January 2015

Organized Crime in Insurance Fraud: An Empirical Analysis of Staged Automobile Accident Rings

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An Empirical Analysis of Staged Automobile Accident Rings

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
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Abstract

The growing trend of insurance fraud continues to cost US consumers billions of dollars a year through increased premiums. In 2015, the Coalition Against Insurance Fraud estimated the cost of insurance fraud as being at least $80 billion dollars a year. Even though an increasing number of criminals are drawn to the low risk, high reward of insurance fraud, little criminological literature has explored this topic and the public remains relatively unaware of the extent of the problem.

One alarming aspect of insurance fraud is the involvement of organized criminal groups. These organized criminal enterprises are formed for the sole purpose of defrauding the insurance industry. Often, these enterprises are believed to have ties to traditional organized criminal groups, such as the Italian Mafia or the Russian Mob. In order to combat these criminal organizations, it is important to understand the behavior and motivation of such groups.

The present study aims to analyze the generally held belief throughout the insurance industry that organized insurance fraud rings are more likely to operate in states with mandatory Personal Injury Protection (PIP) policies. This analysis was conducted by examining staged automobile accidents reported to the National Insurance Crime Bureau. The results of this analysis were mixed. Although a larger percentage of states with mandatory PIP displayed higher staged accident rate, some mandatory PIP states did not, and multiple non-PIP states also demonstrated a high staged accident rate. In an attempt to better understand this crime, further criminological research is needed.

Chapter One: Background

Insurance Fraud

Insurance fraud is a growing problem throughout the United States, and innocent citizens are forced to bare the financial burden created by this crime. Industry research estimates that insurance fraud amounts to 10 percent of all property and casualty claim expenses. The Insurance Information Institute estimated that insurance fraud cost $335.4 billion in the U. S., from 2000-2011 (Weisbart, 2012). Over this 11 year period, the average cost per year was $30.5 billion. In comparison, the Federal Bureau of Investigation Uniform Crime Report estimated that the cost to victims of burglary in 2009 was $4.9 billion, or just over 16% of the estimated cost for insurance fraud. Further research by Ericson and Doyle (2004) states that the actual cost of insurance fraud may be twice the estimated cost of 10 percent. More recently, the Coalition Against Insurance Fraud (2015) estimated the cost of insurance fraud to be at least $80 billion per year, more than two-and-a-half times as large as prior estimates. This expense is inevitably transferred to the consumer through increases in insurance premiums paid.

Both the insurance industry along with business and economic scholars have extensively researched the issue of insurance fraud. The Insurance Research Council (IRC), an independent, nonprofit research organization, which is supported by the insurance industry, estimates billions of dollars in added expenses to the industry each year due to insurance fraud and buildup (IRC, 2015). This proportionally large, growing costs to the insurance industry allude to systematic problems related to insurance fraud. In a 2004 examination of the issues and challenges related to insurance fraud, economists Stijn Viaene and Guido Dedene explore

the public's tolerance for insurance fraud (Viaene & Dedene, 2004). Some justifications of insurance fraud described in the research include the perception that it is a victimless crime; that the involvement of professionals, such as doctors and lawyers, legitimizes the act; and identifying insurance companies as socially acceptable targets. One of the greatest problems listed in a recent study, containing interviews conducted of insurance fraud investigators, was a lack of public awareness and support (Skiba & Disch, 2014). An informed public, along with law enforcement agencies and legislatures, is essential in combating this crime.

Despite the enormity of the financial loss stemming from insurance fraud, the public remains unaware of the criminal and social implications of this crime. This subject has rarely been assessed in the criminological literature (Friedrich, 2010; Ericson & Doyle, 2004; Niemi, 1995). However, there are compelling reasons that it should be.   First, insurance fraud is unanimously defined by law as a crime in all fifty states. Second, as law enforcement places pressure on more traditional crimes, those crimes less policed become more appealing to organized groups and professional criminals, who are incentivized by the low risk, high reward environment (The Institute for Public Policy & Economic Development, 2013). Thus, empirical research on crimes such as insurance fraud may shine a light on inefficiencies in current policies and policing strategies. Third, the omission of research on automobile insurance crime means that criminologists will tend to underestimate the extent and cost of crime in society.

In order to fill this void in criminological literature, the current study aims to examine insurance fraud from a criminological perspective and offer empirical evidence of this under-studied crime. By illustrating that certain types of insurance fraud can and should be defined as organized crime, and that certain public policies may incentivize such crimes, this study will show that insurance fraud deserves greater recognition among criminologists. A better understanding of this crime may lead to changes in policing and legislation that could decrease the prevalence of this crime and the perceived reward to the criminals who perpetrate it.

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In the present study, the focus is on one specific type of insurance fraud – staged automobile accidents. Through the data collected from this study, reported staged automobile accidents increased by 207% from 2002 to 2012. This increase displays a growing threat to the insurance industry and in turn the general public. In addition to the increased premium to the average consumer, there are examples of innocent citizens being killed due to staged accidents (Vogel, 2013; Coalition Against Insurance Fraud, 2015). Understanding the cause of this growing crime is paramount in developing a plan to combat it.

The intention of this study is to specifically examine the distribution of staged automobile accidents across US States. Data from the National Insurance Crime Bureau from 2002 and 2012 is utilized for this analysis. This study begins with a general overview of research on insurance fraud in the criminological literature. Staged automobile accidents are an organized activity orchestrated by criminal groups, and to illustrate that point, definitions of organized crime activity are presented. Important to the explanation of staged automobile accidents as a form of organized crime are criminological theories such as routine activities, and that theory is reviewed below. To understand factors that influence staged automobile accidents, it is important to understand the context in which these accidents occur, particularly the regulatory context. Examined below are regulatory differences between US states regarding insurance policy. Data on staged accidents is then presented and analyzed. The analysis examines whether variations in insurance regulations across states appear to influence the distribution of staged automobile accidents.

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Capturing Insurance Fraud in the Criminological Literature

Even though all 50 states classify insurance fraud as a crime – 44 of which define it as a specific crime – and certain classifications of insurance fraud qualify as a felony in 33 states (Coalition Against Insurance Fraud, 2015), very little criminological literature explicitly includes insurance fraud as a topic of analysis. Moreover, there do not appear to be any criminological studies related specifically to staged automobile accidents as a particular form of insurance fraud.

Criminologist David Friedrich (2010) briefly explores insurance fraud in *Trusted Criminals: White Collar Crime in Contemporary Society*. Friedrich (2010) describes insurance fraud as an avocational crime. Avocational crimes are those committed by "respectable members of society outside of an occupational context," (Friedrich 2010, p. 121). These individuals may be part of the middle- or upper-class, with roles such as teachers or bankers. Avocational crimes, or crimes of opportunity, are non-conventional criminal acts committed by white collar workers, and therefore, defined loosely as white collar crimes (Friedrich, 2010).

When individuals band together to habitually commit insurance fraud, it is necessary to use an additional crime typology. This second type of insurance fraud should be labeled as enterprise crime. Enterprise crime is a crime by "cooperative enterprises involving syndicated (organized) crime and legitimate business," (Friedrich 2010, p. 8). Often with enterprise crime the line between white collar crime and organized crime is blurred, and does not neatly fall under the usual parameters of white collar crime. This second type of insurance fraud, involving organized crime and the conjunction with legitimate industries, will be the focus of this study.

Defining Organized Crime

Organized crime is defined as "a continuing criminal enterprise that rationally works to profit from illicit activities that are often in great public demand," (Albanese 2015, p. 4).

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Albanese (2015) explains that organized criminal behavior can be divided into four groups. These groups are *organizational*, *corporate*, *political*, and *white-collar crimes*. However, research has found that organizational and white-collar crimes share more similarities than differences. The only difference is that white-collar crime is an illegal deviation from legitimate business practices, while organized crime is a "continuing criminal enterprise" that exists to profit from an illegal activity (Albanese 2015, p. 5). Therefore, any enterprise established for the sole purpose of committing insurance fraud would be more suitably defined as organized crime rather than as white-collar crime.

An Organized Crime Model

Social scientists use three models to illustrate how organized criminal groups are formed (Albanese 2015). The first, and most traditional model, is the hierarchal model. The two newer models involve an ethnic model and enterprise model, but for the sake of this study only the original hierarchal model will be explored. The reason this model was used in the study was to better portray the existence of a criminal enterprise and to better portray the existence of organized crime in insurance fraud through its common public perception. There is a cultural awareness of this hierarchal model because Hollywood has portrayed examples of this hierarchy in movies about the Italian Mafia, such as The Godfather, Goodfellas, and many others. The hierarchal model involves a ranking system where a chain-of-command is established.

Three factors must be present in order for an organization to fit this model. First, the organization must have "graded ranks of authority," (Albanese, 2015). Second, these ranks of authority must have someone at the top directing the organizations activities. In order to fit the third criteria of this model, this boss must also handle relations with other outside enterprises or

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organizations. Perhaps the best way to examine this model of organized crime in insurance fraud is through staged automobile accident rings.

Staged Automobile Accidents

A 2012 report by the National Insurance Crime Bureau (NICB) examined claims reported by the insurance industry as involving *Organized Group/Ring Activity*. Of these reported claims, the top reason for being referred to NICB was *Staged/Caused Accident,* accounting for more than 33 percent of all *Organized Group/Ring Activity* claims (McClain, 2012). A *Staged/Caused Accident* is an automobile collision that is orchestrated by the involved parties for the purpose of bilking insurance companies for reported vehicle damage and alleged medical care. In a staged accident, all damage and injury is fictitious and reported for the sole sake of turning a profit by filing a fraudulent insurance claim. In many instances, intricate enterprises are formed around staging such accidents. These enterprises create a hierarchy of individuals with specifically defined roles and thus resemble organized criminal activity.

According to the NICB, most staged accident enterprises have at least four basic levels to their hierarchy. The first level of individuals are the crash participants (NICB, 2012). These individuals are paid a minimal amount to be involved in the crash and file the eventual claim. The next level in the hierarchy is the recruiter (NICB, 2012). A recruiter is responsible for bringing the participants together and normally orchestrates the accident. He is also responsible for guiding the participants to the medical clinic where they are to be treated. The next level of the hierarchy is the professional, normally attorneys or medical providers (NICB, 2012). An attorney's role in this hierarchy can vary depending on the organization. Some attorneys simply provide legal services for kickbacks, while others fill a more significant role within the organization. For example, some attorneys may direct the participants to specific clinics affiliated with the ring. Within these enterprises, medical providers either treat the

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participants of the staged accidents, submit bills for non-rendered medical services, sign blank treatment forms, or simply lend their license as a *straw owner* of the clinic. The next tier is the ring leader (NICB 2012). Often the ring leader is the actual owner of one or more of the involved medical clinics, and in some cases the billing company as well. In many instances, these leaders have been connected to other traditional criminal groups, including large crime syndicates such as LaCostra Nostra, the Russian Mob, Cuban organized crime, and others (Kestin, O'Matz, & Maines, 2014; Skiba & Disch, 2014; Jay 2012; Morales & Hurtado, 2012; Sukharenko, 2004; Fella 2001).

Often medical facilities are established by staged accident enterprises exclusively to bill insurance companies for fictitious claims related to staged accidents. Often no treatment actually takes place in these clinics, nor do they serve the purpose of a legitimate business. They only serve as a façade to the insurance industry and law enforcement as an attempt to legitimatize claims being billed under the fictitious clinics name and address. (NICB, 2012)

These staged accident enterprises, in conjunction with white collar professionals, are comprised of an organized criminal hierarchy and business entities created solely to facilitate illegal activities (see Figure 1). Although legitimate professionals serve as important components within the enterprise, this makes them no different than other more traditionally acknowledged organized crime syndicates. Staged accident rings should be defined as organized crime, and as such, any attempt to understand and deter this type of crime should follow the same protocol as for other organized crime.
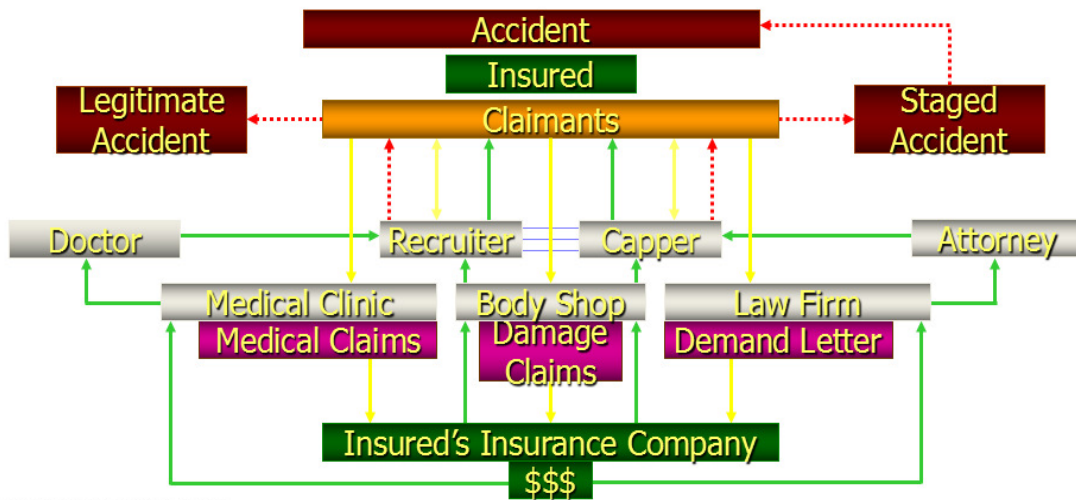
Fig. 1. Flow chart for claims process including the hierarchy

Opportunity Theory of Organized Crime

Stijn Viaene and Giudo Dedene state, within their research, that fraud is the product of motivation and opportunity (Viaene & Dedene, 2004). Individuals participate in the staging of accidents for financial gain (motivation); however, the environment surrounding the individual must produce an opportunity to commit the crime. Previous research applied this theory of routine activities to bridge the gap between insurance fraud prevention strategies and current criminological theory (Skiba & Disch, 2014). This paper intends to expand this theoretical foundation as it relates to staged auto accident rings.

In 1979, criminologists Lawrence Cohen and Marcus Felson developed the routine activities theory of crime. This theory suggests that crimes occur when three elements are present: motivated offenders, suitable targets of criminal victimization, and absence of capable guardians (Cohen & Felson, 1979). This theory assumes the existence of motivated offenders and does not explain the factors that produce motivated offenders. Rather, routine activities theory examines criminal opportunity and the situational characteristics that lead to

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victimization. In the case of organized crime, this theory can be utilized at the macro-social level to examine the social settings necessary for organized crime to be prevalent in a geographic region.

As mentioned above, an organized criminal group is an enterprise working rationally to make a profit. The rational choice theory of crime mirrors economic theory by claiming that a rational actor would choose the route which maximizes profit and minimizes costs. In other words, rational choice theory measures risk against reward. Both of these theories – routine activities theory and rational choice theory – derived from the same early utilitarian philosophy of the expected utility principle (Akers & Sellers, 2013; Gibbs, 1975). Using rational choice theory, a criminal enterprise would act in the same manner as a legitimate business by trying to maximize profits. Thus, the enterprise would act as a reasoning criminal business, and only implement actions where they faced the least risk (von Lampe 2011, Cornish & Clarke 1986).

An integrated model combining rational choice theory and routine activities theory has become prevalent in criminological literature. A model which focuses on the environment conducive to criminal activities, or the situation in which crime takes place, is known as situational crime prevention (Clarke, 1983). The framework for this model begins with the principles of the routine activities theory: motivated offenders, suitable targets, and absence of intervention. However, rational choice theory is then implemented, where the rational criminal, or criminal enterprise, would conduct a cost-benefit analysis of whether or not to perpetrate the crime (von Lampe 2011).

Situational crime prevention emphasizes the importance of opportunities surrounding crime and the choice to commit the crime. The opportunity component of the model focuses on the structural boundaries within which the crime would take place. Research applying this model towards organized criminal groups has proven to be advantageous (Bouloukos, Farrell,

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and Laycock 2003; Van der Schoot 2006; Levy and Tartaro 2010). If an environment is optimal for a particular type of crime, then a criminal enterprise would make the most of this opportunity and exploit this particular environment. One important element of the environment are the legal rules proscribing certain behaviors or actions. Regarding insurance fraud, laws and policies vary depending on the state. Using the situational crime prevention model and the theories behind it, a state where laws and regulations are more susceptible to abuse and fraud would be more likely to be targeted by organized criminal groups, such as staged accident rings. For example, policies creating an absence of intervention or restricting investigations by the insurance industry may make the state where such a policy was enacted more vulnerable to insurance fraud.

Having described the organization of staged automobile accidents and relevant theoretical explanations that might apply to these behaviors, it is also useful to understand more about the context in which these crimes occur, or the environmental opportunities. To do so the next section examines certain policy distinctions within the US automobile insurance industry.

Personal Injury Protection (No-fault) Insurance

In 1965, Robert E. Keeton and Jeffrey O'Connell wrote *Basic Protection for the Traffic Victim: A Blueprint for Reforming Automobile Insurance*. Keaton and O'Connell (1965) illustrated that the auto claims system was inefficient and full of shortcomings. They proposed a reformation of the system that would come to be known as no-fault, or personal injury protection (PIP), insurance. In order to expedite the claims process and reduce the amount of claims entering the tort system, an insurance company would compensate its own policyholder for the medical costs of minor injuries, regardless of whether the insured motorist was at fault for the accident (Insurance Information Institute (III), 2014). Additionally, a tort liability threshold,

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monetary or verbal, would be established where claimants may sue an insurance company only after this threshold is crossed (Keaton & O'Connell, 1965).

In the 1970s, due to public criticism of the current system, seventeen states adopted mandatory no-fault insurance (III 2014). Five states later repealed their no-fault laws, the most recent repeal being Colorado in 2003. The remaining twelve states with mandatory no-fault laws are Florida, Hawaii, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Dakota, Pennsylvania, and Utah (III, 2014).

The effectiveness of the PIP system and its susceptibility to fraud has also promoted heated discussions within the insurance industry (Jaafari, 2014; Dartland & Foley, 2014; Fairley, 2013). Over the last two decades, many PIP states have released reports claiming increased fraud in their insurance systems (Insurance Federation of Minnesota, 2014; Tennyson, 2011; Florida Office of the Insurance Consumer Advocate, 2011; Delegal & Pittman, 2002). Many of these PIP states indicate that they are exploited by organized rings, specifically staged accident rings (III, 2014; McLain, 2012). These reports illustrate a potential criminal opportunity presented by mandatory PIP insurance.

All auto owners in mandatory PIP states are required to carry PIP coverage and insurance carriers are required to expeditiously settle their claims. Thus, all insured drivers have quick money at their disposal were they to file a claim. The inability of insurance carriers to diligently investigate a PIP claim makes them suitable targets for staged accident rings. Additionally, the expedition of the claims process keeps the claim out of the tort system. No civil procedure is followed without the involvement of the tort system.

In routine activities theory, motivated offenders are assumed, but attractive targets and capable guardians are the determinate variables which lead to criminal behavior. The accessibility and abundance of quick money within the PIP system make insurance companies

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in mandatory PIP states a very attractive target for organized staged accident rings. Without the time to thoroughly investigate claims and without the regular involvement of the court system, insurance companies are unable to serve as capable guardians. These factors may encourage abuse from organized criminal enterprises.

Based on the above observations, including reports by PIP states that they are experiencing problems with stage automobile accidents, one can hypothesize that states with PIP insurance requirements experience higher levels of staged automobile accidents than states without PIP policies. Using this logic, a comparison of PIP states to non-PIP states should show a higher likelihood of staged accidents. This issue is examined below and begins with an examination of the data used in this study.

Chapter Two: Analysis

Data

The data for this study was collected by the National Insurance Crime Bureau (NICB). NICB is a not-for-profit company, supported by membership of insurance companies. The purpose of NICB is to prevent, detect, and defeat insurance fraud. Member companies represent over seventy-eight percent of the property and casualty insurance industry. These companies also account for 93% of all personal auto insurance policies written in the United States. As part of their membership, member companies report suspected fraudulent insurance claims to the NICB. The data in this study was accumulated through this referral process.

Analysis was conducted on "Questionable Claims" reported to the NICB in 2002 and 2012. These years were selected because legislative and reporting changes commenced in years surrounding this time frame. In 2003, Colorado abolished PIP throughout the state. Also, 2003 marked a year when major policy and law enforcement changes began to take form in Massachusetts (Vogel, 2013). Similarly, in 2012, legislation was enacted in Florida to combat staged accidents, which would take full effect in 2013 (Longino, 2014). Inclusion of these years may have created incongruent results, as well as an inaccurate measurement of the dependent variable. Also, the distance between the two years allowed for any changes made after 2002 to be fully implemented before selecting a second year for analysis.

This data was recorded by the state where the accident occurred, and then a distribution of automobile staged accidents examined. Staged accidents were determined as a claim that was reported to the NICB as a Staged/Caused Accident referral. The referral process entails a

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detailed report of the alleged fraudulent activity to the NICB by the insurance company. Each company has an extensive list of fraudulent acts to choose from when reporting its claim. The reporting company can choose up to seven allegations per claim. Only those claims that listed Staged/Caused Accident as one of the referral reasons were included in the data used for this analysis. This data should be considered self-reported victimization data, as the immediate reporting victim in this case would be the insurance company.

Methodology

In order to determine if PIP states are more likely to report higher levels of staged accidents, a standardized measurement is needed. Once the number of staged accidents per state was acquired, a rate of staged accidents per million residents was computed. This rate was determined using the same state population figures used by the National Highway Traffic Safety Administration (NHTSA) to calculate statistics related to highway fatalities. These staged accident rates were then converted to z-scores for the purpose of determining significance. Significance was determined if the z-score exceeded 1.65. Any state with a z-score of 1.65 or higher was deemed as having significantly larger amounts of staged accidents for that particular year. A z-score of 1.65 was chosen as it would represent the same standard as a one-tailed t-score of 1.65 because, in this case, the pertinent results are only those with higher rates. Therefore, a t-score of 1.65 would equate to a p-value of p=.05.

Hypothesis

If, as stated above, a state possessing mandatory PIP policy would make the state a more suitable target for staged accidents, then one would expect the number of staged accidents to be proportionately higher in PIP states than in non-PIP states. Since this study controls for population size by creating a standardized staged accident rate, it can be hypothesized that those states with mandatory PIP will have higher rates of staged accidents

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than those states without PIP. The null hypothesis would then be that PIP states do not have higher staged accident rates than non-PIP states.

Results

The outcome of this analysis yielded mixed results. The mean staged accident rate for states with mandatory PIP was larger in both 2002 ($\mu = 5.46$) and 2012 ($\mu = 17.62$) than in non-PIP states ($\mu = 3.63$ and $\mu = 11.57$, respectively). Although the PIP states showed a larger percentage of high staged accident rates, not all PIP states were significantly higher than non-PIP states. Also, multiple non-PIP states had significantly more staged accidents than many of the PIP states. These results suggest that although PIP states seem to have an increased chance of reporting a higher level of staged accident rates, PIP states are not exclusive to having significantly high staged accident rates. Thus, some PIP states met the hypothesized relationship, while some do not. In addition, some non-PIP states show high rates of staged accidents. These results imply that PIP policies alone are not the cause of higher rates of staged accidents across states.

In 2002, only three (23%) of the thirteen PIP states were significantly higher than the national average with respect to staged accidents.   These three PIP states were Florida ($z= 2.26$), New York ($z=4.17$), and Massachusetts ($z=2.26$). In 2002, only one of the 37 non-PIP states had a rate that was significantly higher than the national average: California ($z=1.99$). These data indicate that the effect of being a PIP state on staged accidents is minimal.

The calculations for 2012 showed similar results were three states showed significantly higher staged accident rates. These states were two PIP states, Florida ($z=4.89$) and Kentucky ($z=1.85$), and one non-PIP state, Nevada ($z=2.26$). Florida's staged accident rate for 2012 was much higher than all other states, and as an outlier appeared to skew the data. Excluding Florida from the data revealed six additional states that were statistically higher than the

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average state. Only one state was added to the previous two PIP states, New York (z=2.15).

This additional state made three of the twelve PIP states (Colorado disbanded PIP insurance in

2003 and was excluded from mandatory PIP states in 2012), or 25%, that were significantly

higher than the average state. The additional five states that joined Nevada as non-PIP states

with higher 2012 staged accident rates were California (z=1.80), Louisiana (z=2.26), Maryland

(z=2.91), Rhode Island (z=1.88), and South Carolina (z=2.87).
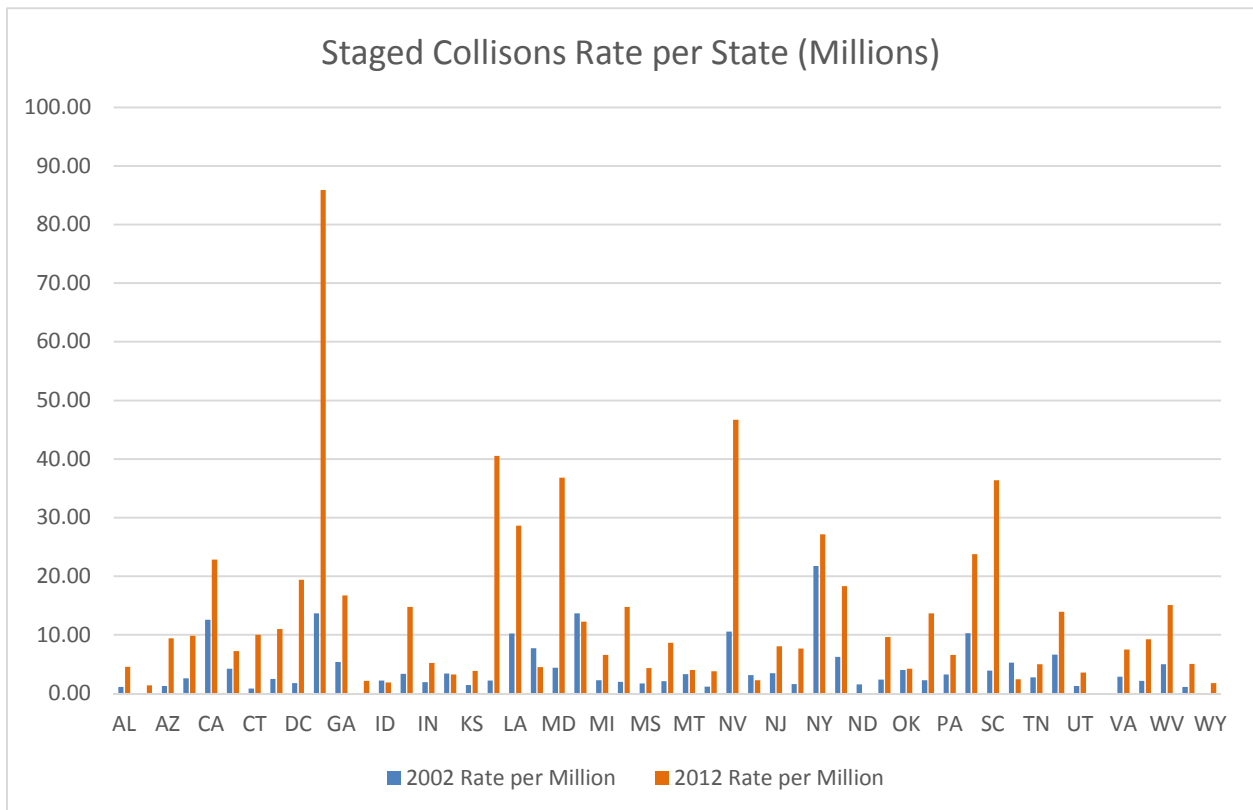
Fig. 2. Staged accident rate for each state

Three states remained constant from 2002 to 2012. These states included two PIP

states, Florida and New York, and one non-PIP state, California. An additional five non-PIP

states showed significantly high staged accident rates in 2012: Louisiana, Maryland, Nevada,

Rhode Island, and South Carolina. There were only two changes amongst the PIP states with

significant high numbers of staged accidents. Kentucky was added to the list of states with high

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rates of staged accidents in 2012, and although included in the 2002 list, Massachusetts was excluded from the list of PIP states with significantly high staged accident rates in 2012.

Analysis of this data suggests that even though mandatory PIP states are more likely to have higher rates of staged accidents than other states, the influence these policies have is weak. That is, whether or not a state has mandatory PIP is not a strong determining factor in that state having a high staged accident rate. Other factors need to be examined in order to predict the likelihood of staged accidents in a PIP state. For example, this study broadly examined states based on PIP versus non-PIP; however, the regulations guiding PIP policies in mandatory PIP stated vary. A more thorough examination of state-specific PIP rules and regulations may reveal better predictors of high staged accident rates.

It also should be noted that some non-PIP states showed relatively high staged accident rates. These states invite further examination of factors other than PIP policies that may influence staged accident rates. For further clarity, regression analysis was conducted regarding the staged accident rates in PIP and non-PIP states in both 2002 and 2012. The results of this analysis determined no significant relationship between the policy type of the state and the staged accident rate in either year. An extended analysis of other criminological theories may be necessary in order to determine influential factors of high staged accident rates.

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Chapter 3: Discussion

Policy Implications

In 2003, a fatal staged accident changed the projection of public policies related to staged accidents in Massachusetts, and affected law enforcement investigations of staged accidents in the commonwealth (Vogel, 2013). Even though Massachusetts remained a PIP state, specific laws were created to deter individuals from participating in staged accidents. Laws criminalizing insurance fraud, statutes strengthening law enforcements ability to investigate staged accidents, and the reinforcement of interstate investigations were just a few of the measures taken to discourage and decrease staged accidents in Massachusetts.

As seen in the results of this study, Massachusetts, although showing high staged accident rates in 2002, did not display high staged accident rates in 2012. In a 2013 Eagle-Tribune article, Vogel associates the changes in staged accident activity to cooperation between law enforcement and lawmakers in an effort to combat staged accident rings. This article mentions many laws that the state passed in an effort to discourage the staging of auto accidents. Other PIP states have also taken legislative actions with positive results (Longino, 2014). Although this current study shows a minimal effect of staged accident rates based on the existence of mandatory PIP, differences in PIP regulation may explain differences in staged accident rates within PIP states.

The legislative actions taken by many PIP states to reduce staged accidents entail some form of correcting the processes that attract opportunistic criminals to the PIP system. The NICB lists reform recommendations to those PIP states battling staged accident rings. One focal point of these recommendations is the criminalization of conspiring to and actually

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committing staged accidents (NICB, 2013). Fear of being arrested or incarcerated may make it difficult for organized rings to find individuals to perpetrate the accidents and, therefore, make the state a less attractive target in which to operate. Other recommendations include giving insurance investigators more tools to cypher out and investigate fraudulent claims (NICB, 2013). The act of giving insurance industries more tools to complete due diligence of suspected claims provides further intervention into the claims process, which should decrease incentives to submit fraudulent claims. Strengthened insurance investigators would serve as capable guardians for the state.

The NICB (2013) also recommends allocating more law enforcement resources to investigating these rings. Added pressure from law enforcement may result in apprehension of high-ranking members of the organized rings. This increased likelihood of arrest may deter organized groups from locating their illegal enterprises in states that implement such policies. These policy recommendations align with routine activities principles of suitable targets and capable guardians.

As previously stated, states that have implemented these policies have shown decreases in staged accident rates (Vogel, 2013; Longino, 2014). Alternatively, decreases in staged accident activity in one state may push the organized groups to other states with less stringent policies. Both anecdotal evidence from NICB cases (Johnson, 2014) and the results from this study show increased organized activity related to staged accidents in Kentucky. This concept of organized crime moving from one geographic region where preventative measures have been made to another location with less restrictions is known as spatial displacement effect. Although the analysis conducted in this study displays a minimal distinction between PIP and non-PIP states, this anecdotal evidence may allude to movement by criminal organizations between states with similar PIP policies. These organized groups may already be established

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within these states, but move more of their operations to the location with greater criminal opportunity.

Further Research

When preventive legislation measures are enacted, it is important to determine any adverse effects that may be caused by these measures. Particularly, any displacement effect due to PIP reform should be accounted for when discussing the merit of these policy changes. Recent criminological research has discovered displacement effects, specifically spatial displacement effects, of organized crime due to public policies that were implemented to reduce crime in another geographic location (Vijlbrief, 2012). Extensive research should be conducted regarding spatial displacement effects due to PIP reforms. Such analysis is important in terms of understanding the national effectiveness of such policy reformation. Additionally, this research could help in determining the extent to which the reach of these criminal organizations stretches.

Analysis of the policy changes on the implementing states is important as well. Even though this study shows increased likelihood of PIP states having high staged accident rates, no significant relationship can be gleaned regarding increases or decreases due to policy adjustments. As a cross-sectional study, this research is limited in regards to analyzing policy changes made over time. A longitudinal study that measured rates in certain states before and after policy changes could add significant understanding to this research area. This type of research might reveal particular policy changes which are more effective than others.

One particular policy reform recommended by the NICB (2013) is stricter laws regarding the professionals who play a role in these schemes. As a Massachusetts law enforcement officer, who investigated staged accident rings stated, "Without the professionals, there would be no staged accidents. They're the ones who fueled them," (Vogler, 2013). Although not

explored in this study, the enterprise model of organized crime argues that organized criminal groups are formed by the desire to increase profit (Albanese, 2015). Doctors and lawyers are an integral part of the profit machine that is staged accident criminal enterprises. It seems reasonable to assume that any laws deterring or restricting professionals' involvement in staging accidents would decrease the opportunity of these organized rings. Many states enforce penalties upon those individuals involved in fraudulent accidents, but fewer penalties are furnished to individuals involved in the scheme who hold more traditional, respected roles in society. These concepts parallel with conflict theories of crime in which less law enforcement attention is given to crimes committed by individuals with respected societal positions than those from impoverished communities (Lynch, 2006). Punishing white-collar professionals may help to shift the public perception of insurance fraud. Any legitimization of this crime could be weakened by punishing these respected individuals.

Another criminological theory which may be applied to this area of research is social disorganization theory. Social disorganization theory focuses on increased crime rates in particular communities. Certain demographics and transitional neighborhoods appear to be targeted by staged accident rings (NICB, 2013). Often organizations will target non-English speaking, immigrant communities to stage the accidents. These communities tend to be easier to manipulate, lower on the socioeconomic scale and hence perhaps more open to such activity, and easily organized through already established social relationships. The third model of organized crime, the ethnic model, states that organized criminal enterprises are most often bound by cultural ties (Albanese, 2015). Exploiting these communities accommodates for easy construction of organized rings in such areas. Poor immigrant communities with hopes of realizing the American dream may be easily influenced when presented with the idea of quick money. This integration between social disorganization and criminal opportunity has surfaced recently in criminological research (Weisburd, Groff, & Yang, 2012; Smith, Frazee, & Davison,

2000). Although some research shows these communities prime for criminal behavior, additional research shows immigrant communities to have lower crime rates, especially regarding violent crimes (Sampson, 2008; Graif & Sampson, 2009). Sampson (2008) explains that some immigrant communities are actually less criminological than American cities with small immigrant populations. However, this does not make them less susceptible to pressure from organized crime rings. Many immigrant communities are not fully integrated within American culture and citizens of these communities may not be able to distinguish between what is legal and illegal, especially in the case of complicated crimes such as insurance fraud. Future research regarding this theoretical integration may improve the academic understanding of staged accident rings.

Limitations

The data used in this study is directly reported by the immediate victim, the insurance company, to the NICB. Due to this process, the data takes on many of the qualities of self-reported victimization data. Victimization surveys became a recognized way of measuring criminal behavior in the 1960s and has become fairly prevalent in criminology today (Lynch, 2006). One particular issue is that the data is subject to individual responses. In the case of the data used for this study, insurance companies may rely on different processes to report alleged fraudulent claims. This may include reporting data at different times in the claim process. When measuring these claims at certain times, changes in aggregate totals may occur, which could increase chances of unreliability in the measurement of staged auto-accidents. Different referral processes per region may also bring into question cross-state analysis reliability as well. For the purposes of this study, no reliability issues were determined; however, future longitudinal analysis would be wise to determine any possible inconsistencies within the data.

Finally, it should be noted that the analysis conducted in this study only relates to reported staged accidents. All other schemes which may be perpetrated by these criminal organizations would not be accounted for through this study. Therefore, analysis of any PIP reform, which aimed to discourage the formation of these organized criminal groups, would be best served by reviewing all the fraudulent practices of these organizations. Some reform may not displace the criminal organization but simply change the organizations modus operandi.

Conclusions

This study displayed a state having a mandatory PIP policy as a relatively poor predictor of high rates of staged accidents. Even though those states with mandatory PIP were more likely to have higher rates, a majority of PIP states did not have high rates and some non-PIP states did. These results allude to other determining factors that would explain whether or not a state has a high staged accident rate. In order to reach a more distinct conclusion regarding predicting staged accident rates, researchers could focus on a few factors to strengthen the study.

A broad understanding of the relationship between PIP policies and staged accidents is created through this study. PIP states are separated into two binomial categories: mandatory PIP and non-PIP. These policies are complicated and differ from one state to the next. Closer analysis of these policies may help better understand which factors within the policies increase the likelihood of staged accident rings functioning within that state. A narrower view of statute characteristics, such as liability thresholds, licensing restrictions, and settlement time restraints, may assist in the creation of future legislature.

By geographically narrowing the research perspective, future studies could better analyze socioeconomic and ethnic factors driving this crime. If data provided the ability to isolate the location where the crime was taking place, potential hypotheses using social

disorganization theory could be tested. Additionally, demographic information within the data could further identify potential racial, ethnic, and environmental factors related to staged accidents. A better understanding of the individuals who are perpetrating these crimes may identify social constructs related to such crimes.

Finally, law enforcement presence, which could be a strong assessment of capable guardianship, is not factored into the analysis of this study. A measurement for the involvement of law enforcement and regulatory agencies would be beneficial, if for no other reason, to serve as a control in policy analysis. Any influence which these agencies may have on staged accident rates is not accounted for in this study. Although this may not strongly affect the current study, future longitudinal research could be strongly shifted by this lack of data, especially in the case of research examining displacement effects.

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References

Albanese, J. S. (1995). *White-collar crime in America*. Englewood Cliffs, NJ: Prentice Hall.

Akers, R. L., and Sellers, C. (2013). *Criminological Theories: Introduction, Evaluation, and Application*. New York, NY: Oxford University Press.

Bouloukos, A., Farrell, G., and Laycock, G. (2003) Transnational organised crime in Europe and North America: Towards a framework for prevention. In: Aromaa K, Heiskanen M (eds) *Crime and Criminal Justice in Europe and North America 1995–1997: Report on the Sixth United Nations Survey on Crime Trends and Criminal Justice Systems*. Helsinki: HEUNI, 176–192.

Clarke, R. V. (1983). Situational Crime Prevention: Its Theoretical Basis and Practical Scope. *Crime and Justice: An Annual Review of Research*, 4: 225-256.

Coalition Against Insurance Fraud. (2015) *Fraud: Why Should I worry?* Retrieved from http://www.insurancefraud.org/fraud-why-worry.htm#.VZHQC-nbLtR

Coalition Against Insurance Fraud. (2015) *The price you pay.* Retrieved from *http://www.insurancefraud.org/scam-alerts-staged-crash.htm#price*

Cohen, L. E., and Felson, M. (1979) "Social inequality and crime rate trends: A routine activities approach," American Sociological Review, 44(4): 588-608.

Cornish, D.B., and Clarke R.V. (1986) Introduction. In: Cornish and Clarke 1986 (eds) *The Reasoning Criminal*. New York: Springer, 2-16.

Cullen, F. T., and Benson, M. (1993). White collar crime: Holding a mirror to the core. *Journal of Criminal Justice Education*, 4: 328– 348.

Dartland, W. and Foley, P. (2014). No-Fault Auto: Worth Saving. Coalition Against Insurance Fraud website. Retrieved from http://www.insurancefraud.org/news.htm

Delegal, M.K., and Pittman, A.P. (2002) Florida No-Fault Insurance Reform: A Step in the Right Direction. *Florida State Law Review*. 29 (3)

Ericson, R.V., and Doyle, A. (2004). "*Criminalization in private: The case of insurance fraud*,"pp.99-124 in Law Commission of Canada, *What is a Crime? Defining criminal conduct in contemporary society*. Vancover: University of British Columbia Press.

Fairley, J. (2013). No Fault Auto Insurance States Explore Reform. *Mainstreet.com website.* Retrieved from https://www.mainstreet.com/

Federal Bureau of Investigations. (2015). *Organized Crime: Glossary of Terms*. Retrieved from https://www.fbi.gov/about-us/investigate/organizedcrime/glossary

Friedrich, D.O. (2010). *Trusted Criminals: White Collar Crime in Contemporary Society* (4th ed.). Belmont, CA: Wadsworth Cengage Learning.

Gibbs, J. P. (1975) Crime, Punishment, and Deterrence. New York: Elsevier

Graif, C., and Sampson, R. J. (2009) "Spatial heterogeneity in the effects of immigration and diversity on neighborhood homicide rates." *Homicide Studies*.

Institute for Public Policy & Economic Development. (2013). *White Collar Crime*. Operation Gang Up. Retrieved from http://www.operationgangup.com/WhiteCollarCrimeandGangs.pdf

Insurance Information Institute. (2011). *Florida Drivers Pay A "Fraud Tax" That Is Rising And Contributes To Higher Premiums For Honest Drivers* (Press Release) Recovered from http://www.iii.org/press_releases/florida-drivers-pay-a-fraud-tax-that-is-rising-and-contributes-to-higher-premiums-for-honest-drivers.html

Insurance Information Institute. (February 2014). *No-Fault Auto Insurance*. Retrieved from http://www.iii.org/issue-update/no-fault-auto-insurance

Insurance Information Institute. (2015). *Fraud: Insurance Fraud*. Retrieved from http://www.iii.org/fact-statistic/fraud

Insurance Research Council. (February 2015). *Insurance Research Council Finds That Fraud and Buildup Add Up to $7.7 Billion in Excess Payments for Auto Injury Claims*. Press Release. Retrieved from http://www.insurance-research.org/

Jaafari, J. (2014). Insurers find fault in 'No Fault'. *PropertCasualty360.com website.* Retrieved from https://www.propertycasualty360.com/

Johnson, D. (2014). Insurance Scams and Fraud Trends to Watch in 2014. *Claims Journal*. Retrieved from http://www.claimsjournal.com/

Keeton, R. E. and O'Connell, J. (1965). *Basic Protection for the Traffic Victim: A Blueprint for Reforming Automobile Insurance*. Boston, MA: Little, Brown and Company.

Levy, M. P., and Tartaro, C. (2010). Repeat Victimization: A Study of Auto Theft in Atlantic City Using WALLS Variables to Measure Environmental Indicators. *Criminal Justice Policy Review*. 11 (2): 296-318.

Lynch, M.J., McGurrin, D., and Fenwick, M. (2004). Disappearing act: the representation of corporate crime research in criminological literature. *Journal of Criminal Justice*, 32, 389-398.

Lynch, M. J., Michalowski, R. J., and Groves, W. B. (2006). *The new primer in radical criminology: Critical perspectives on crime, power and identity* (3rd ed.). Monsey, NY: Criminal Justice Press.

Longino, C. (2014). Florida Personal Injury Protection. (White Paper). National Insurance Crime Bureau. Des Plaines, IL: Central Florida Major Medical Fraud Task Force

McLain, A. (2012). *Organized Group Activity in Insurance Fraud: 2008-June 2012.* (White Paper). National Insurance Crime Bureau. Des Plaines, IL: Data Analytics.

Morales, J. and Hurtado, S. (2012). "Estimation of Operative Risk for Fraud in the Car Insurance Industry," Global Journal of Business Research, 6(3): 73-83.

National Insurance Crime Bureau (Producer). (2012). *Staged Accidents* (Webcast). Available from https://www.nicb.org/training/webcasts/staged-accidents

National Insurance Crime Bureau (Producer). (2012). *PIP Schemes* (Webcast). Available from - https://www.nicb.org/training/webcasts/pip-schemes

National Insurance Crime Bureau (Producer). (2012). *Organized Groups* (Webcast). Available from -https://www.nicb.org/training/webcasts/organized-groups

National Insurance Crime Bureau (Producer). (2012). *Recruitment of Patients* (Webcast). Available from -https://www.nicb.org/training/webcasts/recruitment-of-patients

National Insurance Crime Bureau. (March 2013). *Motor Vehicle No-Fault Insurance (Personal Injury Protection) Recommendations.* Retrieved from https://www.nicb.org/search/site_search?kw= recommendations

Niemi, Hannu. (1995). Insurance Fraud. European Journal on Criminal Policy and Research, Vol. 3, No. 1, 48-71.

Sampson, R. J. (2008) "Rethinking crime and immigration." *Contexts* 7, 1: 28-33.

Skiba, J. M., and Disch, W. B. (2014). A Phenomenological Study of the Barriers and Challenges Facing Insurance Fraud Investigators. *Journal of Insurance Regulation*, Vol. 33, No. 4.

Smith, W. R., Frazee, S.G., and Davidson, E.L. (2000). Furthering the Integration of Routine Activity and Social Disorganization Theories: Small Unit of Analysis and the Study of Street Robbery as a Diffusion Process. *Criminology*. 38 (2): 489-524.

Sukharenko, A., (2004). "The use of Corruption by Russian Organized Crime in the United States," Trends in Organized Crime, 8(2): 118–129.

Tennyson, S. (2008). "Moral, Social, and Economic Dimensions of Insurance Claims Fraud," Social Research, 75(4): 1181-1204.

Tennyson, S. (2011). *The High Costs of Michigan's No-Fault Auto Insurance: Causes and Implications for Reform*. Prepared for the Michigan Chamber of Commerce

Thompson, L. H. (1992, May). *Health insurance: Vulnerable payer lose billions to fraud and abuse* (Rep. to the Chairman of the Subcommittee on Human Resources and Intergovernmental Operations). Washington, DC: U.S. General Accounting Office.

U.S. Department of Justice, Federal Bureau of Investigations. (2010). *Uniform Crime Report: Crime in the United States, 2009.* Retrieved from https://www2.fbi.gov/ucr/cius2009/offenses/property_crime/ burglary.html

Van Der Schoot CRA (2006) Organised crime prevention in the Netherlands: Exposing the effectiveness of preventive measures. Doctoral dissertation, Erasmus Universiteit Rotterdam.

Viaene, S., and Dedene, G. (2004, April). Insurance Fraud: Issues and Challenges. *Geneva Papers on Rick and Insurance*, 29 (2): 313-333.

Vijlbrief, M.F.J. (2012). "Looking for displacement effects: exploring the of ecstasy and amphetamine in the Netherlands," Trends in Organized Crime, 15: 198-214.

Vogel, M. E. (2013). An Accident Waiting to Happen: Fatal crash 10 years ago keeps saving millions for drivers. *The Eagle-Tribune.* Retrieved from http://www.eagletribune.com/

Von Lampe, K. (2011). The application of the framework of Situational Crime Prevention to 'organized crime'. Criminology & Criminal Justice, 11(2): 145-163.

Weisbart, S.N. (2011, July). *Insurance Fraud: Are Policyholders the Only Victims?* (Senior Vice President & Chief Economist). New York, NY: Insurance Information Institute.

Weisburd, D., Groff, E.R., and Yang, S.M. (2014) The Importance of Both Opportunity and Social Disorganization Theory in a Future Research Agenda to Advance Criminological Theory and Crime Prevention at Places. Journal of Research in Crime and Delinquency. 51(4): 499-508.

Appendix A: State Z-Scores

Table A1. Staged/Caused Accident Z-score by state for 2002 and 2012

State	2002 Z-Score	2012 Z-score	2012 Z-score (exluding FL)
Alabama	-0.71	-0.56	0.36
Alaska	-0.98	-0.78	0.11
Arizona	-0.67	-0.24	0.00
Arkansas	-0.37	-0.21	0.78
California	1.99 *	0.66	1.80 *
Colorado*	0.02	-0.39	0.57
Connecticut	-0.77	-0.20	0.79
Delaware	-0.39	-0.13	0.87
District of Columbia	-0.56	0.43	1.53
Florida	2.26 *	4.89 *	
Georgia	0.29	0.25	1.32
Hawaii	-0.98	-0.73	0.17
Idaho	-0.45	-0.74	0.15
Illinois	-0.19	0.12	1.17
Indiana	-0.52	-0.52	0.41
Iowa	-0.17	-0.65	0.26
Kansas	-0.63	-0.61	0.30
Kentucky	-0.46	1.85 *	3.20 **
Louisiana	1.45	1.05	2.26 *
Maine	0.85	-0.57	0.00
Maryland	0.06	1.60	2.91 **
Massachusetts	2.26 *	-0.05	0.97
Michigan	-0.44	-0.43	0.52
Minnesota	-0.51	0.12	1.17
Mississippi	-0.57	-0.58	0.34
Missouri	-0.48	-0.29	0.68
Montana	-0.20	-0.60	0.32
Nebraska	-0.70	-0.62	0.30
Nevada	1.53	2.26 *	3.69 **
New Hampshire	-0.24	-0.72	0.18
New Jersey	-0.15	-0.33	0.63
New Mexico	-0.60	-0.36	0.61

Table A1. Staged/Caused Accident Z-score by state for 2002 and 2012 (Continued)

State	2002 Z-Score		2012 Z-score		2012 Z-score (exluding FL)	
New York	4.17	**	0.95		2.15	*
North Carolina	0.50		0.36		1.45	
North Dakota	-0.60		-0.87		0.00	
Ohio	-0.42		-0.23		0.76	
Oklahoma	-0.03		-0.59		0.33	
Oregon	-0.44		0.05		1.08	
Pennsylvania	-0.21		-0.43		0.52	
Rhode Island	1.46	*	0.72		1.88	*
South Carolina	-0.06		1.57		2.87	**
South Dakota	0.27		-0.71		0.19	
Tennessee	-0.32		-0.54		0.39	
Texas	0.60		0.06		1.10	
Utah	-0.67		-0.63		0.28	
Vermont	-0.98		-0.87		0.00	
Virginia	-0.30		-0.37		0.59	
Washington	-0.47		-0.25		0.73	
West Virginia	0.20		0.14		1.19	
Wisconsin	-0.72		-0.53		0.40	
Wyoming	-0.98		-0.75		0.40	

$*p > .95$ $**p > .99$

- States highlighted in red are those with mandatory PIP policies.