002)	0.003 (0.003)
% African	-0.003* (0.001)	-0.003** (0.001)	-0.001 (0.001)	-0.003** (0.001)	-0.001 (0.001)
Heterogeneity	0.623*** (0.172)	0.625*** (0.160)	0.549*** (0.164)	0.627*** (0.171)	0.561*** (0.165)
Distance Downtown			-0.029*** (0.009)		-0.027*** (0.009)
% Over 25 Graduate			-0.008*** (0.002)		-0.006*** (0.002)
% Commercial Uses			0.015*** (0.001)		0.014*** (0.001)
% 1-Member Househ.			0.015*** (0.002)		0.015*** (0.002)
% Same House			-0.006*** (0.002)		-0.004** (0.002)
% Female Not Work			0.002 (0.002)		0.001 (0.002)
Bridge			0.406*** (0.107)		0.416*** (0.108)
Periphery*Richest			-0.223 (0.136)		-0.242* (0.136)
Portland	-0.194*** (0.064)	-0.184*** (0.063)	-0.091 (0.060)	-0.131* (0.070)	-0.070 (0.067)
Nashville	-0.246*** (0.070)	-0.235*** (0.069)	-0.302*** (0.067)	-0.188** (0.074)	-0.286*** (0.073)
Pseudo R ²	0.036	0.038	0.063	0.036	0.062

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.12 - Neg.ve Binomial Estimates of Determinants of Aggravated Assault in Block Groups (N=1'321)

	(1)	(2)	(3)	(4)	(5)
Constant	0.317* (0.192)	-0.069 (0.171)	0.635* (0.327)	0.313 (0.191)	0.658** (0.324)
ICE	-0.773*** (0.117)	-0.873*** (0.119)	-0.186 (0.121)		
ICE catchment				-1.284*** (0.162)	-0.751*** (0.165)
Income_000	-0.019** (0.009)		-0.009 (0.009)	-0.018** (0.009)	-0.004 (0.009)
Income_Square	-3.2e-05 (1.2e-04)		-1.4e-06 (1.2e-04)	-7.9e-06 (1.1e-04)	-1.5e-05 (1.1e-04)
% Below Poverty Line		0.006*** (0.002)			
Unemploym_Catchm	0.146*** (0.012)	0.151*** (0.013)	0.100*** (0.012)	0.124*** (0.013)	0.086*** (0.013)
Richest	0.043 (0.063)	-0.077 (0.059)	0.069 (0.063)	-0.062 (0.065)	0.004 (0.064)
Total Population_000	0.334*** (0.023)	0.338*** (0.024)	0.369*** (0.022)	0.348*** (0.024)	0.376*** (0.022)
Density	-0.001*** (1.6e-04)	-0.001*** (1.7e-04)	-0.001*** (1.5e-04)	-0.001*** (1.6e-04)	-0.001*** (1.5e-04)
% Single-Parent	0.001 (0.002)	-2.3e-04 (0.002)	0.004* (0.002)	0.003 (0.002)	0.003 (0.002)
% Adult	0.002 (0.002)	-2.4e-04 (0.002)	-2.8e-04 (0.003)	0.004* (0.002)	-0.001 (0.003)
% African	0.003*** (0.001)	0.004*** (0.001)	0.006*** (0.001)	0.002 (0.001)	0.005*** (0.001)
Heterogeneity	1.204*** (0.140)	1.543*** (0.130)	0.861*** (0.136)	1.172*** (0.139)	0.900*** (0.135)
Distance Downtown			-0.014* (0.008)		-0.005 (0.008)
% Over 25 Graduate			-0.015*** (0.002)		-0.014*** (0.002)
% Commercial Uses			0.010*** (0.001)		0.010*** (0.001)
% 1-Member Househ.			0.008*** (0.002)		0.009*** (0.002)
% Same House			-0.004** (0.002)		-0.004** (0.002)
% Female Not Work			-1.7e-04 (0.002)		-0.001 (0.002)
Bridge			0.204** (0.090)		0.214** (0.088)
Periphery*Richest			-0.531*** (0.148)		-0.511*** (0.146)
Portland	0.825*** (0.059)	0.810*** (0.059)	0.865*** (0.058)	0.952*** (0.063)	0.963*** (0.062)
Nashville	1.062*** (0.063)	1.050*** (0.064)	0.889*** (0.063)	1.183*** (0.067)	0.980*** (0.066)
Pseudo R ²	0.148	0.145	0.178	0.151	0.181

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.13 - Neg.ve Binomial Estimates of Determinants of Simple Assault in Block Groups (N=1'319)

	(1)	(2)	(3)	(4)	(5)
Constant	1.946*** (0.179)	1.599*** (0.163)	2.517*** (0.316)	1.948*** (0.179)	2.539*** (0.314)
ICE	-0.533*** (0.110)	-0.549*** (0.116)	0.034 (0.115)		
ICE catchment				-0.833*** (0.155)	-0.319** (0.161)
Income_000	-0.016** (0.007)		-0.008 (0.008)	-0.016** (0.007)	-0.004 (0.008)
Income_Square	-2.31e-06 (8.0e-05)		6.4e-05 (8.2e-05)	1.4e-05 (7.9e-05)	4.0e-05 (8.1e-05)
% Below Poverty Line		0.007*** (0.002)			
Unemploy_m_Catchm	0.132*** (0.012)	0.135*** (0.012)	0.089*** (0.012)	0.116*** (0.013)	0.081*** (0.013)
Richest	0.023 (0.058)	-0.076 (0.054)	0.017 (0.058)	-0.047 (0.060)	-0.009 (0.059)
Total Population_000	0.414*** (0.025)	0.422*** (0.026)	0.416*** (0.024)	0.424*** (0.026)	0.421*** (0.024)
Density	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)	-0.001*** (1.5e-04)
% Single-Parent	0.007*** (0.002)	0.007*** (0.002)	0.009*** (0.002)	0.009*** (0.002)	0.008*** (0.002)
% Adult	0.003 (0.002)	3.5e-04 (0.002)	-0.003 (0.003)	0.004* (0.002)	-0.003 (0.003)
% African	3.0e-04 (0.001)	0.001 (0.001)	0.003*** (0.001)	-0.001 (0.001)	0.003** (0.001)
Heterogeneity	1.082*** (0.139)	1.361*** (0.127)	0.882*** (0.135)	1.063*** (0.138)	0.905*** (0.134)
Distance Downtown			-1.3e-04 (0.007)		0.005 (0.008)
% Over 25 Graduate			-0.016*** (0.002)		-0.015*** (0.002)
% Commercial Uses			0.008*** (0.001)		0.008*** (0.001)
% 1-Member Househ.			0.011*** (0.002)		0.012*** (0.002)
% Same House			-0.004** (0.002)		-0.003* (0.002)
% Female Not Work			-0.004** (0.002)		-0.004** (0.002)
Bridge			0.200** (0.092)		0.207** (0.092)
Periphery*Richest			-0.304** (0.124)		-0.310** (0.123)
Portland	-0.773*** (0.053)	-0.784*** (0.053)	-0.766*** (0.052)	-0.700*** (0.057)	-0.714*** (0.057)
Nashville	0.157*** (0.056)	0.145*** (0.056)	-0.028 (0.056)	0.229*** (0.059)	0.019 (0.060)
Pseudo R ²	0.117	0.115	0.140	0.117	0.141

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.14 - Neg.ve Binomial Estimates of Determinants of Sexual Assault in Block Groups (N=1'322)

	(1)	(2)	(3)	(4)	(5)
Constant	-3.571*** (0.380)	-2.984*** (0.314)	-3.498*** (0.601)	-3.569*** (0.378)	-3.363*** (0.594)
ICE	-1.057*** (0.208)	-1.326*** (0.200)	-0.550*** (0.215)		
ICE catchment				-1.411*** (0.304)	-1.213*** (0.325)
Income_000	0.028 (0.019)		0.006 (0.021)	0.020 (0.018)	0.006 (0.020)
Income_Square	-0.001* (3.0e-04)		-2.2e-04 (3.1e-04)	-4.2e-04 (2.9e-04)	-1.4e-04 (3.0e-04)
% Below Poverty Line		-0.014*** (0.004)			
Unemploym_Catchm	0.152*** (0.021)	0.161*** (0.021)	0.102*** (0.023)	0.135*** (0.023)	0.082*** (0.024)
Richest	-0.086 (0.129)	-0.099 (0.119)	0.075 (0.137)	-0.194 (0.132)	-0.030 (0.140)
Total Population_000	0.279*** (0.032)	0.275*** (0.032)	0.296*** (0.034)	0.282*** (0.033)	0.297*** (0.034)
Density	-0.001*** (3.0e-04)	-0.001*** (3.0e-04)	-0.001*** (3.2e-04)	-0.001*** (3.0e-04)	-0.001*** (3.1e-04)
% Single-Parent	-0.002 (0.004)	-4.5e-04 (0.004)	0.005 (0.004)	0.001 (0.004)	0.005 (0.004)
% Adult	0.027*** (0.004)	0.025*** (0.004)	0.016*** (0.005)	0.029*** (0.004)	0.016*** (0.005)
% African	0.007*** (0.002)	0.006*** (0.002)	0.009*** (0.002)	0.005** (0.002)	0.008*** (0.002)
Heterogeneity	1.130*** (0.252)	1.231*** (0.233)	1.081*** (0.280)	1.140*** (0.253)	1.141*** (0.282)
Distance Downtown			0.026 (0.017)		0.040** (0.018)
% Over 25 Graduate			-0.003 (0.003)		-0.003 (0.003)
% Commercial Uses			0.009*** (0.002)		0.009*** (0.002)
% 1-Member Househ.			0.015*** (0.003)		0.017*** (0.003)
% Same House			-0.001 (0.003)		-0.001 (0.003)
% Female Not Work			0.004 (0.003)		0.002 (0.003)
Bridge			0.356** (0.150)		0.390*** (0.150)
Periphery*Richest			-0.598* (0.344)		-0.529 (0.341)
Portland	0.026 (0.113)	0.024 (0.109)	0.110 (0.119)	0.144 (0.124)	0.241* (0.127)
Nashville	0.062 (0.124)	0.044 (0.122)	-0.072 (0.129)	0.179 (0.132)	0.039 (0.136)
Pseudo R ²	0.150	0.153	0.183	0.149	0.185

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.15 - Neg.ve Binomial Estimates of Determinants of Robbery in Block Groups (N=1'321)

	(1)	(2)	(3)	(4)	(5)
Constant	-1.153*** (0.252)	-1.446*** (0.244)	0.373 (0.452)	-1.067*** (0.247)	-0.255 (0.446)
ICE	-0.673*** (0.158)	-0.416** (0.168)	0.144 (0.175)		
ICE catchment				-1.490*** (0.225)	-0.649*** (0.241)
Income_000	-0.006 (0.005)		-0.005 (0.006)	-0.001 (0.005)	5.0e-05 (0.006)
% Below Poverty Line		0.013*** (0.003)			
Unemploym_Catchm	0.138*** (0.018)	0.126*** (0.018)	0.079*** (0.018)	0.111*** (0.018)	0.064*** (0.018)
Richest	-0.033 (0.089)	-0.077 (0.084)	0.059 (0.089)	-0.166* (0.091)	0.006 (0.091)
Total Population_000	0.228*** (0.033)	0.227*** (0.033)	0.327*** (0.033)	0.254*** (0.033)	0.337*** (0.033)
Density	-0.001*** (2.2e-04)	-0.001*** (2.2e-04)	-0.001*** (2.2e-04)	-0.001*** (2.2e-04)	-0.001*** (2.2e-04)
% Single-Parent	0.002 (0.003)	0.001 (0.003)	0.006* (0.003)	0.002 (0.003)	0.003 (0.003)
% Adult	0.016*** (0.003)	0.015*** (0.003)	0.003 (0.004)	0.017*** (0.003)	0.002 (0.004)
% African	0.004** (0.002)	0.005*** (0.002)	0.006*** (0.002)	0.002 (0.002)	0.004** (0.002)
Heterogeneity	1.378*** (0.203)	1.510*** (0.187)	0.976*** (0.204)	1.308*** (0.201)	1.037*** (0.203)
Distance Downtown			-0.066*** (0.012)		-0.053*** (0.012)
% Over 25 Graduate			-0.012*** (0.003)		-0.009*** (0.001)
% Commercial Uses			0.016*** (0.002)		0.016*** (0.002)
% 1-Member Househ.			0.014*** (0.003)		0.015*** (0.003)
% Same House			-0.004 (0.003)		-0.002 (0.002)
% Female Not Work			0.001 (0.002)		-0.001 (0.002)
Bridge			0.082 (0.131)		0.101 (0.130)
Periphery*Richest			-0.836*** (0.233)		-0.823*** (0.227)
Portland	0.083 (0.085)	0.098 (0.084)	0.271*** (0.085)	0.275*** (0.091)	0.396*** (0.091)
Nashville	0.697*** (0.090)	0.707*** (0.089)	0.597*** (0.091)	0.853*** (0.094)	0.703*** (0.095)
Pseudo R ²	0.095	0.096	0.133	0.098	0.134

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.16 - Neg.ve Binomial Estimates of Determinants of Homicide in Block Groups (N=1'322)

	(1)	(2)	(3)	(4)	(5)
Constant	-2.827*** (0.875)	-3.347*** (0.751)	-2.132 (1.388)	-2.821*** (0.873)	-2.086 (1.365)
ICE	-0.675 (0.479)	-0.541 (0.478)	-0.249 (0.507)		
ICE catchment				-1.587** (0.686)	-1.040 (0.748)
Income_000	-0.020 (0.038)		0.003 (0.044)	-0.013 (0.036)	0.008 (0.043)
Income_Square	1.5e-04 (5.1e-04)		-3.0e-05 (5.9e-04)	1.3e-04 (4.8e-04)	-2.3e-05 (5.7e-04)
% Below Poverty Line		0.012 (0.009)			
Unemploym_Catchm	0.140*** (0.050)	0.131*** (0.050)	0.085 (0.052)	0.104* (0.056)	0.063 (0.056)
Richest	0.103 (0.283)	0.039 (0.261)	0.059 (0.312)	-0.035 (0.292)	-0.028 (0.318)
Total Population_000	0.239*** (0.068)	0.243*** (0.067)	0.288*** (0.073)	0.249*** (0.065)	0.289*** (0.072)
Density	-0.001 (0.001)	-0.001 (0.001)	-5.7e-05 (6.6e-04)	-0.001 (0.001)	-6.8e-05 (6.5e-04)
% Single-Parent	-0.003 (0.009)	-0.006 (0.010)	-0.002 (0.010)	-0.001 (0.009)	-0.003 (0.010)
% Adult	-0.006 (0.009)	-0.006 (0.009)	-0.009 (0.012)	-0.004 (0.009)	-0.009 (0.012)
% African	0.012*** (0.005)	0.014*** (0.005)	0.012** (0.005)	0.010* (0.005)	0.011** (0.005)
Heterogeneity	1.241** (0.557)	1.385*** (0.515)	0.691 (0.623)	1.227** (0.562)	0.765 (0.626)
Distance Downtown			-0.077* (0.044)		-0.063 (0.045)
% Over 25 Graduate			-0.016* (0.009)		-0.014 (0.009)
% Commercial Uses			0.009* (0.005)		0.009* (0.005)
% 1-Member Househ.			-2.7e-04 (0.008)		2.1e-04 (0.008)
% Same House			-0.003 (0.007)		-0.002 (0.007)
% Female Not Work			0.001 (0.008)		-0.001 (0.008)
Bridge			0.701** (0.313)		0.706** (0.313)
Periphery*Richest			-0.114 (0.659)		-0.075 (0.657)
Portland	-0.385 (0.286)	-0.407 (-0.280)	-0.320 (0.309)	-0.147 (0.316)	-0.153 (0.335)
Nashville	0.110 (0.287)	0.082 (0.284)	0.030 (0.311)	0.305 (0.306)	0.170 (0.328)
Pseudo R ²	0.132	0.134	0.151	0.136	0.153

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.17 - OLS Estimates of Determinants of Residential Burglary in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-54.097*** (8.613)	-51.492*** (7.885)	-74.868*** (15.904)	-48.052*** (8.669)	-71.206*** (15.809)
ICE	-18.281*** (5.303)	-17.103*** (5.816)	-12.863** (5.999)		
ICE catchment				-37.987*** (7.793)	-31.261*** (8.879)
Income_000	0.100 (0.136)		0.372* (0.199)	0.158 (0.135)	0.400** (0.197)
% Below Poverty Line		0.017 (0.160)			
Unemploym_Catchm	3.732*** (0.800)	3.569*** (0.871)	2.915*** (0.914)	2.395*** (0.868)	2.001** (0.953)
Richest	7.097** (2.789)	7.464*** (2.757)	8.131** (3.182)	5.008* (2.769)	5.927* (3.160)
Density	-0.075*** (0.009)	-0.076*** (0.009)	-0.074*** (0.010)	-0.069*** (0.009)	-0.069*** (0.010)
% Single-Parent	0.392*** (0.120)	0.388*** (0.121)	0.480*** (0.126)	0.418*** (0.110)	0.489*** (0.116)
% Adult	0.979*** (0.110)	0.988*** (0.110)	1.170*** (0.145)	0.980*** (0.108)	1.127*** (0.144)
% African	-0.072 (0.067)	-0.078 (0.067)	-0.052 (0.069)	-0.090 (0.066)	-0.062 (0.068)
Heterogeneity	-4.285 (7.271)	-6.807 (6.451)	-9.336 (8.027)	-5.223 (7.173)	-7.458 (7.968)
Distance Downtown			-0.074 (0.373)		0.201 (0.382)
% Over 25 Graduate			-0.288** (0.128)		-0.236* (0.127)
% Commercial Uses			0.154** (0.078)		0.143* (0.077)
% 1-Member Fam.			0.125 (0.107)		0.158 (0.106)
% Same House			0.194* (0.105)		0.202* (0.103)
% Female Not Work			-0.001 (0.108)		-0.019 (0.106)
Bridge			-4.336 (3.623)		-3.516 (3.579)
Periphery*Richest			-8.285 (5.825)		-6.077 (5.689)
Portland	3.553 (2.747)	4.037 (2.769)	4.464 (2.955)	8.193*** (3.011)	8.317*** (3.224)
Nashville	-1.179 (3.047)	-0.885 (3.038)	-2.759 (3.263)	2.810 (3.213)	0.781 (3.473)
Adjusted R ²	0.337	0.336	0.357	0.355	0.369

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.18 - OLS Estimates of Determinants of Vehicle Theft in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-38.136*** (6.673)	-35.589*** (6.096)	-14.055 (11.507)	-36.373*** (6.800)	-12.467 (11.544)
ICE	-0.288 (4.108)	5.137 (4.496)	2.970 (4.341)		
ICE catchment				-6.739 (6.113)	-5.537 (6.484)
Income_000	0.165 (0.105)		0.164 (0.144)	0.192* (0.106)	0.166 (0.144)
% Below Poverty Line		0.238* (0.124)			
Unemploym_Catchm	6.032*** (0.620)	5.265*** (0.674)	3.746*** (0.661)	5.694*** (0.681)	3.519*** (0.696)
Richest	4.341** (2.161)	5.179** (2.131)	5.721** (2.302)	4.040* (2.172)	5.635** (2.308)
Density	-0.049*** (0.007)	-0.054*** (0.007)	-0.049*** (0.007)	-0.048*** (0.007)	-0.048*** (0.007)
% Single-Parent	0.306*** (0.093)	0.285*** (0.094)	0.252*** (0.091)	0.279*** (0.087)	0.203** (0.085)
% Adult	0.392*** (0.085)	0.408*** (0.085)	0.062 (0.105)	0.398*** (0.085)	0.049 (0.105)
% African	-0.087* (0.052)	-0.105** (0.052)	-0.028 (0.050)	-0.092* (0.052)	-0.035 (0.050)
Heterogeneity	7.360 (5.633)	2.871 (4.987)	10.393* (5.807)	7.200 (5.626)	11.672** (5.818)
Distance Downtown			-0.203 (0.270)		-0.088 (0.279)
% Over 25 Graduate			-0.058 (0.093)		-0.019 (0.093)
% Commercial Uses			0.254*** (0.057)		0.242*** (0.056)
% 1-Member Fam.			0.231*** (0.077)		0.243*** (0.078)
% Same House			-0.111 (0.076)		-0.094 (0.075)
% Female Not Work			0.009 (0.078)		-0.014 (0.077)
Bridge			6.231** (2.621)		7.027*** (2.613)
Periphery*Richest			-6.154 (4.214)		-6.613 (4.154)
Portland	-3.248 (2.128)	-1.605 (2.140)	1.201 (2.138)	-1.934 (2.362)	2.492 (2.354)
Nashville	-1.957 (2.361)	-1.147 (2.348)	-2.367 (2.361)	-0.803 (2.520)	-1.003 (2.536)
Adjusted R ²	0.342	0.344	0.443	0.344	0.444

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.19 - OLS Estimates of Determinants of Larceny in Census Tracts (N=420)

	(1)	(2)	(3)	(4)	(5)
Constant	-277.306*** (38.247)	-255.86*** (35.061)	-180.104*** (64.996)	-265.512*** (38.894)	-172.080*** (65.568)
ICE	9.660 (23.406)	36.821 (25.598)	53.064** (24.205)		
ICE catchment				-38.867 (34.881)	-0.289 (36.367)
Income_000	1.111* (0.598)		2.721*** (0.801)	1.334** (0.600)	2.696*** (0.806)
% Below Poverty Line		1.053 (0.707)			
Unemploym_Catchm	32.747*** (3.510)	28.881*** (3.826)	18.772*** (3.676)	30.418*** (3.858)	18.103*** (3.891)
Richest	24.622** (12.314)	29.696** (12.217)	26.262** (12.922)	23.313* (12.362)	29.411** (13.019)
Density	-0.280*** (0.040)	-0.303*** (0.040)	-0.263*** (0.041)	-0.275*** (0.040)	-0.265*** (0.042)
% Single-Parent	2.075*** (0.533)	1.970*** (0.536)	1.976*** (0.514)	1.792*** (0.494)	1.464*** (0.480)
% Adult	3.451*** (0.491)	3.558*** (0.490)	2.507*** (0.594)	3.532*** (0.489)	2.468*** (0.601)
% African	-0.754** (0.295)	-0.855*** (0.294)	-0.335 (0.277)	-0.786*** (0.295)	-0.379 (0.279)
Heterogeneity	-13.533 (31.969)	-42.685 (28.344)	-25.451 (32.500)	-13.898 (31.928)	-15.709 (32.778)
Distance Downtown			-1.867 (1.505)		-1.195 (1.568)
% Over 25 Graduate			-1.814*** (0.518)		-1.503*** (0.523)
% Commercial Uses			1.975*** (0.330)		1.896*** (0.332)
% 1-Member Fam.			1.251*** (0.438)		1.298*** (0.444)
% Same House			-0.377 (0.423)		-0.210 (0.422)
% Female Not Work			-0.277 (0.437)		-0.469 (0.437)
Bridge			15.863 (14.611)		22.339 (14.654)
Periphery*Richest			-18.242 (23.559)		-27.198 (23.341)
Portland	-26.750** (12.028)	-17.925 (12.144)	-4.566 (11.973)	-17.427 (13.353)	1.696 (13.279)
Nashville	-28.886** (13.383)	-24.319* (13.370)	-38.626*** (13.225)	-20.664 (14.285)	-31.104** (14.301)
Adjusted R ²	0.336	0.334	0.457	0.338	0.450

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.20 - OLS Estimates of Determinants of Aggravated Assault in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-77.003*** (10.609)	-66.925*** (8.517)	-99.003*** (18.094)	-75.220*** (10.570)	-98.651*** (18.212)
ICE	5.901 (6.127)	13.979** (6.282)	14.618** (6.047)		
ICE catchment				-21.589** (8.780)	-13.720 (8.891)
Income_000	0.650 (0.475)		1.477** (0.590)	1.203*** (0.456)	1.774*** (0.583)
Income_Squared	-0.005 (0.006)		-0.013* (0.007)	-0.010* (0.006)	-0.016** (0.007)
% Below Poverty Line		0.227 (0.173)			
Unemploym_Catchm	6.687*** (0.885)	5.641*** (0.941)	5.046*** (0.925)	5.638*** (0.954)	4.511*** (0.976)
Richest	8.890*** (3.057)	10.567*** (2.978)	8.691*** (3.181)	7.509** (3.084)	8.597*** (3.215)
Density	-0.048*** (0.010)	-0.054*** (0.010)	-0.035*** (0.010)	-0.044*** (0.010)	-0.032*** (0.011)
% Single-Parent	0.874*** (0.130)	0.856*** (0.131)	0.883*** (0.125)	0.730*** (0.121)	0.701*** (0.117)
% Adult	0.578*** (0.122)	0.627*** (0.119)	0.550*** (0.144)	0.583*** (0.121)	0.519*** (0.146)
% African	-0.059 (0.072)	-0.087 (0.072)	0.034 (0.068)	-0.073 (0.072)	0.015 (0.069)
Heterogeneity	3.534 (8.057)	-5.428 (6.968)	2.074 (7.972)	4.826 (7.983)	6.897 (8.004)
Distance Downtown			0.258 (0.371)		0.601 (0.387)
% Over 25 Graduate			-0.200 (0.130)		-0.079 (0.132)
% Commercial Uses			0.666*** (0.077)		0.628*** (0.078)
% 1-member Fam.			-0.046 (0.113)		-0.031 (0.114)
% Same House			-0.025 (0.107)		0.026 (0.107)
% Female Not Work			0.241** (0.122)		0.192 (0.124)
Bridge			-0.065 (3.578)		2.778 (3.582)
Periphery*Richest			-15.241*** (5.828)		-17.953*** (5.742)
Portland	-2.576 (2.999)	-0.108 (2.990)	3.883 (3.000)	1.963 (3.289)	7.477** (3.322)
Nashville	4.958 (3.287)	6.040* (3.281)	6.478** (3.222)	9.400*** (3.494)	10.765*** (3.480)
Adjusted R ²	0.345	0.343	0.468	0.354	0.463

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.21 - OLS Estimates of Determinants of Simple Assault in Census Tracts (N=421)

	(1)	(2)	(3)	(4)	(5)
Constant	-139.159*** (23.203)	-119.459*** (18.605)	-130.704*** (38.759)	-134.082*** (23.035)	-129.071*** (39.015)
ICE	16.060 (13.450)	34.096** (13.725)	37.705*** (13.002)		
ICE catchment				-59.644*** (19.136)	-41.524** (19.048)
Income_000	1.299 (1.039)		2.514** (1.264)	2.813*** (0.994)	3.291*** (1.249)
Income_Squared	-0.009 (0.013)		-0.016 (0.014)	-0.025** (0.012)	-0.026* (0.014)
% Below Poverty Line		0.568 (0.381)			
Unemploym_Catchm	13.847*** (1.940)	11.475*** (2.055)	8.774*** (1.985)	10.982*** (2.080)	7.227*** (2.093)
Richest	21.070*** (6.684)	24.607*** (6.503)	19.794*** (6.813)	17.243** (6.718)	19.209*** (6.888)
Density	-0.091*** (0.021)	-0.104*** (0.022)	-0.064*** (0.022)	-0.079*** (0.021)	-0.055** (0.023)
% Single-Parent	1.861*** (0.285)	1.814*** (0.287)	1.778*** (0.267)	1.465*** (0.262)	1.286*** (0.250)
% Adult	1.137*** (0.267)	1.234*** (0.259)	0.964*** (0.309)	1.148*** (0.265)	0.871*** (0.312)
% African	-0.296* (0.159)	-0.358** (0.158)	-0.084 (0.146)	-0.337** (0.157)	-0.140 (0.147)
Heterogeneity	2.479 (17.631)	-16.115 (15.221)	-11.692 (17.091)	6.139 (17.399)	1.754 (17.155)
Distance Downtown			-0.296 (0.795)		0.668 (0.829)
% Over 25 Graduate			-0.740*** (0.279)		-0.404 (0.284)
% Commercial Uses			1.595*** (0.166)		1.488*** (0.166)
% 1-Member Fam.			-0.047 (0.243)		0.001 (0.245)
% Same House			0.013 (0.229)		0.155 (0.230)
% Female Not Work			-0.049 (0.262)		-0.185 (0.265)
Bridge			1.972 (7.663)		9.779 (7.672)
Periphery*Richest			-29.505** (12.481)		-36.446*** (12.299)
Portland	-29.084*** (6.561)	-23.624*** (6.531)	-14.535** (6.428)	-16.642** (7.168)	-4.328 (7.119)
Nashville	-1.051 (7.187)	1.370 (7.168)	-0.210 (6.901)	11.165 (7.612)	11.878 (7.454)
Adjusted R ²	0.300	0.299	0.454	0.314	0.449

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.22 - OLS Estimates of Determinants of Sexual Assault in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-8.826*** (1.229)	-7.640*** (0.986)	-13.900*** (2.090)	-8.453*** (1.215)	-13.606*** (2.083)
ICE	-0.013 (0.710)	0.277 (0.727)	1.007 (0.698)		
ICE catchment				-3.416*** (1.009)	-2.612** (1.017)
Income_000	0.0655 (0.055)		0.139** (0.068)	0.123** (0.052)	0.163** (0.067)
Income_Squared	-5.4e-4 (0.001)		-0.001 (0.008)	-0.001* (0.001)	-0.001** (0.001)
% Below Poverty Line		-0.007 (0.020)			
Unemploym_Catchm	0.421*** (0.102)	0.391*** (0.109)	0.238** (0.107)	0.272** (0.110)	0.145 (0.111)
Richest	0.680* (0.354)	0.804** (0.345)	0.642* (0.367)	0.471 (0.354)	0.555 (0.368)
Density	-0.005*** (0.001)	-0.005*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)
% Single-Parent	0.090*** (0.015)	0.091*** (0.015)	0.102*** (0.014)	0.077*** (0.014)	0.083*** (0.013)
% Adult	0.096*** (0.014)	0.101*** (0.014)	0.099*** (0.017)	0.097*** (0.014)	0.094*** (0.017)
% African	-0.004 (0.008)	-0.006 (0.008)	0.005 (0.008)	-0.006 (0.008)	0.002 (0.008)
Heterogeneity	0.038 (0.933)	-0.719 (0.807)	0.300 (0.921)	0.137 (0.918)	0.859 (0.915)
Distance Downtown			0.064 (0.043)		0.110** (0.044)
% Over 25 Graduate			-0.018 (0.015)		-0.003 (0.015)
% Commercial Uses			0.071*** (0.009)		0.067*** (0.009)
% 1-Member Fam.			0.015 (0.013)		0.019 (0.013)
% Same House			0.022* (0.012)		0.028** (0.012)
% Female Not Work			0.031** (0.014)		0.025* (0.014)
Bridge			-0.224 (0.413)		0.101 (0.410)
Periphery*Richest			-1.550** (0.673)		-1.734*** (0.657)
Portland	-0.457 (0.347)	-0.345 (0.346)	0.317 (0.347)	0.150 (0.378)	0.845** (0.380)
Nashville	-0.139 (0.381)	-0.090 (0.380)	0.047 (0.372)	0.437 (0.402)	0.627 (0.398)
Adjusted R ²	0.253	0.250	0.396	0.274	0.403

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.23 - OLS Estimates of Determinants of Robbery in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-39.053*** (6.575)	-35.015*** (6.027)	-32.093*** (11.526)	-35.131*** (6.663)	-28.940** (11.524)
ICE	0.160 (4.048)	4.787 (4.446)	4.150 (4.348)		
ICE catchment				-14.299** (5.990)	-12.643* (6.472)
Income_000	0.199* (0.104)		0.150 (0.144)	0.262** (0.104)	0.157 (0.144)
% Below Poverty Line		0.172 (0.123)			
Unemploym_Catchm	3.667*** (0.611)	3.015*** (0.666)	2.546*** (0.662)	2.925*** (0.667)	2.061*** (0.694)
Richest	5.670*** (2.129)	6.552*** (2.107)	5.986*** (2.306)	5.047** (2.129)	5.637** (2.304)
Density	-0.025*** (0.007)	-0.029*** (0.007)	-0.023*** (0.007)	-0.023*** (0.007)	-0.021*** (0.007)
% Single-Parent	0.372*** (0.092)	0.355*** (0.093)	0.335*** (0.092)	0.306*** (0.085)	0.249*** (0.085)
% Adult	0.329*** (0.084)	0.347*** (0.084)	0.193* (0.105)	0.345*** (0.083)	0.165 (0.105)
% African	-0.053 (0.051)	-0.070 (0.051)	-0.010 (0.050)	-0.063 (0.051)	-0.022 (0.050)
Heterogeneity	4.309 (5.550)	-0.923 (4.931)	3.430 (5.817)	3.973 (5.513)	5.874 (5.808)
Distance Downtown			0.003 (0.270)		0.232 (0.279)
% Over 25 Graduate			0.003 (0.093)		0.079 (0.093)
% Commercial Uses			0.414*** (0.057)		0.392*** (0.056)
% 1-Member Fam.			-0.022 (0.077)		0.003 (0.078)
% Same House			-0.012 (0.076)		0.020 (0.075)
% Female Not Work			0.011 (0.078)		-0.031 (0.077)
Bridge			-0.091 (2.625)		1.399 (2.609)
Periphery*Richest			-8.081* (4.221)		-8.703** (4.147)
Portland	-3.139 (2.097)	-1.623 (2.116)	2.025 (2.141)	-0.224 (2.314)	4.667** (2.351)
Nashville	3.130 (2.326)	3.928* (2.322)	4.967** (2.365)	5.695** (2.470)	7.712*** (2.531)
Adjusted R ²	0.227	0.223	0.324	0.237	0.329

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.24 - OLS Estimates of Determinants of Homicide in Census Tracts (N=422)

	(1)	(2)	(3)	(4)	(5)
Constant	-0.025 (0.182)	-0.088 (0.146)		-0.044 (0.183)	1.019*** (0.339)
ICE	0.127 (0.105)	0.143 (0.108)	0.116 (0.113)		
ICE catchment				0.062 (0.152)	0.012 (0.166)
Income_000	-0.006 (0.008)		-0.018 (0.011)	-0.003 (0.008)	-0.016 (0.011)
Income_Squared	1.0e-04 (1.0e-04)		2.4e-04* (1.3e-04)	6.6e-05 (9.9e-05)	2.1e-04* (1.2e-04)
% Below Poverty Line		-0.002 (0.003)			
Unemploym_Catchm	0.070*** (0.015)	0.066*** (0.016)	0.043** (0.017)	0.070*** (0.016)	0.043** (0.018)
Richest	0.013 (0.053)	0.011 (0.051)	-0.002 (0.059)	0.015 (0.053)	0.003 (0.060)
Density	-5.1e-04*** (1.7e-04)	-5.4e-04*** (1.7e-04)	-4.6e-04** (2.0e-04)	-5.2e-04*** (1.7e-04)	-4.5e-04** (2.0e-04)
% Single-Parent	0.008*** (0.002)	0.008*** (0.002)	0.005** (0.002)	0.007*** (0.002)	0.004** (0.002)
% Adult	-0.002 (0.002)	-0.003 (0.002)	-0.008*** (0.003)	-0.002 (0.002)	-0.008*** (0.003)
% African	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)	0.002 (0.001)
Heterogeneity	-0.023 (0.139)	0.033 (0.119)	-0.071 (0.149)	-0.011 (0.138)	-0.049 (0.149)
Distance Downtown			-0.012* (0.007)		-0.011 (0.007)
% Over 25 Graduate			9.1e-05 (0.002)		0.001 (0.002)
% Commercial Uses			0.003* (0.001)		0.002* (0.001)
% 1-Member Fam.			-0.001 (0.002)		-0.001 (0.002)
% Same House			-0.002 (0.002)		-0.002 (0.002)
% Female Not Work			-0.006*** (0.002)		-0.006*** (0.002)
Bridge			0.185*** (0.067)		0.199*** (0.067)
Periphery*Richest			0.065 (0.109)		0.043 (0.107)
Portland	-0.052 (0.052)	-0.044 (0.051)	-0.019 (0.056)	-0.048 (0.057)	-0.011 (0.062)
Nashville	0.013 (0.056)	0.020 (0.056)	0.013 (0.060)	0.019 (0.061)	0.027 (0.065)
Adjusted R ²	0.207	0.208	0.239	0.205	0.237

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.25 - OLS Estimates of Determinants of Residential Burglary in Block Groups (N=1'322)

	(1)	(2)	(3)	(4)	(5)
Constant	-40.191*** (8.336)	-36.068*** (7.904)	-84.405*** (15.306)	-37.512*** (8.301)	-83.259*** (15.221)
ICE	-18.573*** (5.100)	-23.729*** (5.523)	-13.964** (5.682)		
ICE catchment				-36.169*** (7.324)	-31.425*** (8.222)
Income_000	0.055 (0.132)		-0.085 (0.162)	0.144 (0.134)	-0.018 (0.163)
% Below Poverty Line		-0.264** (0.121)			
Unemploym_Catchm	1.966*** (0.657)	2.220*** (0.661)	1.575** (0.681)	1.160* (0.692)	0.995 (0.703)
Richest	11.704*** (2.894)	11.816*** (2.753)	8.111*** (3.105)	8.853*** (2.942)	5.605* (3.139)
Density	-0.064*** (0.008)	-0.062*** (0.008)	-0.056*** (0.008)	-0.063*** (0.008)	-0.055*** (0.008)
% Single-Parent	0.410*** (0.118)	0.437*** (0.118)	0.564*** (0.122)	0.446*** (0.110)	0.578*** (0.114)
% Adult	0.961*** (0.102)	0.976*** (0.102)	1.132*** (0.140)	0.985*** (0.102)	1.124*** (0.140)
% African	-0.084 (0.064)	-0.079 (0.063)	-0.109* (0.065)	-0.134** (0.064)	-0.144** (0.065)
Heterogeneity	-10.759 (6.879)	-11.544* (6.395)	-8.259 (7.396)	-11.793* (6.857)	-7.310 (7.378)
Distance Downtown			-0.335 (0.396)		-0.019 (0.409)
% Over 25 Graduate			0.046 (0.093)		0.090 (0.094)
% Commercial Uses			0.346*** (0.066)		0.342*** (0.065)
% 1-Member Families			0.040 (0.091)		0.059 (0.091)
% Same House			0.401*** (0.086)		0.406*** (0.085)
% Female Not Work			0.119 (0.089)		0.101 (0.088)
Bridge			-6.072 (5.262)		-6.096 (5.239)
Periphery*Richest			13.571** (6.468)		14.262** (6.401)
Portland	-1.260 (2.733)	-1.911 (2.724)	2.756 (2.830)	2.503 (2.934)	6.140** (3.041)
Nashville	-1.243 (3.020)	-1.662 (3.014)	1.682 (3.154)	2.172 (3.157)	4.933 (3.330)
Adjusted R ²	0.133	0.136	0.166	0.140	0.171

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.26 - OLS Estimates of Determinants of Vehicle Theft in Block Groups (N=1'320)

	(1)	(2)	(3)	(4)	(5)
Constant	-10.595** (4.832)	-11.271** (4.574)	-17.284** (8.568)	-8.223* (4.797)	-15.460* (8.518)
ICE	-9.456*** (2.944)	-5.849* (3.195)	-1.415 (3.167)		
ICE catchment				-22.164*** (4.217)	-14.145*** (4.590)
Income_000	0.037 (0.076)		0.061 (0.090)	0.107 (0.077)	0.111 (0.091)
% Below Poverty Line		0.144** (0.070)			
Unemploym_Catchm	2.479*** (0.379)	2.282*** (0.381)	1.497*** (0.379)	1.933*** (0.398)	1.188*** (0.391)
Richest	0.337 (1.676)	0.697 (1.595)	0.647 (1.733)	-1.389 (1.698)	-0.309 (1.749)
Density	-0.039*** (0.004)	-0.040*** (0.004)	-0.036*** (0.004)	-0.038*** (0.004)	-0.036*** (0.004)
% Single-Parent	0.134** (0.068)	0.119* (0.069)	0.181*** (0.068)	0.137** (0.063)	0.148** (0.064)
% Adult	0.341*** (0.060)	0.335*** (0.059)	0.234*** (0.079)	0.356*** (0.059)	0.218*** (0.079)
% African	-0.033 (0.037)	-0.039 (0.036)	-0.014 (0.036)	-0.065* (0.037)	-0.035 (0.036)
Heterogeneity	-0.067 (3.977)	-0.895 (3.693)	-0.375 (4.159)	-0.891 (3.955)	0.495 (4.149)
Distance Downtown			-0.443** (0.221)		-0.233 (0.228)
% Over 25 Graduate			-0.111** (0.052)		-0.069 (0.053)
% Commercial Uses			0.285*** (0.037)		0.278*** (0.037)
% 1-Member Fam.			0.261*** (0.052)		0.270*** (0.051)
% Same House			0.095* (0.048)		0.113** (0.048)
% Female Not Work			0.037 (0.050)		0.011 (0.049)
Bridge			4.847* (2.927)		5.076* (2.914)
Periphery*Richest			-2.453 (3.624)		-2.928 (3.584)
Portland	-1.954 (1.574)	-1.396 (1.570)	1.020 (1.574)	0.655 (1.686)	3.131* (1.692)
Nashville	-2.393 (1.742)	-2.042 (1.739)	-2.560 (1.759)	-0.084 (1.816)	-0.452 (1.860)
Adjusted R ²	0.129	0.132	0.217	0.141	0.223

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.27 - OLS Estimates of Determinants of Larceny in Block Groups (N=1'313)

	(1)	(2)	(3)	(4)	(5)
Constant	-85.217*** (20.342)	-71.135*** (19.213)	-54.128 (34.549)	-77.263*** (20.361)	-46.556 (34.463)
ICE	-32.038*** (12.275)	-6.792 (13.442)	10.023 (12.798)		
ICE catchment				-69.667*** (17.912)	-25.542 (18.910)
Income_000	0.911*** (0.317)		0.742** (0.362)	1.086*** (0.320)	0.863** (0.364)
% Below Poverty Line		0.680** (0.292)			
Unemploym_Catchm	11.832*** (1.658)	10.074*** (1.661)	6.764*** (1.598)	9.893*** (1.776)	5.883*** (1.677)
Richest	6.824 (6.918)	13.331** (6.605)	5.924 (6.922)	1.365 (7.042)	4.696 (7.002)
Density	-0.178*** (0.018)	-0.189*** (0.019)	-0.159*** (0.018)	-0.175*** (0.018)	-0.159*** (0.018)
% Single-Parent	0.671** (0.286)	0.598** (0.288)	0.711*** (0.275)	0.698*** (0.266)	0.539** (0.259)
% Adult	1.805*** (0.248)	1.827*** (0.248)	0.883*** (0.320)	1.853*** (0.247)	0.821*** (0.319)
% African	-0.378** (0.153)	-0.434*** (0.152)	-0.236 (0.145)	-0.466*** (0.154)	-0.282* (0.147)
Heterogeneity	31.080* (16.503)	13.531 (15.395)	28.116* (16.674)	29.161* (16.461)	30.932* (16.698)
Distance Downtown			-2.802*** (0.882)		-2.267** (0.915)
% Over 25 Graduate			-0.341 (0.211)		-0.208 (0.213)
% Commercial Uses			1.536*** (0.151)		1.512*** (0.151)
% 1-Member Fam.			0.950*** (0.209)		0.962*** (0.209)
% Same House			0.076 (0.196)		0.148 (0.194)
% Female Not Work			-0.007 (0.198)		-0.093 (0.197)
Bridge			44.201*** (11.740)		45.555*** (11.726)
Periphery*Richest			18.447 (14.581)		14.948 (14.464)
Portland	-17.046*** (6.530)	-11.977* (6.521)	-2.686 (6.313)	-9.014 (7.070)	2.799 (6.867)
Nashville	-22.723*** (7.208)	-19.846*** (7.214)	-22.340*** (7.048)	-15.867** (7.547)	-16.949** (7.494)
Adjusted R ²	0.150	0.148	0.275	0.155	0.276

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.28 - OLS Estimates of Determinants of Aggravated Assault in Block Groups (N=1'321)

	(1)	(2)	(3)	(4)	(5)
Constant	- 26.071*** (7.381)	-18.569*** (6.280)	-43.518*** (11.282)	-25.324*** (7.386)	-42.985*** (11.250)
ICE	- 16.677*** (4.264)	-17.453*** (4.370)	-7.316* (4.018)		
ICE catchment				-25.408*** (6.052)	-18.797*** (5.767)
Income_000	0.355 (0.279)		0.229 (0.273)	0.360 (0.276)	0.290 (0.270)
Income_Squared	-0.003 (0.003)		-0.001 (0.003)	-0.002 (0.003)	-0.002 (0.003)
% Below Poverty Line		-0.163* (0.096)			
Unemploym_Catchm	3.505*** (0.528)	3.492*** (0.523)	2.415*** (0.480)	3.020*** (0.553)	2.067*** (0.493)
Richest	-0.666 (2.323)	0.426 (2.185)	-0.766 (2.197)	-2.597 (2.391)	-2.238 (2.232)
Density	-0.033*** (0.006)	-0.033*** (0.006)	-0.025*** (0.006)	-0.032*** (0.006)	-0.024*** (0.006)
% Single-Parent	0.010 (0.094)	0.028 (0.094)	0.136 (0.085)	0.073 (0.088)	0.139* (0.080)
% Adult	0.330*** (0.082)	0.358*** (0.081)	0.311*** (0.097)	0.352*** (0.082)	0.305*** (0.097)
% African	0.053 (0.050)	0.049 (0.050)	0.090** (0.045)	0.020 (0.051)	0.068 (0.045)
Heterogeneity	1.748 (5.572)	-1.717 (5.059)	0.432 (5.167)	1.166 (5.567)	1.165 (5.156)
Distance Downtown			0.014 (0.275)		0.217 (0.285)
% Over 25 Graduate			-0.020 (0.066)		0.104 (0.066)
% of land under commercial uses			0.428*** (0.045)		0.425*** (0.045)
% 1-Member Fam.			0.115* (0.065)		0.126* (0.065)
% Same House			0.098 (0.061)		0.105* (0.061)
% Female Not Work			0.090 (0.064)		0.077 (0.064)
Bridge			2.807 (3.643)		2.829 (3.630)
Periphery*Richest			3.794 (4.482)		4.040 (4.438)
Portland	3.703* (2.185)	3.894* (2.155)	7.954*** (1.991)	5.831** (2.337)	10.073*** (2.132)
Nashville	9.226*** (2.387)	9.159*** (2.385)	9.547*** (2.189)	11.229*** (2.507)	11.630*** (2.315)
Adjusted R ²	0.129	0.130	0.216	0.131	0.221

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.29 - OLS Estimates of Determinants of Simple Assault in Block Groups (N=1'319)

	(1)	(2)	(3)	(4)	(5)
Constant	-39.480*** (11.389)	-20.052** (9.733)	-41.356** (18.632)	-36.897*** (11.335)	-40.057** (18.507)
ICE	-36.570*** (6.595)	-28.544*** (6.798)	-21.040*** (6.631)		
ICE catchment				-64.313*** (9.302)	-49.817*** (9.476)
Income_000	1.205*** (0.431)		1.000** (0.451)	1.370*** (0.424)	1.135** (0.445)
Income_Squared	-0.009** (0.005)		-0.007 (0.005)	-0.010** (0.005)	-0.007 (0.005)
% Below Poverty Line		-0.044 (0.148)			
Unemploym_Catchm	7.249*** (0.817)	6.647*** (0.811)	5.106*** (0.793)	5.926*** (0.851)	4.194*** (0.811)
Richest	-1.494 (3.599)	2.345 (3.393)	-1.141 (3.623)	-6.547* (3.680)	-5.060 (3.667)
Density	-0.069*** (0.009)	-0.073*** (0.009)	-0.053*** (0.009)	-0.066*** (0.009)	-0.051*** (0.009)
% Single-Parent	0.344** (0.145)	0.350** (0.146)	0.404*** (0.140)	0.450*** (0.135)	0.424*** (0.132)
% Adult	0.565*** (0.128)	0.637*** (0.126)	0.393** (0.163)	0.613*** (0.127)	0.378** (0.162)
% African	-0.087 (0.078)	-0.112 (0.078)	-0.035 (0.074)	-0.173** (0.079)	-0.093 (0.075)
Heterogeneity	6.301 (8.635)	-5.136 (7.858)	-1.174 (8.592)	4.898 (8.581)	0.660 (8.541)
Distance Downtown			-0.723 (0.455)		-0.203 (0.469)
% Over 25 Graduate			-0.180* (0.109)		-0.105 (0.110)
% Commercial Uses			0.882** (0.076)		0.875*** (0.075)
% 1-Member Fam.			0.180* (0.109)		0.211* (0.108)
% Same House			0.200** (0.101)		0.214** (0.100)
% Female Not Work			-0.067 (0.106)		-0.098 (0.105)
Bridge			12.490** (6.009)		12.475** (5.964)
Periphery*Richest			-0.745 (7.440)		0.097 (7.340)
Portland	-16.383*** (3.372)	-14.286*** (3.340)	-8.761*** (3.284)	-10.335*** (3.587)	-3.306 (3.503)
Nashville	4.053 (3.687)	4.643 (3.700)	5.176 (3.614)	9.701** (3.850)	10.506*** (3.807)
Adjusted R ²	0.211	0.206	0.310	0.221	0.319

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.30 - OLS Estimates of Determinants of Sexual Assault in Block Groups (N=1'322)

	(1)	(2)	(3)	(4)	(5)
Constant	-9.406*** (1.793)	-6.297*** (1.520)	-16.895*** (3.093)	-9.189*** (1.794)	-16.743*** (3.084)
ICE	2.764*** (1.044)	-4.410*** (1.062)	-3.110*** (1.105)		
ICE catchment				-4.901*** (1.480)	-6.181*** (1.583)
Income_000	0.131* (0.068)		0.021 (0.075)	0.144** (0.067)	0.030 (0.075)
Income_Squared	-0.001* (0.001)		-0.001 (0.001)	-0.001* (0.001)	-0.001 (0.001)
% Below Poverty Line		-0.114*** (0.023)			
Unemploym_Catchm	0.256** (0.129)	0.327*** (0.127)	0.211 (0.132)	0.155 (0.135)	0.100 (0.136)
Richest	1.560*** (0.568)	1.770*** (0.529)	1.542** (0.603)	1.170** (0.584)	1.043* (0.614)
Density	-0.007*** (0.001)	-0.006*** (0.001)	-0.005*** (0.002)	-0.006*** (0.001)	-0.005*** (0.001)
% Single-Parent	0.074*** (0.023)	0.085*** (0.023)	0.101*** (0.023)	0.081*** (0.021)	0.107*** (0.022)
% Adult	0.128*** (0.020)	0.140*** (0.020)	0.133*** (0.027)	0.131*** (0.020)	0.132*** (0.027)
% African	-0.013 (0.012)	-0.012 (0.012)	-0.017 (0.012)	-0.019 (0.012)	-0.023* (0.012)
Heterogeneity	-0.766 (1.364)	-1.614 (1.229)	0.832 (1.421)	-0.871 (1.362)	0.987 (1.418)
Distance Downtown			0.102 (0.076)		0.160** (0.078)
% Over 25 Graduate			0.062*** (0.018)		0.069*** (0.018)
% Commercial Uses			0.059*** (0.012)		0.059*** (0.012)
% 1-Member Fam.			0.007 (0.018)		0.011 (0.018)
% Same House			0.074*** (0.017)		0.074*** (0.017)
% Female Not Work			0.014 (0.018)		0.012 (0.017)
Bridge			-0.022 (1.004)		-0.044 (1.000)
Periphery*Richest			0.916 (1.234)		1.105 (1.222)
Portland	-0.193 (0.535)	-0.336 (0.524)	0.724 (0.549)	0.271 (0.572)	1.350** (0.587)
Nashville	0.342 (0.584)	0.157 (0.579)	1.167* (0.602)	0.774 (0.613)	1.762*** (0.636)
Adjusted R ²	0.064	0.079	0.096	0.066	0.101

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.31 - OLS Estimates of Determinants of Robbery in Block Groups (N=1'321)

	(1)	(2)	(3)	(4)	(5)
Constant	-18.336*** (3.985)	-15.549*** (3.781)	-26.973*** (6.774)	-17.375*** (3.970)	-25.971*** (6.740)
ICE	-7.270*** (2.421)	-5.707** (2.631)	-2.125 (2.506)		
ICE catchment				-13.981*** (3.483)	-10.355*** (3.634)
Income_000	0.125** (0.063)		0.075 (0.071)	0.159** (0.064)	0.107 (0.072)
% Below Poverty Line		0.003 (0.058)			
Unemploym_Catchm	1.925*** (0.312)	1.812*** (0.315)	1.302*** (0.300)	1.616*** (0.329)	1.087*** (0.309)
Richest	-0.372 (1.377)	0.465 (1.315)	-0.271 (1.371)	-1.466 (1.402)	-1.003 (1.384)
Density	-0.021*** (0.004)	-0.021*** (0.004)	-0.018*** (0.004)	-0.020*** (0.004)	-0.017*** (0.003)
% Single-Parent	0.008 (0.056)	0.009 (0.057)	0.067 (0.054)	0.023 (0.052)	0.052 (0.051)
% Adult	0.253*** (0.049)	0.260*** (0.049)	0.175*** (0.062)	0.263*** (0.049)	0.166*** (0.062)
% African	0.013 (0.030)	0.007 (0.030)	0.033 (0.028)	-0.006 (0.031)	0.018 (0.029)
Heterogeneity	3.806 (3.266)	1.415 (3.046)	4.127 (3.262)	3.416 (3.261)	4.657 (3.256)
Distance Downtown			-0.097 (0.174)		0.042 (0.180)
% Over 25 Graduate			0.003 (0.041)		0.029 (0.042)
% Commercial Uses			0.296*** (0.029)		0.293*** (0.029)
% 1-Member Fam.			0.125*** (0.040)		0.132*** (0.040)
% Same House			0.086** (0.038)		0.096** (0.038)
% Female Not Work			0.023 (0.039)		0.008 (0.039)
Bridge			-1.744 (2.315)		-1.633 (2.307)
Periphery*Richest			0.953 (2.848)		0.790 (2.819)
Portland	-0.337 (1.297)	0.055 (1.298)	3.010** (1.246)	1.103 (1.395)	4.424*** (1.340)
Nashville	4.046*** (1.434)	4.290*** (1.436)	4.993*** (1.391)	5.359*** (1.502)	6.393*** (1.471)
Adjusted R ²	0.111	0.109	0.205	0.116	0.210

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

Table C.32 - OLS Estimates of Determinants of Homicide in Block Groups (N=1'322)

	(1)	(2)	(3)	(4)	(5)
Constant	-0.199 (0.132)	-0.125 (0.113)	-0.262 (0.234)	-0.177 (0.132)	-0.251 (0.233)
ICE	-0.170** (0.077)	-0.185** (0.079)	-0.234*** (0.083)		
ICE catchment				-0.374*** (0.109)	-0.468*** (0.120)
Income_000	0.003 (0.005)		-0.004 (0.006)	0.005 (0.005)	-0.004 (0.006)
Income_Squared	-2.7e-05 (5.5e-05)		3.2e-05 (5.9e-05)	-3.9e-05 (5.4e-05)	3.4e-05 (5.8e-05)
% Below Poverty Line		-0.002 (0.002)			
Unemploym_Catchm	0.034*** (0.009)	0.034*** (0.009)	0.027*** (0.010)	0.026*** (0.010)	0.019* (0.010)
Richest	0.064 (0.042)	0.073* (0.039)	0.093** (0.046)	0.033 (0.043)	0.055 (0.046)
Density	-4.3e-4*** (1.1e-4)	-4.2e-4*** (1.1e-4)	-3.9e-04*** (1.2e-04)	-4.1e-4*** (1.1e-4)	-3.6e-04*** (1.2e-04)
% Single-Parent	0.006*** (0.002)	0.007*** (0.002)	0.007*** (0.002)	0.007*** (0.002)	0.008*** (0.002)
% Adult	0.003* (0.001)	0.003** (0.001)	0.001 (0.002)	0.003** (0.001)	0.001 (0.002)
% African	0.001 (0.001)	0.001 (0.001)	2.6e-04 (0.001)	4.2e-4 (0.001)	-2.4e-04 (0.001)
Heterogeneity	-0.159 (0.100)	-0.189** (0.091)	-0.095 (0.107)	-0.167* (0.100)	-0.083 (0.107)
Distance Downtown			-0.002 (0.006)		0.002 (0.006)
% Over 25 Graduate			0.003** (0.001)		0.003** (0.001)
% Commercial Uses			0.002** (0.001)		0.002** (0.001)
% 1-Member Fam.			0.001 (0.001)		0.001 (0.001)
% Same House			0.002*** (0.001)		0.004*** (0.001)
% Female Not Work			-0.002 (0.001)		-0.002 (0.001)
Bridge			0.129* (0.076)		0.127* (0.075)
Periphery*Richest			-0.091 (0.093)		-0.076 (0.092)
Portland	-0.030 (0.039)	-0.029 (0.039)	0.006 (0.041)	0.011 (0.042)	0.053 (0.044)
Nashville	0.066 (0.043)	0.064 (0.043)	0.105** (0.045)	0.103** (0.045)	0.151*** (0.048)
Adjusted R ²	0.089	0.090	0.099	0.094	0.104

Standard errors in parentheses; *: significant at 10%; **: significant at 5%; ***: significant at 1%.

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