ABSTRACT

LUTZ, JENNIFER RENEE. Condemning the Criminal Corporation: Corporate Sentencing, Focal Concerns, and the Effects of Dodd-Frank on Sentencing Outcomes. (Under the direction of Dr. Patricia McCall and Dr. Anna Manzoni).

Although some criminological research focuses on the punishment and control of crimes of the powerful, much of the theoretical and empirical attention in criminology continues to be on the punishment of street crimes. Further, the literature on the sentencing of white-collar crime overwhelmingly focuses on the sentencing of individuals but does not address the sentencing of corporations, and this criminological work fails to examine the role of contemporary legislative policies in shaping sentencing outcomes. This dissertation addresses these gaps by first expanding the focal concerns framework to assess decision making processes at the corporate level. Further, this dissertation also examines the effects of the Dodd-Frank legislation on sentencing outcomes for corporations. Using sentencing data from the United States Sentencing Commission from 2002 through 2017, the dissertation employs two sets of empirical tests. The first set of empirical tests use multinomial logistic regression and logistic regression to extend the focal concerns framework to corporate cases using three outcomes, fines, sentencing placement, and probation. The second set of empirical tests also uses multinomial logistic regression and logistic regression to examine the effects of the Dodd-Frank decision on sentencing outcomes for corporations. The results of this dissertation reveal support for the focal concerns framework at the corporate level. Particularly, blameworthy corporations with a high number of potential future victims receive the harshest sentences, but judges are constrained by practical factors such as the corporation's ability to pay the fine and the physical location of the corporation (within the U.S. or outside). Additionally, the results reveal the nuanced effects of the Dodd-Frank legislation on corporate sentencing, with corporations convicted of financial

crimes receiving higher financial penalties following the implementation of Dodd-Frank, but being less likely to receive a sentence above the guideline range following the implementation of Dodd-Frank. This research has important implications for the focal concerns framework and the role of guidelines in sentencing outcomes.

Condemning the Criminal Corporation: Corporate Sentencing, Focal Concerns, and the Effects of Dodd-Frank on Sentencing Outcomes

by
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DEDICATION

To my 20s.

BIOGRAPHY

Jennifer Lutz was born and raised in Fredonia, New York, a small town in the most western region of the state. After graduating from Fredonia High School in 2008, she attended SUNY Cortland, where she graduated summa cum laude in 2011 with a Bachelor of Arts in Criminology and a minor in Political Science. Jennifer then went on to earn a Master of Science in Sociology from North Carolina State University in 2015 and then continued on with her doctoral degree at North Carolina State University. Her several lines of research focus on sentencing, the media framing of white-collar crime, theoretical explanations of crime, and social networks and mental health.

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TABLE OF CONTENTS

LIST OF TABLES

CHAPTER ONE: INTRODUCTION

"And it means reforming a weak and outdated regulatory system so that we can better withstand financial shocks and better protect consumers, investors and businesses from the reckless greed and risk-taking that must never endanger our prosperity again. No longer can we allow Wall Street wrongdoers to slip through regulatory cracks. No longer can we allow special interests to put their thumbs on the economic scales. No longer can we allow the unscrupulous lending and borrowing that leads only to destructive cycles of bubble and bust. It is time to set a new course for this economy, and that change must begin now." (President Barack Obama's Speech on the Economy, January 8th, 2009)

In September of 2008, the global financial crisis reached a new level of severity in the United States (henceforth, U.S.) when Lehman Brothers Holdings, Incorporated filed a petition for bankruptcy (Zimmerman and Petruno 2008). The collapse of what was once the largest investment bank in the U.S. confirmed economists' worst fears: the global financial system was on the brink of disaster. Now considered the worst financial crisis since The Great Depression, the 2008 global financial crisis crippled financial institutions in the U.S. and abroad. It is estimated that mortgage fraud cost the financial industry between $946 million and $4.2 billion during the crisis (Nguyen and Pontell 2010), and the U.S. unemployment rate soared to 9.1 as failing businesses tried to cut costs by eliminating employees (Barak 2012). With global markets nearly collapsing, the U.S. Federal Reserve provided millions in bailouts to protect the global economy (Cafruny and Schwartz 2013).

While law violation and financial fraud contributed to the global financial crisis of 2008, many of the top executives of "the too big to fail banks" and high-ranked officials involved in the financial fraud have gone unpunished (Pontell and Geis 2014; Pontell, Black, and Geis 2014). Rather than focusing attention on punishing the actors that contributed to the financial meltdown, the American government bailed out the banks at the taxpayers' expense (Barak 2012; Pontell et al. 2014). While the Dodd-Frank Wall Street Reform and Consumer Protection

Act of 2010 (henceforth, Dodd-Frank) offered hope in reforming regulatory practices, the act has largely been criticized for being insufficient in regulating financial markets and big businesses (Will, Handelman, and Brotherton 2013). The failure to prosecute these top executives and bankers and the failure to create meaningful regulatory reforms following the 2008 financial crisis raises serious questions about how the criminal wrongdoings of corporate offenders are treated in the U.S. and about the influence of corporations on law and policy.

Despite some developments in the literature on the punishment and control of powerful offenders, much of the theoretical and empirical attention in criminology has focused on the punishment of street crimes committed by marginalized groups in society. However, crimes of the powerful are costly, both financially and physically for its victims; therefore, it requires the attention of social scientists. Financial costs refer to the direct costs (the financial losses of victims) and the indirect costs (higher taxes to pay criminal justice personnel, an increased cost of goods and services, and higher insurance rates) associated with the crime (Friedrichs 2010; Shenk and Klaus 1984). The public suffers greatly from the financial harms associated with crimes of the powerful (Friedrichs 2010). For example, Conklin (1977) argues that the economic losses attributable to crimes of the powerful are nearly ten times greater than the economic loss attributed to property offenses of the powerless.

Furthermore, there are physical costs associated with white-collar crimes. The physical costs of white-collar crime include personal injuries and death that result because of the actions of white-collar criminals (Friedrichs 2010; Reiman and Leighton 2010; Shenk and Klaus, 1984). Using estimates from the Bureau of Labor Statistic (BLS), Reiman and Leighton (2010) report approximately 55,238 deaths annually that are traceable to occupation-related hazards in the U.S. To exemplify these statistics, Reiman and Leighton (2010) discuss the "crime clock" for

occupational deaths. The "crime clock," used traditionally in the FBI's annual uniform crime statistics for street crimes, describes how many murders occur over a given amount of time in the U.S. The FBI's crime statistics suggest that one murder occurs every 34 minutes. Using the BLS data for white-collar crimes, a crime clock suggests that an occupational death occurs every 10 minutes (Reiman and Leighton 2010). Given the seriousness of the crimes of the powerful, both financially and physically, further research on the punishment and control of corporations is critical.

Despite the seriousness of white-collar corporate offenses, much empirical attention in criminology continues to focus on street crimes. Further, with one exception, Piquero and Davis (2004), the existing white-collar crime sentencing literature overwhelmingly focuses on the sentencing of individuals and does not address the sentencing of corporations. Additionally, research does not address the role of contemporary legislative policies in shaping sentencing outcomes. Previous research suggests that major white-collar events, such as Watergate (Hagan and Palloni 1986; Katz 1980), the savings and loan scandal (Calavita and Pontell 1990; 1993) and Enron (Galvin 2015; Rockness and Rockness 2005; Silberfarb 2004), initiate new legislation and reform criminal justice practices as a response to punitive public pressures. However, little empirical research has examined the effects of the Dodd-Frank legislation on sentencing outcomes.

Following the example of Piquero and Davis (2004), this dissertation will speak to these gaps in the literature by specifically analyzing the sentencing of corporate cases.[1] This dissertation also extends the focal concerns framework, by assessing how three focal concerns,

[1] Importantly, the term "corporation" is used throughout this dissertation in keeping with the corporate crime definition established by Clinard and Quinney (1973). However, the data used in this dissertation encompasses a variety of organizations including, businesses, partnerships, labor unions, pension funds, trusts, non-profits, and government units.

blameworthiness, the protection of the community, and practical constraints and consequences, influence sentencing decisions at the corporate level. Further, using the focal concerns framework, this dissertation considers Dodd-Frank as a practical constraint on judge's sentencing options and examines the effects of this legislation on the sentencing of corporations.

The dissertation is organized employing two empirical tests. Using regression techniques, the first empirical test uses the federal corporate sentencing data to examine the focal concerns framework with three outcome measures, fines, sentencing placement, and probation. Using the same three outcome measures, the second empirical test assesses the effects of the Dodd-Frank decision on sentencing outcomes for corporations.

This dissertation makes several notable contributions to the literature. First, this dissertation adds to the limited research on the punishment of corporations. While Piquero and Davis (2004) offer some insight into the sentencing of corporate offenders, much of the research on the sentencing of white-collar offenders focuses on the individual, and not the corporation. Further, recent research on the punishment of corporations emphasizes the role of prosecutors in in helping powerful corporations evade punishment (Garrett 2014), but this literature offers little by way of understanding what happens to corporations when they are convicted and sentenced. Therefore, this dissertation this dissertation considers the sentencing of corporations through the focal concerns framework. While the focal concerns framework (Steffensmeier, Ulmer, and Kramer 1998) has been widely tested using individual cases, it has not been extended to corporate cases. Therefore, this dissertation makes a considerable contribution by extending an individual level theory to the corporate level to assess sentencing decisions. The dissertation examines these issues by exploring the importance of three factors judges assess when

dispensing justice in making their sentencing decisions: blameworthiness of corporations in their offending, the protection of the community and the practical constraints.

Next, this dissertation uses the arguments established by Crow and Bales (2006), who consider legislative changes within the focal concerns framework, to examine the effects of Dodd-Frank on the sentencing of corporations. In particular, legislative changes often limit and shift the sentencing options for judges (Crow and Bales 2006). By considering the Dodd-Frank legislation within the focal concerns framework, this dissertation aids in understanding the effects of legislative changes on sentencing outcomes. Finally, while critiques have been offered concerning the Dodd-Frank legislation, little research has looked specifically at the effects of this legislation on sentencing outcomes. One study (Testa 2017) has tested the consequences of the 2008 global financial crisis on individual sentencing outcomes, but there has not been a similar empirical test of the effects of the Dodd-Frank legislation on corporations. Thus, this dissertation makes a considerable contribution to the literature by assessing these effects.

The dissertation continues in the following chapter by providing a background and review of literature on the topic. It begins with a discussion of the definitions of white-collar crime. This includes a discussion of the sentencing and prosecution of corporations in the U.S. and a review of Piquero and Davis (2004). Then, the history of the United States Sentencing Commission is reviewed. That is followed by a review of white-collar crime sentencing literature and a discussion of the focal concerns framework. Then, a brief historical account of white-collar scandals and the legislation that followed these scandals is reviewed. After this follows a discussion of the context of the global financial crisis as a critical time point for the focus of this study. Then, the hypotheses are stated.

Chapter three discusses the data, measures and analytic procedures. Chapter four includes the results of the two analytic tests. The first analytic test again extends the focal concerns framework to examine corporate sentencing disparities using three outcome measures: fines, probation, and sentencing placement. The second analytic test uses the focal concerns framework, to consider the effects of the Dodd-Frank legislation on sentencing outcomes for corporations. Finally, chapter five includes a discussion of the findings, the limitations of the research, and directions for future research.

CHAPTER TWO: BACKGROUND, THEORY AND HYPOTHESES

DEFINING WHITE-COLLAR CRIME

Edwin Sutherland coined the term 'white-collar crime' in his 1939 American Sociological Association Presidential Address in which he urged criminologists to focus attention on the illegal behaviors of powerful professionals. He further elaborated on the concept of white-collar crime in his seminal criminology text, where he defined white-collar crime as "crime committed by a person of respectability and high social status in the course of his occupation" (Sutherland 1949: 9). Notably, the definition of white-collar crime offered by Sutherland highlights the individual characteristics of the offender – a person of power and high social status (Barnett 2000). Alternatively, law enforcement agencies, including the United States Department of Justice in their uniform crime reporting, offer an offense-based definition of white-collar crime, which focuses on the characteristics of the offense, and not the offender (Barnett 2000).

Refining the definition of white-collar crime further, Clinard and Quinney (1973) differentiate corporate crime from occupational crime. Corporate crimes are crimes that benefit the company (Braithwaite 1984, Clinard and Quinney 1973; Clinard and Yeager 1980). However, occupational crimes are crimes committed by individuals in the course of their position for their own benefit (Clinard and Quinney 1973). Friedrichs (2010) argues that the approach adopted should reflect the research goals of the scholar. For this dissertation, a corporate crime approach using an offense-based definition is employed.

THE PROSECUTION AND SENTENCING OF CORPORATIONS

Despite the seriousness of white-collar corporate offenses, it has long been argued that the lower class is punished harsher in the United States than the upper-class elites (Bonger 1916). Therefore, large corporations often evade prosecution and receive lenient sentences in the United States (Alexander and Cohen 2011; Garrett 2014; Yeager 2016a). The behaviors of the elite are not criminalized, as the laws tend to be established in the interest of the most powerful (Friedrichs 2010; Quinney 1970), and laws are used to criminalize vulnerable or marginalize populations (Bonger 1916). Further, large and powerful corporations have substantial resources, and lawyers that navigate the complexities of the corporate criminal justice system (Braithwaite and Geis 1982; Yeager 2016a). With entire legal teams and financial resources, corporations have an extra advantage in the criminal justice system.

Further, recent research on the punishment of corporations reveals the expansion and increased use of deferred prosecution (or non-prosecution) agreements for corporations in recent decades (Garrett 2014; Yeager 2016b). By admitting responsibility, agreeing to a fine and promising to implement organizational reforms, corporations avoid prosecution and criminal charges (Garrett 2014; Yeager 2016b). For example, in his study of federal corporate crime prosecution, Garrett (2014) notes that total fines for corporations has increased since the implementation of sentencing guidelines, but the proportion of convicted corporate offenses brought before the court for sentencing has not increased. This is due to the growth of deferred prosecution agreements. Garrett (2014) contends that courts have changed their practices to keep large corporations from being sentenced. Garrett (2014) reveals that more than 250 deferred prosecution agreements have occurred in the federal courts in the past decade. Of those large corporations that received deferred prosecution agreements, 47 percent had no fine at all (Garrett

2014). As Garrett (2014) notes, "The rise of such deferred prosecution agreements, and non-prosecution agreements, in which no criminal case is even filed, means that the official Sentencing Commission statistics on corporate convictions… fail to capture the most important cases" (Pg. 6). Consequently, smaller, mom and pop-shops often show up in the sentencing data, because big corporations are simply not charged with a crime because they have been offered and accepted deferred prosecution agreements (Garrett 2014). Because smaller corporations do not have the same resources, prosecutors often go after these small, non-powerful corporations (Garrett 2014).

Although deferred prosecution agreements omit certain cases from the federal sentencing data, nearly 90 percent of the cases in the U.S. Sentencing Commissions' sentencing statistics are companies. These cases in the federal sentencing data cover a broad range of criminal activity, such as fraud, money laundering, bribery, copyright infringement, and some cases involve larger corporations that are financially secure, publically-traded, and employ more than 500 employees. Importantly, the practice of deferred prosecution agreements restricts the nature of the corporations included in these data and therefore restricts the generalizability of these research findings primarily to sentencing practices for smaller corporations committing white-collar crimes. Clearly this limits the generalizability of these findings to corporations of all sizes.

Extending Piquero & Davis (2004)

While large corporations seldom appear in sentencing data given their advantages with deferred prosecutorial decisions, scholars find that sentencing disparities do exist in corporate cases. Although minimal literature exists on corporate sentencing disparities, Piquero and Davis (2004) use the federal sentencing data on organizations, the same data used in this dissertation, to

study sentencing outcomes following the implementation of the Chapter Eight sentencing guidelines for organizations. The Chapter Eight guidelines aim to reduce disparities in the sentencing of organizational offenders. In their work, Piquero and Davis (2004) extend the legal and extra-legal framework, which was used previously to understand the sentencing of individuals, to study organizational sentencing outcomes[2]. The legal and extra-legal framework argues that non-legal factors often influence sentencing outcomes and create disparities in sentencing (Nagel 1969; Forslund 1969).

Extending the legal and extra-legal framework to organizations, as opposed to individual offenders, Piquero and Davis (2004) use both the amount of the fine and placement of the fine within the sentencing guideline range as outcome measures in their analyses. Piquero and Davis (2004) operationalize the placement of the fine by first calculating the midpoint of the fine range within the sentencing guidelines and determining whether the final fine was above or below the midpoint of the fine range. Organizations that received fines below the midpoint were considered to have received a lenient sentence and organizations that received fines above the midpoint were considered to have received a harsh sentence.

Finding support for the legal and extra-legal framework, Piquero and Davis' results reveal that both legal and extra-legal variables influence sentencing decisions in organizational cases. Among the legal factors, Piquero and Davis (2004) find that organizational tolerance of criminal wrongdoing and the offending organizations' ability to pay the fine increased the fine handed down by the court and increased the likelihood of the fine being above the midpoint of the guideline range. Additionally, they find that among the extra-legal variables, closely held organizations (not openly-traded) and financially solvent organizations typically receive higher

[2] While this dissertation used the term corporation to describe these criminal cases, the term organization is used in this section because this is the language used by Piquero and Davis (2004).

fines. However, none of the extra-legal variables had a statistically significant effect on the placement of the fine relative to above or below the midpoint of the guideline range (Piquero and Davis 2004).

Similar to Piquero and Davis' (2004) research, this dissertation examines judicial discretion in corporate sentencing by extending an individual theory of sentencing to understand the patterns of sentencing in corporate cases. Specifically, this dissertation examines sentencing in corporate cases using the focal concerns framework. The focal concerns framework is an extension of the legal and extra-legal framework tested by Piquero and Davis (2004) and is described in detail in the theoretical discussion below. Given the work of Piquero and Davis (2004), the aim of this dissertation is to add the limited research on the sentencing of corporate cases. Before turning to the theoretical background for this research, the following section provides a brief history of the United States Sentencing Commission and the development of federal sentencing guidelines of corporations.

THE SENTENCING OF CORPORATIONS UNDER FEDERAL GUIDELINES

Although many corporations often evade punishment in the United States judicial system, when corporations are sentenced they are sentenced under the guidelines established by the United States Sentencing Commission (henceforth, the Commission). The formation of the Commission was recommended in 1972 by federal judge Marvin E. Frankel (Von Hirsh 1987). However, it was not established until October of 1984 as part of the Comprehensive Crime Control Act in an effort to reduce sentencing disparities by instituting mandatory minimum sentencing for cases prosecuted at the federal level (Balsmeier and Kelly 1996; Izraeli and Schwartz 1998). At the time, the Commission established the Chapter Two sentencing

guidelines, which applied only to individual offenders (Von Hirsh 1987). The Commission collects data on federal sentencing and amends sentencing guidelines. The Commission consists of seven members that vote on guideline amendments. These seven members are appointed by the president and are confirmed by Congress. As an independent agency, no more than four of the seven voting members can be of the same political party (United States Sentencing Commission 2019). The federal court system consists of 11 circuits and 94 separate district courts.

Prior to the implementation of the Commission's guidelines, the rehabilitative model prevailed as the guiding framework for sentencing decisions. This allowed for much judicial discretion, as judges were encouraged to make sentencing decisions on a case-by-case basis (Von Hirsh 1987). However, in the late 1960s, many argued that this gave too much discretionary power to judges, and there was a call to make sentencing more equitable (Von Hirsh 1987). The Commission, as well as many states across the U.S., began formulating sentencing guidelines for this purpose in the 1980s.

As Von Hirsh (1987) chronicles, the Commission grappled with two competing theoretical frameworks of sentencing in writing the sentencing guidelines for individuals. The first theoretical framework was the 'just desserts' framework, which argues that the severity of the crime should match the severity of the sentencing outcome. The second framework was the incapacitation model. This framework suggests that criminal history and the pattern of criminal records determines the likelihood of recidivism and should be most important in sentencing decisions. Ultimately, while the Commission determined that the criminal history of an offender is important to consider, the Commission modeled their guidelines using the 'just desserts'

framework. Therefore, the seriousness of the crime, or the offense level, is given first importance in considering the sentence under the guidelines (Von Hirsh 1987).

To create sentencing guidelines for the federal courts, the Commission created a sentencing grid to determine sentences in 1984. The vertical axis contains the offense level (the seriousness of the crime), and the horizontal axis is the criminal history category of the offender. Based on the offense level and criminal history score, each cell of the table has a sentencing range for imprisonment time. However, it is important to note that judges may deviate above or below this guideline range because of mitigating or aggravating circumstances. Further, in 2005, after the Supreme Court ruling Booker v. The United States, these guidelines became advisory rather than mandatory. Therefore, giving more discretion back to judges (United States Sentencing Commission 2006). Importantly, organizations are sentenced under different guidelines, the Chapter Eight guidelines, which are discussed below.

Chapter Eight Sentencing Guidelines

In its original inception, the Commission's guidelines applied only to individual offenders; but in May 1991, the Commission expanded their efforts to include the sentencing of organizations (Izraeli and Schwartz 1998). Finding similar disparities in the sentencing of organizations and a growing public concern over the lenient treatment of white-collar crime, the Commission decided to establish guidelines for the sentencing of organizations (Murphy 2002). This created Chapter Eight sentencing guidelines. Recall, under Chapter Eight guidelines, an organization refers to corporations, partnerships, labor unions, pension funds, trusts, non-profits, and government units.[3]

[3] While the term corporation is used throughout the dissertation, the term organization will be used in the following section, as this section refers to the Commission's organizational sentencing guidelines.

The Commission approaches the sentencing of corporations by focusing on both restitution and deterrence (Murphy 2002). The deterrence doctrine, put forth by classical theorists, Beccaria (1963) and Bentham (1948), assumes that offenders are rational actors and that criminal behavior is reduced if the costs of offending outweigh its benefits. For punishments to deter criminal behavior, they must be certain, severe, and swift (Beccaria 1963). Deterrence operates on two-levels, preventing further offending from the punished individual through specific deterrence and preventing potential offending among others who are aware of the punishment through general deterrence (Piquero and Pogarsky 2002). While this is a fundamental principle for the Commission's guidelines for corporations, research on corporate crime deterrence reports mixed empirical support for strategies that deter corporate offending (Schell-Busey et. al 2016).

Under the guidelines, organizations can be given a number of different types of sentences, the most popular being fines, followed by probation. As detailed by Murphy (2002), according to the guidelines, in determining the sentence, judges first determine the sanction for the harm caused. Next, judges determine if the organization has the financial ability to pay the fine. Then, based on the offense level (seriousness of the offense), judges determine the base fine amount. Importantly, the offense level used in the sentencing of organizations comes from the offense levels established in Chapter Two guidelines. Thus, the offense levels are the same for organizations and for individuals. Afterward, organizations are assigned a culpability score, which is based on (1) aggravating circumstances – tolerance of criminal behavior in the organization, history of criminal behavior, violation of a previous criminal order, and obstruction of justice – and (2) mitigating circumstances – an effective compliance program, self-report of the crime, cooperation in the investigation, and acceptance of responsibility. The culpability

score is then multiplied by the base fine to provide a final range of fines for judges to levy against the offending corporation (Murphy 2002). Similar to individual sentencing, judges may depart from these guideline ranges.

In addition to restitution and crime prevention, the Commission also focuses on the creation of 'good corporate citizenship' by encouraging and rewarding corporations with effective ethical compliance programs (Murphy 2002). Not only is this one of the mitigating circumstances that can greatly reduce an organization's sentence, but the Commission also requires the implementation of a compliance program as part of the sentence if an organization does not have such a program (Murphy 2002). The focus on ethical compliance programs speaks to the overall goal of the Chapter Eight guidelines, which is to deter future offending and to promote good corporate citizenship (Murphy 2002).

While some scholars argue that the guidelines are effective in corporate compliance (Murphy 2002), others argue that the guidelines have not reduced illegality among organizations (McKendall, DeMarr and Jones-Rikkers 2002). Further, some suggest that the guidelines support the pro-business environment of the United States (Etzioni 1993). Importantly, not all organizational crimes have guideline calculations under Chapter Eight. Environmental pollution, food and drug law violations, agricultural and consumer products, civil and individual rights, administration of justice, and national defense offenses do not have Chapter Eight provisions (United States Sentencing Commission 2016b); rather, they are sentenced using Chapter Two guidelines.

Despite the implementation of these sentencing guidelines that aim to reduce sentencing disparities, criminologists have long argued that inequalities still exist throughout the criminal justice system. While little criminological research assesses corporate sentencing specifically

(Simpson 2019), what is known about white-collar crime and sentencing comes from research on individual sentencing. The literature on sentencing disparities and individual white-collar offenders is discussed in the following section.

SENTENCING DISPARITIES AND INDIVIDUAL WHITE-COLLAR OFFENDERS

Previous research on the sentencing of white-collar crime focuses specifically on individual offenders and assesses the effects of socioeconomic status of the offender on sentencing outcomes. Therefore, what is known about the sentencing of white-collar crime comes from research on individuals as previous work offers little by way of understanding the punishment of corporations.

One aspect of sentencing examined by scholars is the sentencing disparities between white-collar offenders and street crime offenders. This body of empirical research on the sentencing of white-collar offenders provides inconclusive evidence regarding sentencing disparities. Most research suggests that white-collar criminals receive preferential treatment when compared to street offenders in the criminal justice system (Eitle 2000; Hagan and Parker 1985; Hagan and Nagel 1982; Reiman and Leighton 2010; Shapiro 1985; Shapiro 1990; Simpson 2002; Tillman and Pontell 1992; Van Slyke and Bales 2012). That is, street criminals are more likely to receive prison sentences and are more likely to receive lengthier prison sentences than white-collar criminals. However, a contradictory body of findings suggests that white-collar criminals are disadvantaged in the criminal justice system, or that being a white-collar offender as opposed to a street criminal has little effect on sentencing outcomes (Benson and Walker 1988; Podgor 2007; Testa 2017; Weisburd 1991; Weisburd, Waring and Wheeler 1990; Wheeler, Weisburd and Bode 1982).

To understand inconsistent findings, some researchers propose that contextual variations in judicial districts shape disparities in sentencing outcomes for white-collar criminals (Hagan, Nagel and Albonetti 1980). Namely, some judicial contexts produce disparities between the prosecution of white-collar offenders and street crime offenders, and others do not. Consistent with this approach, proactive white-collar crime prosecution, large influxes of white-collar criminal cases and a tightly-coupled court system (wherein various criminal justice personnel work closely together on cases) have been demonstrated as predictors of variations in sentencing outcomes for white-collar criminals across judicial districts (Hagan et al. 1980; Nagel and Hagan 1982).

Researchers who find that white-collar criminals receive harsher treatment in the criminal justice system as compared to street criminals suggest that judgments of blameworthiness and responsibility come into play (Weisburd 1991; Wheeler et al. 1982). For example, Wheeler et al. (1982) suggest that judges hold white-collar criminals to a higher level of responsibility due to greater monetary losses and the number of victims affected. Expanding on this premise, Weisburd et al. (1990) found that class position influences prison sentences with managers receiving slightly longer prison sentences than employers or business officers. In these studies, the general logic among judges seems to be that with great power comes great responsibility, and abuse of such responsibility requires harsh punishment because of the greater consequences for individuals and society of white-collar offending as compared to street offending. Recent work on the sentencing of white-collar criminals compares street-level property crime to white-collar property crime, and reveals that among offenders sentenced between 2005-2010, embezzlers were in fact more likely to receive a prison sentence than larceny offenders (Testa 2017).

Contrary to this argument, many studies find that white-collar criminals receive lenient sentences compared to street criminals (Coleman 2005; Eitle 2000; Hagan and Parker 1985; Hagan and Nagel 1982; Moore 1987; Reiman and Leighton 2010; Shapiro 1990; Simpson 2002; Tillman and Pontell 1992; Van Slyke and Bales 2012). Some argue that white-collar criminals have a certain "status shield" (Tillman and Pontell 1992), which makes them less vulnerable to prosecution and sentencing (Eitle 2000; Giordano 1983; Reiman and Leighton 2010; Shapiro 1990; Simpson 2002; Tillman and Pontell 1992). For example, in a study using federal sentencing data on embezzlement and automobile theft, Maddan, Hartley, Walker, and Miller (2012) report differential sentencing for white-collar embezzlers versus automobile thieves with automobile thieves being four times more likely to receive a prison sentence than white-collar embezzlers when controlling for legal factors (Maddan et al. 2012).

The unfair advantage to criminals at the top of the structural hierarchy has been attributed to a combination of offender characteristics and the complexities of white-collar cases. White-collar offenders often receive preferential treatment from actors within the criminal justice system, including judges (Coleman 2005; Van Slyke and Bales 2012), prosecutors (Coleman 2005; Hagan et al. 1980; Moore 1987; Simpson 2002; Van Slyke and Bales 2012), and legal defense counsel (Chibe 2006; Coleman 2005; Van Slyke and Bales 2012). These criminal justice actors tend to share the same social status as white-collar criminals and thereby assume a set of common or shared values among themselves and the alleged offenders (Coleman 2005). Van Slyke and Bales (2012) note that judges often identify with white-collar criminals and award lenient sentences because they view white-collar criminals as family oriented, dedicated to their communities, and having an important economic function in society. In other words, judges are empathetic to white-collar criminals as a result of their shared positions of privilege (Clinard and

Yeager 1980; Tillman and Pontell 1992). Judges are further reluctant to punish white-collar offenders, who often hold powerful positions in their communities, for fear of retaliation by these powerful actors (Friedrichs 2010; Van Slyke and Bales 2012).

Additionally, strong legal representation provides white-collar criminals advantages in the criminal justice system over street criminals (Chibe 2006; Coleman 2005; Van Slyke and Bales 2012). Affluent white-collar criminals have the resources to hire the best lawyers, make appeals, hire private investigators, and locate witnesses. That is, white-collar criminals most often have the advantage to "buy the best" (Coleman 2005) and can afford better legal talent and have higher quality legal representation (Reiman and Leighton 2010). Given the disparities in the criminal justice system, criminologists have long attempted to explain why these disparities exist. These theories of sentencing disparities are discussed below.

THEORY OF SENTENCING DISPARITIES

While recent research on sentencing disparities has expanded its focus to include gender, age, and class, the sentencing disparities literature has its roots in racial disparities. In early criminological work on sentencing outcomes, Sellin (1928) notes that racial discrimination in sentencing leads to higher incarceration rates and longer sentence lengths for Black defendants. This early work on racial inequalities in sentencing is embedded within a conflict perspective (Lizzotte 1978), as conflict theorists argue that the powerful elite control the criminal justice system and use the criminal justice system as a mechanism for marginalization and controlling segments of the population (Chambliss 1969). Quinney (1970) argues, many extra-legal factors, such as race and class influence sentencing decisions, with some groups typically sentenced more harshly because of their marginalized identities.

Early sentencing research assesses the influence of these extra-legal factors on sentencing outcomes (Nagel 1969; Forslund 1969). However, these studies yield inconsistent and mixed results regarding the relationship between extra-legal factors and sentencing (Hagan 1974). Hagan (1974) and Wolfgang and Reidel (1973) offer a methodological critique of this work, as these studies failed to statistically control for the effects of legal as well as extra-legal variables. Legal factors include the seriousness of the crime, injury or damage caused and prior record of the defendant. Sentencing disparities exist among cases with comparable legal factors yet with dispositional differences or outcomes that are attributed to extra-legal factors. Therefore, both legal and extra-legal factors must be included for proper model specification (Albonetti 1991; Hagan 1974) when examining sentencing disparities. Since offering this methodological critique, there have been numerous studies that include the effects of both legal and extra-legal factors. These studies examine extra-legal influences including race (Kramer and Ulmer 2009; Miethe and Moore 1986; Ulmer and Bradley 2006; Unnever, Frazier, and Henretta 1980; Spohn 1990), class (Hagan et al. 1980; Lizotte 1978; Steffensmeier et al. 1998), and gender (Doerner and Demuth 2009; Hagan et al. 1980; Klein and Kress 1976; Steffensmeier and Demuth 2006) as they relate to sentencing outcomes.

Despite improved model specification for sentencing studies, Albonetti (1991) makes a theoretical critique of the sentencing literature, "While… conflict theories have since the 1960s provided the perspectives from which the legal/extra-legal debate emerged, little theoretical formulation has followed in the past two decades of sentencing research" (P. 248). By refining the conflict perspective in its application to sentencing disparity research, Albonetti (1991) reconceptualizes and extends this research to account for how judges make sentencing decisions. Albonetti (1991) begins by acknowledging that when judges mete out sanctions, they often focus

on punishing the offender and preventing future criminal acts. Drawing from structural organizational literature (March and Simon 1958; Simon 1957; Thompson 1967) and social-psychological theories (Carroll and Payne 1976), Albonetti (1991) articulates the applicability of uncertainty avoidance and the causal attribution perspectives to explain judicial decision making (Albonetti 1986; 1987; 1991). She argues that because judges cannot accurately predict future criminal behavior of defendants, they attempt to manage uncertainty through an attribution process by relying on stereotypes (Albonetti 1991). Known as, "bounded rationalities" (Simon 1957:198), court actors make rational decisions when they mete out punishment, but these decisions are bounded by available information. While complete knowledge of the offender and their future behavior would eliminate uncertainty in the court's efforts to prevent future criminal acts, court actors do not have optimal information (March and Simon 1958; Simon 1957). To assess the risk of future offending, court actors rely on information about the nature of the offense and stereotypes of the offender to make their decisions (Albonetti 1991). Therefore, disparities in the sentencing process and the reliance on extra-legal factors occurs because judges rely on stereotypes about race, class, and gender to predict whether a defendant will participate in future criminal behavior—that is, recidivate. Albonetti's work on judicial decision making contributed to the development of a theoretical approach for studying sentencing referred to by Steffensmeier and his colleagues in this body of literature as "focal concerns."[4]

The Focal Concerns Framework

Building on Albonetti's framework, Steffensmeier, Ulmer, and Kramer (1998) articulate the focal concerns framework in their research. Borrowing the term, "focal concerns" from

[4] Not to be confused with, although borrowed from by Steffensmeier et al. (1998), Miller's (1958) notion of focal concerns in his discussion of lower-class culture and crime.

Walter Miller's (1958) study of juvenile gangs, Steffensmeier et al. (1998) argue that, as a result of established courtroom practices and culture, judges make sentencing decisions based on three focal concerns. These focal concerns include blameworthiness, protection of the community, and practical constraints and consequences. *Blameworthiness* is rooted in the culpability of the offender, the role of the offender in the crime, and the injury caused by the offender. *Protection of the community* emphasizes the need to incapacitate dangerous offenders and deter other would-be offenders to protect the community and future victims. *Practical constraints and consequences* include organization and individual concerns. In the case of organizational concerns, court's efforts are affected by maintaining relationships among courtroom actors, a steady and efficient flow of cases, and an awareness of court resources. Judges must also consider individual practical consequences, such as an offenders' ability to do time, for instance, their health, disruptions of the family and whether they are caretakers. Further, judges must consider how the sentence impacts the court's standing within the community—that is, how close the sentence matches the community's sense of justice. Similar to Albonetti's (1991) notions, the focal concern framework emphasizes the importance of offender attributes. When court actors face uncertainty, they rely on stereotypes about social groups or 'normal crimes' (Sudnow 1965) in predicting future offending. The focal concerns framework underscores how offender and case attributions influence the three focal concerns.

Previous studies of the focal concerns framework primarily examine the race, age, and gender of offenders and how these extra-legal factors interact with focal concerns to affect sentencing decisions. These studies suggest that although legal factors -- the seriousness of the crime, as well as the prior criminal history of the offender -- matter in sentencing outcomes, extra-legal factors also affect sentencing outcomes. Previous work suggests that males

(Steffensmeier and Demuth 2006) and young Black and Hispanic males in particular (Doerner and Demuth 2010; Kutatcladze et al. 2014; Steffensmeier et al. 1998; Spohn and Holleran 2000) receive the harshest sentences. Thus, judges use stereotypes around danger, risk, and blameworthiness when determining sentencing lengths (Johnson, Ulmer and Kramer 2008; Anderson and Spohn 2010).

Although predating the development of the focal concerns framework, some early studies on the sentencing of individual white-collar offenders focus on the blameworthiness of elite offenders. For example, as discussed above, Wheeler et al. (1982), argue that individual offenders with a higher socioeconomic status receive harsher sentences because judges hold white-collar criminals to a higher level of responsibility due to greater monetary losses and the number of victims affected in these cases.

The Focal Concerns Framework and Corporate Sentencing

While the focal concerns framework has been widely tested using individual cases, limited empirical and theoretical consideration exists regarding how the focal concerns processes operate in corporate cases (see Galvin 2014 for one exception). Of course, an application of the focal concerns framework to corporate crime sentencing would not focus on the race, age, and gender of the corporation, as the traditional focal concern framework does in individual criminal cases. However, this theoretical framework can be applied to the sentencing of corporations from the perspective of sentencing disparities between classes or between those in different power positions. That is, some corporations are larger, with more employees, or are more powerful than others in that they have more financial and economic influence. Thus, disparities may exist in

corporate crime cases when these powerful corporations are awarded more lenient or harsher sentences because of their status.

As previously noted, prior research on the sentencing of individuals has provided evidence for both arguments. On the one hand, individual white-collar offenders are often awarded lenient sentences because of their position of privilege and economic importance (Clinard and Yeager 1980; Tillman and Pontell 1992, Van Slyke and Bales 2012), and the most vulnerable segments of the population are treated harshly in the criminal justice system. On the other hand, competing research on individual white-collar offenders argues that these offenders are treated more harshly because of they are viewed as more blameworthy by the court (Wheeler et al. 1982). Similar to individual offenders, corporations with power may be treated differently within the judicial system. Therefore, the focal concerns framework is appropriate for understanding both individual sentencing as well as corporate sentencing.

Further, elements of deterrence and restitution--with related foci on punishment and preventing future criminal offending--underlie the Chapter Eight sentencing guidelines as well as the focal concerns approach (Nagel and Swenson 1993). Furthermore, focal concerns are shared by courtroom actors as they assess the infractions of the legal code in those cases brought before them whether those cases are individual or corporate crimes.

Analogous with the blameworthiness component of the focal concerns framework, culpability, as conceptualized in the Chapter Eight guidelines, captures the responsibility of the offending corporation. Judges assign a culpability score to offending corporations. The culpability score accounts for any prior criminal offenses of the offending corporation, the severity of the crime, the role of high-level personnel in the crime, and the corporations' cooperation in the investigation (Nagel and Swenson 1993, United States Sentencing

Commission 2016b). Similar to the elements of culpability found in the Chapter Eight guidelines, the notion of blameworthiness in the focal concerns framework refers to the criminal history of the offender, the severity of the crime, and the role of the offender in the offense (Steffensmeier et al. 1998). Thus, there are direct parallels between the blameworthiness aspect of the focal concerns framework and the culpability score assigned by judges in corporate cases.

Additionally, the focal concerns framework considers the protection of the community, which emphasizes the need to punish dangerous offenders to protect the community from future harm (Steffensmeier et al. 1998). Thus, in order to protect the community, judges take into consideration how sentencing decisions may influence the risk to future victims and victimization (Steffensmeier et al. 1998). Corporate crimes often have many victims from which judges must protect from future harm. For example, corporations that are publically traded have more victims than corporations that are not publically traded because they have more shareholders that are harmed. Thus, judges must remedy the harm done by the offending corporation and prevent the victimization of the community (stockholders in this example) in the future. In judges' efforts to protect the community, they may consider whether the corporation is publically traded, whether it is a franchise, or whether the corporation employs a large number of employees. All of these are characteristics of corporations that entail more potential victims than corporations that are not publically traded, that are not a franchise and that do not employ large numbers of persons.

Finally, judges must consider the practical consequences of the punishment levied. While this study does not allow for a test of the organizational concerns (court's efforts are affected by maintaining relationships among courtroom actors, a steady and efficient flow of cases, and an awareness of court resources) aspect of the practical constraint and consequences focal concern,

it does consider the practical consequences. Because corporations perform an economic function to the community, by rendering disproportionately heavy fines, judges may disrupt the economic role of these corporations that then may have negative repercussions throughout the community, such as impacting the livelihood of community members who work at these corporations in the event the corporation becomes bankrupt because of the financial penalty. If these corporations play a crucial role in the economy—local or otherwise, judges may overlook these wrongdoings or hand down sanctions that are much less harsh than the seriousness of the crime merits. Environmental justice literature speaks to this. For example, in the face of environmental damages caused by a corporation's polluting, community members may be willing to forgo their health and the environment for the sake of the economic benefit of the community (Williams, Brown and Greenberg 1999). Thus, if there is an economic benefit (i.e., employment or economic prosperity of the community), community members may be willing to overlook these potential harms.

This is also evident in the literature on the sentencing of individuals. For instance, examining the sentencing of individual white-collar criminals, Van Slyke and Bales (2012) note that judges often award lenient sentences because they see white-collar criminals as dedicated to their communities and having an essential economic function in society (Van Slyke and Bales 2012). Judges do not want to disrupt local economies by removing the contributions of white-collar offenders from the community (Tillman and Pontell 1992; Van Slyke and Bales 2012).

This rationale could be similar for the sentencing of corporations, as levying heavy fines or monitoring behavior through probation can disrupt the economic function of those corporations. On the other hand, it could be that the wealthiest and most powerful corporations receive the toughest financial penalties, because they can absorb these costs without a disruption

to their business. Therefore, the focal concerns framework provides the theoretical foundation to examine corporate crime cases, which leads to the following research questions:

R1: Can focal concerns theory find support in the sentencing of corporations?

R1a: Are 'powerful' corporations afforded tougher or more lenient sentences than less powerful corporations?

R1b: Does the economic importance of corporations in a locale lead to disparities in the court system?

LEGISLATION AS A PRACTICAL CONSTRAINT

Because various aspects of the practical constraints and consequences focal concern cannot be incorporated in a study of corporations due to the absence of appropriate measures, the application of the organizational concerns component will be based on legislative efforts that constrain judge's sentencing options. This connection between focal concerns and sentencing guidelines has been established in the literature (Crow and Bales 2006). Using the focal concerns framework, Crow and Bales (2006) argue that contextual factors (Johnson 2005; Ulmer and Johnson 2004), specifically the implementation of sentencing guidelines, restrict judicial decision making in sentencing. In their analysis of Florida sentencing guidelines, Crow and Bales' (2006) work, "expands upon this organizational facet of the practical constraints category by viewing guidelines' limits on discretion as an organizational constraint placed upon the courts by their environment" (P. 287). In considering this approach, the following section reviews major white-collar scandals and the legislative responses to these scandals in developing the

second major focus of this dissertation, the practical constraints of Dodd-Frank on sentencing decisions.

Legislative Responses to White-Collar Scandals

Importantly, previous research suggests that major white-collar scandals, such as Watergate (Hagan and Palloni 1986; Katz 1980), the savings and loan scandal (Calavita and Pontell 1990; 1993) and Enron (Galvin 2015; Rockness and Rockness 2005; Silberfarb 2004), initiate new legislation to reduce sentencing disparities, and curb the unfair advantage of white-collar offenders. Criminologist Jack Katz (1980) argues that there was a 'social movement against white-collar crime' in the United States due to declining confidence in politicians and businesses following the Watergate crimes during Nixon's presidency and the United States' involvement in the Vietnam War. Katz (1980) contends that during this time there was heightened public attention and public awareness of white-collar criminality in the country. This heightened awareness was indicated by the increase in white-collar crime convictions and the development of new white-collar crime task forces (Friedrichs 2010; Katz 1980). There was an increased emphasis on white-collar crime that came from lay people and the media, which ultimately influenced sentencing decisions in the criminal justice system (Katz 1980).

A number of scholars test this assertion empirically analyzing sentencing decisions following Watergate (Hagan and Palloni 1986; Wheeler et al. 1982). Wheeler et al. (1982) find that white-collar offenders were more likely to receive a prison sentence following the Watergate scandal. Further, using data from one federal district court, Hagan and Palloni (1986) find that after Watergate, educated, white-collar offenders were more likely to be imprisoned compared to less-educated offenders. However, they were also sentenced for shorter lengths (Hagan and

Palloni 1986). Hagan and Palloni (1986) argue that there was a canceling of effects because these criminals were being prosecuted but not sentenced for long periods of time. In the years following this national scandal, Congress passed the Antitrust Procedures and Penalties Act of 1974. With this law, the crime of price fixing became a felony with a maximum sentence of three years (Hagan and Palloni 1986).

Similarly, the savings and loan scandal of the late 1980s provided another critical time point for assessing the readjustments in the criminal justice system following a major white-collar scandal. The savings and loan industry was the primary regulatory agency for federal savings and loans. However, unregulated markets, a lack of enforcement, and financial fraud caused a major crisis in the late 1980s (Calavita and Pontell 1990). Following this crisis, Congress enacted the Comprehensive Thrift and Bank Fraud Prosecutions and Taxpayer Recover Act of 1990. This legislation allocated funds for more fraud investigation and raised maximum sentencing penalties from 20 to 30 years for the most severe financial crimes (Calavita and Pontell 1990). Scholars argue that financial fraud that occurred during the savings and loan crisis was vastly different than the white-collar crimes specified by Sutherland (1949). While Sutherland (1949) focused primarily on manufacturing types of white-collar crimes, Calavita, Tillman, and Pontell (1997), argue that the financial crimes of the savings and loan scandal were the prototypical crime of the 1980s. Referred to as "collective embezzlement", this crime was considered a crime against the corporation, for the benefit of the corporation (Calavita et al. 1997). Different from individual embezzlement, where an employee steals from their company (Cressey 1953), with collective embezzlement, the corporation is both the victim and the weapon (Wheeler and Rothman 1982). That is, the corporation is "a tool to obtain money from victims",

(Wheeler and Rothman 1982:1406) but ultimately, the corporation loots themselves (Calavita et al. 1997).

Given the legislative changes following the savings and loan crisis, Calavita and Pontell (1994) argue that the crackdown on white-collar crime was selective. Rather than a 'social movement' against all white-collar crime as Katz (1980) suggests, there was a movement to get tougher on financial crimes (Calavita and Pontell 1994). They conclude that crimes that harm economic markets receive harsher penalties leading states to intervene with businesses when financial crime threatens long-term economic stability (Calavita and Pontell 1994).

Similarly, after Enron's collapse and bankruptcy in December of 2001 and the subsequent discovery of criminal activities among top corporate officials, this financial scandal became an important area of study for criminologists. Enron misrepresented billions of dollars in debt, which impacted their employees, shareholders, and investors (McBarnet 2006). The economy took a major hit as stock prices and consumer confidence fell (Silberfarb 2004). Following the Enron scandals, there was a discourse of public outrage against white-collar criminals (Conrad 2004). As a result, Congress passed the Sarbanes Oxley Act of 2002. The Sarbanes Oxley Act requires record keeping, reporting, and auditing of financial information in companies (Bowman 2003). Part of the Sarbanes Oxley Act was the White-Collar Crime Penalty Enhancement Act of 2002. This act created new categories of crime, including the destruction of documents (Bowman 2003). It also increased the maximum sentences for mail fraud and wire fraud from a 5 to a 20-year maximum (Bowman 2003). However, the legislation was highly criticized and fell short of its promises because of its many loopholes (Conrad 2004). On the other hand, some argue that this legislation unnecessarily penalized white-collar offenders (Comey 2009). In a study of organizational sentencing, Galvin (2014) finds that corporations

sentenced during the Enron scandal period had an increased likelihood of receiving harsh fine, but that effect only lasted one year after the Enron scandal period.

Following the work of these scholars, this dissertation aims to understand how a major white-collar crisis – the 2008 global financial crisis and the Dodd-Frank legislation – influenced sentencing outcomes for corporations as new legislation often constrains judges as new sentencing options become available. The Global Financial Crisis and subsequent legislation is discussed below.

THE CONTEXT OF THE GLOBAL FINANCIAL CRISIS

Nearly collapsing the global economic system, the 2008 global financial crisis was the most severe economic recession since the Great Depression (Friedrichs 2010). The crisis was rooted in a history of neoliberal economics, globalization, and deregulatory policies. While the housing and financial industries were main catalysts for this crisis, the creation of this crisis was in motion long before 2008. The following sections discuss the context of the state-corporate nexus that set the stage for the 2008 financial crisis. Also discussed is the subprime mortgage crisis. In the final sections, the Dodd-Frank legislation is discussed and considered within the focal concerns framework as a practical constraint that restricts judicial discretion.

The Creation of a Crisis: Neoliberalism and Deregulation

The 2008 global financial crisis came after a long history of a neoliberal and pro-business deregulatory policies. The relationship between corporations and the state in the contemporary U.S. is embedded in a neoliberal economic system, which provides a contextual understanding of corporate malfeasance and its punishment in the U.S. In order to counteract the failing economy

in the 1970s, many corporate leaders and government officials advocated for a neoliberal economic model in the 1980s, which promotes free-market ideology (Harvey 2005; Konings 2010). Neoliberalism also promotes the financialization of institutions and existing markets (Kotz 2015; O'Connor 2010). Financialization increases the importance of the financial market within the economy by increasing financial activity and shifting economic priorities to the financial market for short-term profit gains (Lin and Tomaskovic-Devey 2013). Financialization of the U.S. economy resulted in increased income inequality by reducing the labor share of national income and an increase in the income share of top earners (Lin and Tomaskovic-Devey 2013). Harvey's (2005) history of the development and spread of neoliberal economics show how strategic political decisions led to the unequal redistribution of wealth, which favored the upper-class. As Harvey (2005) suggests, the spread of neoliberalism was a vehicle used by the elite class to regain economic power and restore class power.

Further, in a neoliberal economic system, the state plays a limited, laissez-faire, role through deregulatory policies that allow corporations to operate with limited rules and regulations (Barak 2012). Unsurprisingly, businesses favor the deregulated economic model, which offers diminished control of political authority over the financial system and limited oversight of corporate operations, allowing businesses to maximize profits without restrictions (Fasenfest 2010; Konings 2010). Importantly, governments will intervene with business practices in order to protect markets and the economy (Tombs and Whyte 2003).

In fact, the paradox of the neoliberal model is the criminal justice role of the state. The criminal justice system serves as the control mechanism of the neoliberal state with business regulation standing in contrast to the neoliberal spirit. Given this economic context of the United States and the cultural importance of the 2008 global financial crisis, this project aims to

understand the state's role, as the criminal justice system, in controlling, regulating, and punishing corporations.

The Global Financial Crisis

Neoliberal deregulatory policies and the interconnectedness of the global market set the stage for the crisis to be catastrophic and geographically far-reaching (Claessens, Dell'Ariccia, Igan and Laeven 2010). The crisis was triggered by a number of factors, including financial fraud (Pontell et al. 2014), an unregulated housing and financial industry (Barak 2012), as well as stagnation (Foster and Magdoff 2009). One of the factors contributing to the crisis, the unregulated housing and financial industry, requires elaboration.

Since the 1990s, there has been a push for increased home ownership in the US, in particular, a push for homeownership for those of lower socio-economic backgrounds (Will 2013). This push for homeownership came at a time where we also saw increasing household debt (Foster and Magdoff 2009). Under President Bill Clinton, The National Homeownership Strategy: Partners in the American Dream, is passed. This legislation aimed to increase homeownership by changing mortgage-lending practices to include people who would not traditionally qualify for a conventional home loan (Will 2013). This push continued under President George Bush with the American Dream Down Payment Act (Will 2013). This paved the way for new homeowners and encouraged lending agencies, such as Frannie Mae and Freddie Mac, to increase homeownership by lending money to riskier borrowers (Will 2013).

These practices were successful in increasing homeownership (Ferguson 2008; Will 2013), but also weakened lending standards (Claessens et al. 2010). These lending practices specifically targeted individuals with lower socioeconomic status as the mortgage loans required

only 5 percent down; and in some cases, these loans required no money down (Zandi 2009). These practices were sustainable until the early 2000s as demands for homes increased and home prices appreciated. However, as housing prices began falling, the housing bubble burst. Homeowners in financial straits could no longer refinance their mortgages for a lower rate, so many became delinquent on their loans and often went into foreclosure. At the end of the crisis, home values dropped almost $13 trillion collectively (Barak 2012). Furthermore, in 2008, there were 3.1 million home foreclosure filings (Christie 2009). Mortgage lenders also suffered financially during this time, and many declared bankruptcy (Barnett 2013).

Often, mortgages are pooled together in mortgage-backed securities (MBOs). These MBOs include groupings of higher-tiered loans (low-risk borrowers) and lower-tiered loans (high-risk borrows). However, about 80% of the loans in these MBOs are the high-tiered loans, or low-risk (Barnett 2013). These MBOs are then sold to investors. By selling mortgages to investors, banks keep these loans off their books. This allows banks to write more mortgages and have more lending capital to increase the number of home mortgages.

However, because of the riskiness of the lower-tier mortgages, banks struggled to find investors to buy these loans, so they began making collateralized debt obligations, or CDOs (Barnett 2013). CDOs bundle the lowest-tier home mortgage loans with other types of credit (car loan, personal loans etc.), and are then sold to investors as a new bond. With inflated, and false, credit ratings, these risky investments look appealing to investors, but in reality, these CDOs were full of subprime mortgage loans (Foster and Magdoff 2009). Rating agencies gave these bonds an AAA rating, despite being risky for investors as there was a high likelihood that borrowers would default on those loans (Barnett 2013).

Exacerbating the subprime bubble, banks were betting that these CDOs would fail and that borrowers would default. Using credit default swaps – similar to an insurance policy on an investment – banks and investors could bet against CDOs. That is, when the CDO failed, and borrowers could not pay their loan, banks and investors could still profit from the credit default swaps. Eventually, though, participation in subprime mortgage practices increased household debt, expanded credit (Claessens et al. 2010), and put banks in debt when borrowers could no longer make mortgage payments (Foster and Magdoff 2009). Ultimately, these practices contributed to the crisis that disrupted the global economy (Barak 2012; Barnett 2013).

Dodd-Frank Wall Street Reform and Consumer Protection Act

Following the global financial crisis, there was a societal demand to do something about the financial meltdown (Conniff, Goldschmidt and Gugel 2013). A response to this demand came on July 21, 2010, when President Obama signed the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) into legislation. Similar to previous scandals, legislation is often passed as a response to a demand for punishment following a major white-collar scandal. The Dodd-Frank Act developed the Financial Stability Oversight Counsel to evaluate risky financial practices (Snider 2013). It also aimed to oversee the derivative market and established consumer protections (Snider 2013). Additionally, the act called for an amendment to sentencing guidelines that would make new provisions for financial fraud and provide harsher sanctions for certain financial crimes (Conniff et al. 2013).

However, this legislation has been highly criticized as there has been a failure to prosecute actors involved in the scandal (Pontell et al. 2014). Pontell et al. (2014) argue that the

'social movement against white-collar crime' (Katz 1980) has been eradicated in the current decade. Pontell el al. (2014) note,

> In responding to such financial crises at the very heart of the economy, the state must deal with a major contradiction. It must preserve economic order without delegitimizing itself by criminalizing senior executives of large firms who represent the very captains of the economy that it serves to protect. At the same time, by not criminalizing these elites, the state risks appearing to favor the elites. In the current meltdown, the state has taken that risk. (p. 11)

Further, some scholars argue that courtroom workgroups simply readjust their courtroom practices in order to account for changes made following sentencing reforms. For example, Engen and Steen (2000), examine courtroom practices following the implementation of sentencing reform for drug offenses in Washington state from 1986-1995. Using three models of sentencing, legal rationality, substantive rationality, and organizational efficiency, Engen and Steen (2000) examine how courts adapt to guideline changes. Legal rationality argues that court actors are guided by the law, thus courtroom decisions are in accordance with legal changes (Savelsberg 1992, Weber 1968). Substantive rationality refers to court decisions that consider concerns for the offender and the consequences of sentencing decisions (Savelsberg 1992; Weber 1968). Finally, organizational efficiency argues that courtroom decisions are made to increase case flow, where prosecutors get guilty pleas to increase efficiency. Engen and Steen (2000) argue that reforming sentencing guidelines limits the discretion of judges but increases discretion for the prosecutors. Prosecutors determine what charge will be pleaded to, which may be different from the crime committed. Engen and Steen (2000) find evidence of the organizational efficiency model because legislative changes increasing the severity of sentences following sentencing reforms is contingent on whether the offenders plead guilty. That is, prosecutors change their practices to induce guilty pleas as sentencing options change. While this dissertation

cannot assess the prosecutorial decisions, it is important to highlight how courtroom actors can readjust their practices to account for legislative and guideline changes.

While scant research examines the relationship between the global financial crisis and sentencing outcomes for corporations, the effects of the global financial crisis on sentencing outcomes has been tested empirically for individuals. Recent work from Testa (2017) on the sentencing of individual white-collar criminals reveals that following the 2008 global financial crisis, embezzlers did not have a greater likelihood of receiving a sentence of incarceration compared to before the crisis (Testa 2017).

The Sentencing of Corporations after Dodd-Frank

Importantly, the Dodd-Frank Act contained two directives for the Commission, which called for amendments to the Chapter Two sentencing guidelines. §1079A (a)(1)(A) of the Dodd-Frank Act calls the Commission to,

> …review and, if appropriate, amend the Federal Sentencing Guidelines and policy statements applicable to persons convicted of offenses relating to securities fraud or any other similar provision of law… (Dodd-Frank Wall Street Reform and Consumer Protection Act 2010).

Further, §1079A(a)(2)(A) of the Dodd-Frank Act calls the Commission to,

> … review and, if appropriate, amend the Federal Sentencing Guidelines and policy statements applicable to persons convicted of fraud offenses relating to financial institutions or federally related mortgage loans and any other similar provisions of law…" (Dodd-Frank Wall Street Reform and Consumer Protection Act 2010).

The Commission responded to these directives by amending several provisions in the Chapter Two guidelines. First, the Commission added a securities fraud provision, which now allows judges to more accurately determine the offense loss amount in cases in which prices have changed due to deflation or inflation (United States Sentencing Commission 2012).

Additionally, the Commission amended §sB1.a on insider trading, which increased the seriousness of insider trading by rising the offense level from a level 8 offense to a level 14 offense (from a lesser to more serious category of crime). Insider trading now requires "…at a minimum, a short, but definite period of incarceration" (United States Sentencing Commission 2012). Finally, the Commission amended provisions on mortgage fraud and financial institution fraud, and added a penalty enhancement for offenders that jeopardize the integrity and wellbeing of an organization or financial institution (United States Sentencing Commission 2012).Although these amendments specifically applied to Chapter Two cases, and not Chapter Eight cases, which is the focus of this dissertation, recall, the offense level severity used in the sentencing of corporations is derived from the offense levels established in Chapter Two guidelines. Thus, adjustments made to the offense level in the Chapter Two guidelines will also affect the sentencing of Chapter Eight cases.

Further, additional changes occurred following the Dodd-Frank legislation that specifically affected corporations. First, following the implementation of Dodd-Frank, incentives increased for corporations' self-reporting of crimes (Dinkoff 2011). Thus, corporations are now rewarded with greater sentence leniency for reporting their own crimes. Secondly, the act added whistleblower protections for employees who report crimes occurring in their workplace (Dinkoff 2011). Finally, following the implementation of Dodd-Frank, the Commission began reporting the type of fraud that was adjudicated in the corporate sentencing data.

Again, despite these guideline changes, scholars argue that Dodd-Frank has done little by way of increasing the severity of sentences for criminals (Pontell et al. 2014). However, previous sentencing research on individual offenders highlights the important effect of policy changes on sentencing outcomes as these policy decisions shape judicial decision making (Crow and Bales

2006). In the following section, using the focal concerns framework, the Dodd-Frank decision is discussed as a practical constraint on judges.

Dodd-Frank as a Practical Constraint

Again, one aspect of the focal concerns framework provides the theoretical context for examining the effects of the Dodd-Frank legislation on sentencing outcomes. The Dodd-Frank legislation is a practical constraint in that it restricts judicial decision making by creating new guidelines and tougher sentences for certain financial crimes. As argued by Steffensmeier et al. (1998), practical constraints and consequences include both organizational concerns and individual consequences. The present examination of the effects of Dodd-Frank considers the organizational concerns aspect of the practical constraints focal concern.

Drawing on the work of Savelsberg (1992), Crow and Bales (2006) argue that guidelines move judicial processes towards formal rationality by constraining judges through limiting or changing sentencing options. Their analysis reveals that sentencing guidelines, as a practical constraint, affect judges' sentencing decisions (Crow and Bales 2006). Further, their work highlights the important interplay between practical constraints and the other two focal concerns, as blameworthiness and protection of community are conditioned by the practical constraints of judges. Using the framework established by Crow and Bales (2006), this dissertation considers the guideline changes following the implementation of Dodd-Frank as a practical constraint, which leads to the following research question:

R2: Did sentencing outcomes change after the 2008 global financial crisis and the implementation of Dodd-Frank?

HYPOTHESES

Grounded on the focal concerns theory, prior research on the sentencing of white-collar offenders, the context of the global financial crisis, and the consideration of the Dodd-Frank legislation as a practical constraint, thirteen hypotheses are derived. These hypotheses are elaborated in the following sections.

Focal Concerns Hypotheses

Based on the first research question, hypotheses are derived to test the three focal concerns - blameworthiness, protection of community, and practical constraints and consequences - presented in the focal concerns framework. These hypotheses extend the focal concerns framework to understand the sentencing of corporations.

Blameworthiness Hypotheses

Blameworthiness refers to the culpability of the offender and the responsibility of blame. Beside the seriousness of the crime and the prior criminal history of the corporation, aspects of corporations' actions that influence judges' perception of the blameworthiness include whether the corporation accepted their criminal responsibility, obstructed justice during the investigation or whether a manger/leader tolerated the criminal wrongdoing. Based on the blameworthiness aspect of the focal concerns framework, the following hypotheses are derived.

H1a: Corporations with a history of criminal misconduct will receive harsher penalties than corporations without a criminal history.

H1b: Corporations that accepted criminal responsibility will receive lesser penalties than corporations that did not accept criminal responsibility.

H1c: Corporations that obstructed justice will receive harsher penalties than corporations that did not obstruct justice.

H1d: Corporations that tolerated criminal wrongdoing will receive harsher penalties than corporations that did not tolerate financial wrongdoing.

H1e: Corporations that commit more serious offenses receive harsher penalties than corporations that commit less serious offenses.

Protection of Community Hypotheses

Judges consider the dangerousness of offenders, the number of victims, and whether offending corporations may cause future harm when deciding a sentence. In order to protect the community, judges take into consideration victims and victimization. Larger corporations, as well as corporations that are publically traded have more victims, because they have more employees and shareholders that are harmed. Thus, judges must remedy the harm done by the offending corporation and prevent the victimization of the community in the future. In judges' efforts to protect the community, they consider whether the corporation is publically traded, whether it is a franchise, or whether the corporation employs a large number of employees, as these factors indicate whether there are potential future victims to protect. Based on the protection of the community aspect of the focal concerns framework, the following hypotheses are derived.

H2a: Corporations that are not closely-held receive harsher penalties than corporations that are closely-held.

H2b: Corporations that are a franchise will receive harsher penalties than corporations that are not a franchise.

H2c: Corporations with more employees will receive harsher penalties than corporations with fewer employees.

Practical Consequences Hypotheses

Practical constraints and consequences include both organizational consequences and individual concerns. With individual offenders, judges consider the offender's ability to do time, their health, disruptions of the family and whether the offenders are caretakers. In corporate cases, judges consider the effects of the harshness of the sentence on corporations that may negatively affect the economic health of the local or global economy. Therefore, judges consider whether the corporation is able to pay a fine, whether the corporation is financially secure, and where the corporation is incorporated. Based on the practical constraint and consequences focal concern, the following hypotheses are derived.

H3a: Corporations that are able to pay a fine will receive harsher penalties than corporations that are unable to pay a fine.

H3b: Corporations that are financially secure will receive harsher penalties than corporations that are financially distressed.

H3c: Corporations that are incorporated outside the US will receive harsher penalties than corporations incorporated inside the US.

Dodd-Frank Hypotheses

As Crow and Bales' (2006) argue, the implementation of sentencing guidelines restricts and constrains judges by limiting or changing sentencing options. Therefore, sentencing guidelines are important to consider as an organizational constraint in sentencing research.

Whereas one may argue that legislation aimed at affecting sentencing practices would be evidenced after the implementation of that legislation, the literature reviewed above also suggests established courtroom practices may resist change (Engen and Steen 2000), and that the Dodd-Frank legislation did little to criminalize and control white-collar corporate offenders (Pontell el al. 2014). Therefore, regarding Dodd-Frank, the null hypothesis is tested.

H4a: There will be no difference in the harshness of sentencing of financial crimes after Dodd-Frank than before Dodd-Frank.

On the other hand, as Calavita and Pontell (1994) argue, following a white-collar crisis, crackdowns on white-collar crimes are often selective and target those crimes that threaten long-term economic stability. As Calavita and Pontell (1994) argue, after the savings and loan crisis, there was a movement to get tougher on financial crimes. Similarly, this dissertation analysis will assess the interaction between the Dodd-Frank decision and financial crimes, which leads to the following hypothesis:

H4b: The sentencing of financial crimes will be harsher after Dodd-Frank than before Dodd-Frank.

Based on previous empirical and theoretical research, the goals of this dissertation are twofold. The first goal is to expand the focal concerns framework to corporations to test its relevance; and, second, to determine whether organizations were sentenced differently following the implementation of Dodd-Frank. In the following section, the source of the dataset and the operationalization of variables are discussed, the limitations of the dataset are reviewed, descriptive statistics of the sample are described, and the research design and analytic techniques are delineated.

CHAPTER THREE: DATA AND METHODS

DATA

This dissertation uses the corporate sentencing data from the United States Sentencing Commission[5] from 2002 through 2017. [6] The Commission provides sentencing data on corporations that have been convicted on the federal level. The Commission began collecting data on the sentencing of corporations following the implementation of Chapter Eight sentencing guidelines in 1991. This annual data contains legal variables, as well as extra-legal variables on each corporate case. The dataset was accessed publically through The Commission's website.

Alexander, Arlen and Cohen (2000) caution researchers using the Commission's corporate data. Creating a separate sentencing dataset of only public corporations convicted of crimes, Alexander et al. (2000) compare their data to the Commission's data and find that many convicted public corporations are missing from the dataset. Further, these missing cases have some of the largest fines relative to the Commission's data (Alexander et al. 2000). Importantly, this dataset also contains missingness on several of the key variables of interest. The percent missing is displayed in table 1. Variables of interest, such as obstruction of justice, tolerance of criminal wrongdoing, acceptance of responsibility, and base fine have over 50 percent missing. Missing data on cases can cause serious methodological issues if excluded cases are different than cases included in the analysis (Little and Schenker 1995). This may lead to selection bias in the analysis when a large number of cases are excluded (Berk and Ray 1982). While some scholars use multiple imputation (Rubin 1977; 1987) to handle missing data in multivariate

[5] Again, the Commission's data includes corporations, partnerships, labor unions, pension funds, trusts, non-profits, and government units.

[6] Notably, some of the cases included in the 2002 data file were sentenced in 2001. They are included in the data released in 2002 due to the Commission's fiscal year.

analysis, there is too much missingness on this dataset for multiple imputation to be appropriate. While the dataset does have limitations, Piquero and Davis (2004) argue that the Commission's data is the best available to study corporate sentencing.

One main reason for this missingness is that not all cases are sentenced under the Chapter Eight guidelines.[7] Therefore, the factors that are considered in the Chapter Eight guidelines, such as criminal history and obstruction of justice, will only be available for those cases sentenced under Chapter Eight. However, this cannot explain all of the missingness issues. Some of the missingness may also be the result of recordkeeping practices at the Commission (Alexander et al. 2000). Because the cases sentenced under the Chapter Eight guidelines suffer from less missingness (see table 1, column 2), the main models will examine only Chapter Eight cases. However, in order to compensate for the missingness issues, this dissertation also uses three additional sensitivity analyses to test the robustness of the Chapter Eight findings. These sensitivity analyses are expounded upon in the analytic procedures section. In the following section, the operationalization of the variables is discussed.

MEASUREMENT AND ANALYTICAL TECHNIQUES

Dependent Variables

The outcome of interest is sentencing decisions for corporate cases. This dissertation will use three sentencing outcome variables, fines, sentence placement above the guideline range, and probation.

Fines represent the measure of financial penalty levied against the corporation as part of the sentence or plea agreement. Fines are the most common punishment used against a

[7] Recall, environmental pollution, food and drug law violations, agricultural and consumer products, civil and individual rights, administration of justice, and national defense do not have Chapter Eight provisions (United States Sentencing Commission 2017).

corporation and are established in previous research on organizational sentencing as a measure for sentencing outcomes (Piquero and Davis 2004). Fines are operationalized in the Commission data as a categorical variable. The three fine categories include $0 to $99,999; $100,000 to $999,999; and $1,000,000 or more. It is important to note a limitation of this outcome measure. Given that $0 fines are categorized with $99,999 fines, this may produce bias in the measure, as it is impossible to tell if a corporation received a $0 fine. [8] However, this is the only measure of fines available in the dataset. This dissertation includes two alternative outcome measures, *sentence placement* and *probation*.

Sentence placement represents whether fines handed down by judges are greater than those reflected in the sentencing guidelines (United States Sentencing Commission 2018). The sentence placement is measured as a dichotomous variable. One indicates cases that were sentenced above the guideline range, and zero indicates cases that were not sentenced above the guideline range. It is important to note that this dependent variable has high missingness (30 percent).

Probation is measured as a dichotomous variable with one indicating that the corporation received probation and zero indicating that the corporation did not receive probation.[9] Probationary sentences include strict guidelines for corporations to submit financial reports to the probation officer or court (United States Sentencing Commission 2016b). Additionally,

[8] Sensitivity analyses reveal that about ten percent of the cases could have potentially received a fine of zero dollars. This approximate measure is determined by first examining cases with a zero dollar base fine. Of the seven cases with a zero dollar base fine, six were sentenced above the guideline range, thus receiving a fine greater than zero. Further, an additional ten percent of cases could have potentially received a zero dollar fine. These are cases in the lowest fine category, $0-$99,999 and had a downward departure from the guideline range, thus potentially giving the corporation a zero dollar fine.

[9] Importantly, the Commission codes the probation measure as a continuous variable for total months of probation. However, due to the non-normal distribution of this variable, it was recoded first into a categorical variable to represent year ranges of probation. However, these models violated the independence of irrelevant alternatives of the multinomial logistic model. Therefore, the probation outcome was dichotomized and the logistic regression model is used.

probation includes regular and unannounced examination of business records by the probation office (United States Sentencing Commission 2016b). Importantly, unlike individual offenders, probation is not necessarily given as an alternative to another punishment but can be used in conjunction with fines and other sentences.

Independent Variables

The courts take into consideration characteristics of the corporations that assess their culpability and likelihood of future offending when sentencing decisions are made. Guided by the focal concerns framework, a number of independent variables that capture the three focal concerns, blameworthiness, community protection, and practical constraints and consequences are used. Additionally, included are variables that capture the effects of the Dodd-Frank legislation. These independent variables are discussed below.

Blameworthiness

First, the blameworthiness focal concern is examined using five independent variables. The blameworthiness focal concern considers the responsibility of the offender and the level of harm caused. First, *prior criminal history* refers to whether the offending corporation has a history of criminal misconduct. As an indicator of a repeat corporate offender, prior history of criminal misconduct increases the sentence for the offending organization (Queen 1995). This is consistent with the notion of blameworthiness of individual offenders who have a prior history of offending. The Commission codes criminal history as a dummy variable. Organizations that have a history of criminal misconduct are coded as 1, and organizations with no prior criminal history are coded as 0.

Acceptance of responsibility refers to the corporation taking responsibility for the criminal misconduct. If the offending corporation accepts responsibility for the misconduct and fully cooperates in the investigation, the sentence for the offending corporation is reduced (Murphy 2002; Piquero and Davis 2004). Corporations that did not accept responsibility are coded as 1, and corporations that did accept responsibility are coded as 0.

Obstruction of justice refers to whether the corporation interfered with the criminal investigation. If corporations interfered with the investigation or hindered the investigation in any way, they receive tougher sentences (Murphy 2002; Queen 1995). Corporations that obstructed justice are coded as 1, and corporations that did not obstruct justice are coded as 0.

Tolerate criminal wrong doing measures managerial involvement, participation, or knowing of the offense (Queen 1995). Similar to the blameworthiness focal concern in individual cases, which considers the role of the individual offender in the crime, in corporate cases judges take into account the managerial participation in the illegal activity. The commission also considers the size of the corporation in this measure. Larger corporations that tolerated the criminal wrongdoing receive tougher sentences (Piquero and Davis 2004). In order to test the effects of corporation size and managerial tolerance separately, all corporations that tolerated criminal wrongdoing (regardless of size) are coded as 1, and corporations that did not tolerate criminal wrongdoing are coded as 0.[10]

Finally, *offense level* is used as a measure for the seriousness of the crime as part of the blameworthiness focal concern. The offense level directly corresponds with a base fine amount, with higher offense levels indicating higher fines and more serious crimes (United States Sentencing Commission 2016a). The Commission measures the offense level as a continuous variable.

[10] Size of corporation, measured as number of employees, is captured with the variable *number of employees*.

Protection of Community

Next, the protection of community focal concern is captured using three independent variables. Given the high uncertainty of predicting the future criminal behavior of offenders (Albonetti 1991), the protection of the community focal concern underscores the need to protect the public from serious offenders and protect the community from future victimization (Steffensmeier et al. 1998). In their assessment of future behavior, judges consider characteristics of the offender (Steffensmeier et al. 1998). In the instance of corporate crime, judges will assess characteristics of the corporation in making predictions about risk of future harm.

First, judges take into account the *ownership structure* of the offender corporation. Closely-held corporations, in which one share holder or a small closely-knit group of shareholders hold the stock, have fewer potential future victims. On the other hand, not closely-held corporations, including those that are publically traded, have substantially more potential future victims, because they have the money of shareholders at stake. Not closely-held corporations are coded as 1, and closely-held corporations are coded as 0.

Franchise is a dichotomous variable that indicates whether the offending corporation is a franchise or subsidiary. Franchises tend to be larger entities, with more employees; therefore there are more potential future victims involved. Corporations that are a franchise or subsidiary are coded as 1, corporations that are not franchises or subsidiaries are coded as 0.

A categorical variable, *number of employees*, refers to the size of the corporations. The larger the corporation, the larger the number of potential victims hurt by the corporation's future criminal behavior. The four categories for the number of employees are less than 50 employees; 50 to 99 employees; 100 to 499 employees; 500 or more employees. The Commission's data includes this measure as a categorical variable.

Practical Constraints and Consequences

The third focal concern, practical constraints and consequences, is measured using three variables. *Ability to pay fine* indicates whether the offending corporation was able to pay the proposed fine. Considering the practical consequence of levying a high fine, reductions in fines occur if the offending organization would be financially damaged by the fine. The ability to pay the fine is coded as 1, and inability to pay the fine is coded as 0.

Financial status is used to measure the current financial state of the corporation. Those financially secure corporations serve an important economic role in the community. Following the coding of Piquero and Davis (2004), corporations that are financially secure are coded as 1, and those corporations experiencing financial distress (defunct, bankrupt reorganizing or having financial stress) are coded as 0. Finally, *incorporation* refers to where the corporation is incorporated. Corporations incorporated outside the United States are coded as 1, and corporations incorporated inside the United States are coded as 0.

Dodd-Frank Measures

Additionally, in order to capture the effects of the Dodd-Frank decision on sentencing outcomes, four Dodd-Frank variables are included. First, a dichotomous time variable, *Dodd-Frank,* is used to capture the effect of this legislation on sentencing outcomes. [11] Cases sentenced after Dodd-Frank are coded as 1, and cases sentenced before Dodd-Frank are coded as 0.

Further, since the global financial crisis was triggered by financial fraud and finance crimes, this dissertation will include a dichotomous variable for *financial crimes*. Financial

[11] Different lags (one, two, or three years past the decision) were examined to determine the nature of the lag effect on sentencing outcomes. The Dodd-Frank decision variables considers cases sentenced between 2001 and 2011 as before Dodd-Frank and cases sentenced between 2012 and 2017 as after Dodd-Frank.

crimes (anti-trust/price fixing, equity skim, fraud, embezzlement, money laundering, racketeering, and tax offenses) are coded as 1, and other crimes are coded as 0.

Additionally, the analysis includes an interaction term, *dodd-frank*financial crimes*, between the dichotomous Dodd-Frank decision variable and the dichotomous financial crime variable. Because the typical crimes committed in the global financial crisis were financial crimes, the interaction identifies if sentences got tougher for only those types of crimes involved in the crisis.

Finally, a continuous time measure is included (0=2001, 1=2002, … and 16=2017). This measure controls for whether sentences generally changed (more lenient or harsher) over time in order to determine if any sentencing changes observed in the models are a result of legislative changes or a result of general time trends in sentencing.

Control Variables

The analysis also includes four control variables. Whether a case went to trial is controlled for with the variable *trial*, as sentences are often reduced when offenders cooperate with a plea agreement rather than going to trial (Piquero and Davis 2004). Cases that are tried before the court are coded as 1, and cases where the corporation pled guilty to the charge are coded as 0. Additionally, the 2005 Booker decision that made the sentencing guidelines advisory and no longer mandatory is also controlled for using the variable *Booker*. Cases sentenced after the Booker ruling are coded as 1, and cases sentenced before the Booker ruling are coded as 0.

Further, organizations whose purpose is for criminal enterprise are controlled for with the variable *criminal purpose*. Corporations that exist for a criminal purpose are coded as 1, and

corporations that are not established for a criminal purpose are coded as 0. The following section provides the descriptive statistics for the variables discussed.

Descriptive Statistics

Table 2 displays the descriptive statistics (without a missing category) for five samples of cases. The first column includes all cases in the Commission's dataset and the second column includes only the Chapter Eight Cases. Columns 3, 4, and 5 includes Chapter Eight cases with complete data for the three outcome measures, fines (N =759), sentence placement (N=668), and probation (N=758). These are the samples used in the main models.

Because the descriptive statistics are similar across the five samples, the descriptives are summarized together. Among the cases, over half of the corporations received a fine of $0 to $99,999 and about 20 percent of corporations received a fine of $100,000 to $999,999, with the fewest corporations receiving a fine exceeding $1,000,000. The majority of cases are not sentenced above the guideline fine range with less than five percent of cases being sentenced above the fine range. Around three-quarters of the cases are sentenced to probation.

Among the blameworthiness measures, around 80 percent of the corporations had no criminal history and about 86 percent accepted criminal responsibility for the crime. Additionally, only around five percent of corporations obstructed justice, and over half of corporations tolerated the criminal wrongdoing in the company. The average offense level is about 17. Among the community protection measures, almost three-quarters of the corporations are closely held, and around 12 percent of the corporations are franchises or subsidiaries. Further, most of the corporations are small, three-quarters of the corporations having less than 50 employees and only about five percent have 500 or more employees. Considering the practical

consequences variables, about 40 percent of the corporations were unable to pay the fine, and almost half are financially distressed. The great majority (over 90 percent) of the corporations are incorporated inside the United States.

Among the Dodd-Frank variables, about 70 percent of the cases were sentenced prior to the implementation of Dodd-Frank. Additionally, about 60 percent of the offenses are financial crimes.[12] Examining the control variables, around 90 percent of the cases were settled with a plea bargain. Further, just over a quarter of the cases were sentenced prior to the Booker ruling. Finally, almost all (about 97 percent) of the corporations are not for criminal purpose.

Summarizing, most corporations received a fine of less than $100,000, are not sentenced above the guideline range and receive some period of probation. In a typical case relative to focal concerns, the corporation was not blameworthy (they had no criminal history, they accepted criminal responsibility, they did not obstruct justice, though they tolerated the criminal wrong doing); they were not characterized as a threat to the community (they were closely held, not franchises and were small with less than 50 employees); and their practical consequences would not necessarily be influenced by their inability to pay the fine or being financially distressed.

Analytical Techniques

This dissertation employs two analytic tests in order to assess the stated hypotheses. The first test extends the focal concerns framework to understand corporate sentencing and the

[12] Importantly, the sample of Chapter Eight cases is substantially different than the sample of all cases when considering whether the offense is a financial crime. This is because the types of cases included in Chapter Eight are different than cases included in the entire dataset. Recall, environmental pollution, food and drug law violations, agricultural and consumer products, civil and individual rights, administration of justice, and national defense do not have Chapter Eight provisions, so these types of crimes are not included in a sample of only Chapter Eight cases (United States Sentencing Commission 2017).

second analytic tests examines the effects of the Dodd-Frank legislation on corporate sentencing outcomes. The analytic procedures for these two tests are discussed below.

The Extension of the Focal Concerns Framework

The first analytic test examines whether the focal concerns framework operates at the corporate level. First, using multinomial logistic regression, this dissertation assesses the fine category as an outcome. Using Chapter Eight cases with complete data, this analysis includes 759 corporate cases. First, the variables that capture the blameworthiness aspect of the focal concerns framework are included in a separate model. Next, all of the protection of community variables are examined alone in a separate model. Then the practical constraints and consequences variables are assessed alone in a separate model. The final models include all of the focal concerns measures together and tests hypotheses 1a-1e, hypotheses 2a-2c, and hypotheses 3a-3c.

Next, using logistic regression, this dissertation examines sentence placement as an outcome measure.[13] Using Chapter Eight cases with complete data, this analysis includes 668 corporate cases. Again, the blameworthiness measures, the protection of community measures, and the practical constraints and consequences measures are first considered in separate models. The final model considers all of the focal concerns aspects together to test hypotheses 1a-1e, hypotheses 2a-2c, and hypotheses 3a-3c.

Third, this dissertation considers probation as an outcome and employs logistic regression techniques. This analysis includes 758 corporate cases with complete data. Similar to the analyses described above, the blameworthiness measures, the protection of community measures,

[13] Given the rarity of the outcome event, above guideline range (less than 5 percent), Firth logistic regression, or the penalized likelihood method (Firth 1993) is used as a sensitivity analysis. This estimation method reduces bias in binary outcomes when the sample size is small in one outcome category (King and Zeng 2001).

and the practical constraints and consequences measures are first examined in three separate models. The final model includes all focal concerns measures together to test hypotheses 1a-1e, hypotheses 2a-2c, and hypotheses 3a-3c.

Because of the missing data issues, sensitivity analyses are conducted to test the robustness of the findings. The full models represented above are estimated in the sensitivity analyses. The first sensitivity analysis uses Chapter Eight cases with a missing indicator for all independent variables. This type of analysis employs measures wherein missing values are recoded into an additional category for each variable that captures the missingness. While this category of missing is not interpreted, the creation of the category allows cases with missing data to remain in the analysis. The second sensitivity analysis includes all cases (Chapter Eight and non-Chapter Eight) with complete data on all measures. Finally, models with all cases (Chapter Eight and non-Chapter Eight) are estimated with a missing indicator.

The Effects of Dodd-Frank on Corporate Sentencing

The second analytic test examines the effects of the 2008 global financial crisis, and specifically the implementation of the Dodd-Frank legislation, on sentencing outcomes for corporations. Again, this analytic test uses Chapter Eight cases with complete data and the three outcome measures, fine category, sentence placement, and probation. Repeating the analytic procedures stated above, this second analytic test also introduces the Dodd-Frank variables into the models. With each of the outcome measures, the Dodd-Frank measures are first introduced without the interaction term. Then, the Dodd-Frank measures are included with the interaction term. This allows for the testing of hypotheses 4a-4b.

Again, due to the missing data issues, sensitivity analyses are conducted to test the robustness of the Chapter Eight findings. The full models with the Dodd-Frank variables and the interaction term are estimated in the sensitivity analyses. The same sensitivity samples discussed above are used in this analytic test. The following chapter discusses the results of both analytic tests.

CHAPTER FOUR: RESULTS

TESTING THE FOCAL CONCERNS FRAMEWORK USING CORPORATE CASES

The first analysis uses the focal concerns framework to assess sentencing disparities in federal corporate cases. To reiterate, this framework suggests that judges consider three focal concerns when making sentencing decisions. These focal concerns are blameworthiness, the protection of community, and practical constraints and consequences (Steffensmeier et al. 1998). Blameworthiness refers to the culpability and responsibility of the offender (Steffensmeier et al. 1998). The protection of community focal concern refers to the need to protect the community from dangerous offenders (Steffensmeier et al. 1998). Finally, practical constraints and consequences refer to the organizational concerns (maintaining relationships among courtroom actors, a steady and efficient flow of cases, and an awareness of court resources)[14] and to the individual practical consequences, such as an offenders' ability to serve the sentence, their health, disruptions of the family, and whether they are caretakers (Steffensmeier et al. 1998).

The focal concerns framework has found much empirical support in individual cases. However, there have not been extensive empirical tests of this framework using corporate cases. Yet, the framework can be applied to corporations because the elements of restitution and deterrence that underlie the Chapter Eight sentencing guidelines for corporations parallel the concerns articulated in the focal concerns framework. As noted in chapter two of this dissertation, the blameworthiness aspect of the focal concerns framework corresponds with the culpability score assigned by judges in corporate cases. Both the blameworthiness focal concern and the assigned culpability score take into consideration the severity of the crime, the role of the

[14] The organizational concerns aspect of this focal concern will not be considered in this set of analyses, but will be considered in the Dodd-Frank analysis.

offender/the role of high-level personnel in the crime, and the criminal history of the offender/offending corporation. As the focal concerns framework suggests, judges also consider the protection of the community and future harm and victimization when making sentencing decisions. Similarly, in sentencing corporate cases, judges consider characteristics of the corporation that would entail additional potential victims in the event of recidivism, as large corporations with more employees and shareholders have potential for more future victims. Finally, judges consider practical constraints and consequences when making sentencing decisions. While a consideration of the focal concerns framework with corporate cases would not include the physical health or the ability of an individual offender to serve time, judges do consider the economic health and financial abilities of the corporation when making sentencing decisions. Because corporations play a critical role in the economy, judges may not render disproportionately heavy fines that would disrupt the economic role of the corporation especially as it may affect the livelihood of its employees and thereby the economic health of the community.

Given the parallels between the focal concerns framework and judges' considerations for just desserts and the ramifications of their sentencing decision, this chapter extends the focal concerns framework to corporate cases. The following sections test the framework using three outcome variables. The first analysis uses fine category as an outcome, the second uses the fine placement above the sentencing guideline as the outcome, and the third uses probation.

Financial Penalty

Using chapter eight cases with complete data, table 3 displays the multinomial logistic regression model results predicting the fine penalty in federal corporate cases. The base category

for this outcome measure of the fine penalty is $0-$99,999, the middle category is $100,000 to $999,999, and the highest fine category is > $1,000,000. Recall that whereas the base category does not distinguish between those cases in which the penalty was zero dollars versus those sanctioned with a monetary penalty up to $99,999, Piquero and Davis (2004) indicate that a fine is the most common sanction levied against corporations.

Table 3 has two panels—the first panel shows, the risk a corporation would have of receiving a fine in the middle category relative to receiving a fine in the base category, and the second panel shows the risk of receiving a fine in the high category relative to receiving a fine in the base category. The findings reported in this table and discussed below will henceforth be interpreted relative to the omitted category, the baseline fine ($0-$99,999). Column 1 displays parameter estimates for the restricted model that includes only *blameworthiness* variables. The blameworthiness variables include criminal history, acceptance of responsibility, obstruction of justice, managerial tolerance of criminal wrongdoing, and offense level (a measure of seriousness of the offense). In the restricted model with only blameworthiness variables, the tolerance of criminal wrongdoing, offense level, and acceptance of responsibility are statistically significant. This indicates that corporations with managers that knew about the crime are about three times at risk of receiving a fine in the middle fine category and nearly five times the risk of receiving a fine in the highest fine category. Additionally, the second panel of blameworthiness variables also shows that high levels of offense seriousness are associated with a 1.4 increased risk of receiving a fine in the highest fine category. Finally, the second panel shows that the company's acceptance of responsibility for the crime reduces the risk of receiving a fine in the highest fine category by about one-half.

Column 2 displays the parameter estimates for the restricted model including only the *protection of community* variables. The protection of community variables includes the ownership structure of the corporation, whether the corporation is a franchise or not, and the number of employees, which is measured with four categories: zero to 50 employees (the omitted category), 51 to 99, 100 to 499, and 500 and more employees. The model predicts that corporations that are not closely-held (the corporation's stock is publicly owned), compared to corporations that are closely-held (stock is privately held), are at half the risk of receiving a fine in the middle category. Further, corporations that are franchises have almost four times the risk of receiving a fine in the middle category and are at over four times the risk of receiving the highest fine category. Relative to corporations with less than 50 employees, corporations having 51 to 99 or 100 to 499 employees are at about two times increased risk of receiving a fine in the middle category. Corporations with 100 to 499 employees are at about three times the risk of receiving a fine in the highest category, and notably, those having 500 or more employees are at greater than 28 times the risk of receiving a fine within the highest fine category.

The third column displays the estimates from the restricted model containing only *the practical constraints and consequences* variables. These variables include the corporation's ability to pay the fine, the financial stability of the corporation, and the country of incorporation. Corporations that are financially able to pay the fine are at seven times the risk of receiving a fine in the middle category, and corporations that can pay the fine are at six times the risk of receiving a fine in the highest fine category. Additionally, corporations that are incorporated outside of the US are at almost 13 times the risk of receiving a fine in the highest fine category.

The fourth column reports the restricted model with only control variables. The control variables include whether or not the case went to trial, if the case was sentenced after the Booker

ruling, and if the corporation is considered established for criminal purposes. The results of the reduced control variable model suggests that compared to corporations that took a plea deal, those that went to trial are more than four times at risk of receiving a fine in the highest fine category. Additionally, cases tried after the Booker ruling are at almost two times the risk of receiving a fine in the highest fine category.

Before moving to the last two columns of table 3, note that table 4 presents the findings from a set of sensitivity analyses to determine whether the chapter eight results are robust across related samples. These sensitivity results are discussed below in conjunction with the full models. The sensitivity analyses use three separate samples. The first sample includes chapter eight cases with a missing indicator. In this type of analysis, missing values are recoded into an additional category for each variable. The second sample employed for the sensitivity analyses is a sample of all federal sentencing cases with complete data, and the third sample is comprised of all these cases using a missing indicator. The findings from the sensitivity analyses are reviewed in tandem with the full models.

Column 5 and column 6 display the results of the full model. Due to multicollinearity between the variables trial and acceptance of responsibility, each of these is included in separate models. Because these models yield comparable results, the findings from these models will be summarized together. The results of the full model show that among blameworthiness variables acceptance of responsibility, the managerial tolerance of criminal wrongdoing and offense level are statistically significant. Confirming hypothesis 1d, the model shows that corporations with managers who tolerated criminal wrongdoing are at over two times the risk of receiving a fine in the middle fine category. Likewise, those corporations with managers that tolerated criminal wrongdoing are at over two times the risk of receiving a fine in the highest fine category. The

results of the sensitivity analyses suggest that the managerial tolerance finding is robust across the multiple samples.

Resuming with the blameworthiness measures, the final model predicts that an increase in the offense level increases the risk of a fine in the middle category. Further, an increase in the offense level also increases the risk of receiving a fine in the highest fine category. These findings substantiate hypothesis 1e and are corroborated across sensitivity models. Additionally, supporting hypothesis 1b, the final model shows that the acceptance of responsibility decreases the risk of receiving a fine in the highest fine category over the lowest fine category. This finding also is robust across samples in the sensitivity analyses.

Continuing with the results from the final model in table 3, all of the protection of community variables are statistically significant. Contrary to hypothesis 2a, not closely-held corporations compared to closely-held corporations have a decreased risk of receiving a fine in the middle category. This finding is confirmed across the sensitivity analysis samples. Importantly, the results of the sensitivity analysis using all cases with a missing indicator reveal that corporations that are not closely-held are at an increased risk of receiving a fine in the highest fine category. This effect was not statistically significant in the main model of table 3. Further, confirming hypothesis 2b, corporations that are a franchise are at an increased risk of receiving a fine in the middle category and also are at an increased risk of receiving a fine in the highest category. This finding is also substantiated in the sensitivity analyses. Finally, validating hypothesis 2c, corporations with 500 or more employees are at about 16 times the risk of receiving a fine in the highest fine category. The results of the sensitivity analyses confirm this finding.

Turning to the full model results for the practical constraints and consequences variables, the ability to pay the fine and the country of incorporation remain statistically significant when all variables are included in the model. Substantiating hypothesis 3a, corporations that are able to pay the fine are at almost 14 times the risk of receiving a fine in the middle category. Further, corporations that are able to pay the fine are at approximately 28 times the risk of receiving a fine in the highest fine category. This finding is robust across all samples in the sensitivity analyses. Additionally, corporations that are incorporated outside of the United States are at over nine times the risk of receiving a fine in the highest fine category over the lowest fine category. This finding is confirmed across all samples of the sensitivity analyses. Finally, relative to the control variables, only the trial variable is statistically significant in this model. The model shows that corporations that went to trial are at over three and a half times the risk of receiving a fine in the highest category. This finding is robust across all sensitivity analysis samples. Finally, the pseudo R^2 for the final model shows that the variables in the final models explain 32 percent of the variation across the financial penalty categories.

Importantly, some variables did not result in statistically significant estimates in the final models. Among these are blameworthiness measures of criminal history and obstruction of justice, protection of community measures of corporations with 51 to 99 employees, practical constraints and consequences measures of financially secure corporations, and control measures of cases sentenced after the Booker ruling and those established for criminal purposes. While Piquero and Davis (2004) operationalize the fine outcome as a continuous variable, findings from this analysis are fairly comparable to theirs. Similar to the findings in this dissertation, Piquero and Davis' (2004) analyses reveal that corporations with managerial tolerance of criminal wrongdoing and closely-held corporations have an increased financial penalty. Further,

comparable to the findings of this dissertation, Piquero and Davis (2004) find the legal factors, prior criminal history, obstruction of justice, and whether the corporation was for criminal purpose had no effect on predicting the fine outcome. Differing from Piquero and Davis (2004), their analysis reveals that financial security has a statistically significant effect on fines with economically solvent corporations receiving higher fines. Continuing with the results of the other outcome variables, the next section presents the results for the analyses that use fine placement as an outcome measure.

Sentence Placement

Using chapter eight cases with complete data, table 5 presents the results of the logistic regression analyses predicting fine placement, which measures whether fines handed down by judges are greater than those reflected in the sentencing guidelines. The sentence placement is measured as a dichotomous variable. One indicates cases that were sentenced above the guideline range, and zero indicates cases that were not sentenced above the guideline range. Cases sentenced above the guideline range are considered to be sentenced more harshly.

The first column of table 5 displays the parameter estimates for the restricted model with only blameworthiness variables and shows that criminal history and offense level are statistically significant in determining whether a judge sentences a corporation to a fine that is above the sentencing guideline range. Criminal history increases the odds of a fine above the guideline range by 2.90. Interestingly, the model suggests that an increase in the offense level is associated with decreased odds of getting a fine above the guideline range. The second column presents the restricted model with only the protection of community variables. None of these variables are significant.

The third column presents the restricted model with the practical constraints and consequences variables.[15] Of the practical constraints variables, the corporation's ability to pay the fine is statistically significant. A corporation's ability to pay the fine substantially increases the odds of receiving a fine above the guideline range with an odds ratio exceeding 21. None of the control variables in column four are statistically significant.

Columns 5 and 6 in table 5 display the results of the full models. Sensitivity analyses are again conducted to test the robustness of the results. The results of the sensitivity analyses are displayed in table 6. The missing indicator models are excluded from the sensitivity analysis with the fine placement outcome due to too few cases in the missing indicator categories. The findings from these sensitivity analyses are reviewed in tandem with the full models. Additional sensitivity analyses are conducted for the fine placement outcome using Firth logistic regression, or the penalized likelihood method (Firth 1993). Given the rarity of the outcome event, above guideline range (4.19 percent), this estimation method reduces bias in binary outcomes when the sample size is small in one outcome category (King and Zeng 2001). The results of the Firth logistic regression are shown in Appendix A and are discussed with the full models below. As with the prior analysis, due to multicollinearity between the variables trial and acceptance of responsibility, each of these variables is included in separate models. Because these models yield similar results, the findings from these models will be summarized together.

In these full models, of the blameworthiness variables, criminal history and offense level are statistically significant. Confirming hypothesis 1a, corporations with a criminal history have over two and a half times the odds of receiving a fine above the guideline range. The results of the sensitivity analyses suggest that the criminal history finding is robust across models. Turning

[15]Importantly, the variable, country of incorporation, is excluded from this analysis because there are zero corporations that were both sentenced outside of the United States and sentenced above the guideline range. This is not an issue with the other analyses because there are enough cases in each of the outcome categories.

to Appendix A, the results of the Firth logistic regression also confirm this finding. Continuing with columns 5 and 6 in table 5, another blameworthiness variable, offense level, is statistically significant. However, counter to hypothesis 1e, an increase in the offense level actually reduces the odds of the sentence being above the guideline range. This finding is confirmed also in the sensitivity analyses across samples and in the Firth logistic regression models. Finally, one of the practical constraints and consequences variables is statistically significant in the full models. Substantiating hypothesis 3a, corporations with the ability to pay their fine have 10 times the odds of receiving a fine above the guideline range. This finding is substantiated in the sensitivity analyses and in the Firth models. The pseudo R^2 for the final models show that the variables explain 29 percent of the variation for the fine placement variable.

It is important to note that many (11 of 14) variables did not result in statistically significant estimates in the full models for fine placement. Among the blameworthiness measures, acceptance of responsibility, obstruction of justice, and managerial tolerance of criminal wrongdoing are not statistically significant. None of the protection of community measures are statistically significant in the full models. Additionally, of the practical constraints and consequences measures, financially security is not statistically significant. Finally, none of the control measures are statistically significant in the full models. In the next section, the results are discussed for the analysis that uses probation as an outcome measure.

Probation

Table 7 shows the results of the logistic regression model predicting probation using chapter eight cases with complete data as the prior two analyses do. As previously discussed, probationary sentences for corporations include strict guidelines to submit financial reports to the

probation officer or court (United States Sentencing Commission 2016b). Further, probation includes regular and unannounced examination of business records by the probation officer (United States Sentencing Commission 2016b). The probation outcome is measured as a dichotomous variable with one indicating that the corporation received a probation sentence and zero indicating that the corporation did not receive probation.

The first column of table 7 displays the reduced model with only the blameworthiness variables. None of the blameworthiness variables are statistically significant in the reduced models. The second column in table 7 displays the reduced model with the protection of community variables, none are significant. The reduced model with practical constraints and consequences measures is presented in the third column. Of these variables, country of incorporation is statistically significant in the reduced model. Corporations incorporated outside of the U.S. have about .3 times lower odds of receiving probation relative to those not incorporated outside the U.S. Finally, of the control variables, presented in column 4, none are statistically significant.

Column 5 in table 7 presents the full model including all measures. Again, sensitivity analyses are conducted using three samples to test the robustness of the findings. Comparable to the sensitivity analyses for the fine penalty, the three samples for sensitivity analyses consist of chapter eight cases with a missing indicator, all cases with complete data, and all cases using a missing indicator. Table 8 displays the results of the sensitivity analyses. In the full model, only one variable, country of incorporation is statistically significant. The model shows, contrary to hypothesis 3c, that corporations incorporated outside of the U.S. have decreased odds of receiving probation. Again, the finding is confirmed in the sensitivity analyses. Importantly, the

pseudo R^2 for the full probation model shows that the variables in the final model only explain 5 percent of the variation for the probation variable.

While the sensitivity analyses do substantiate what is found in the main models, these samples also reveal several statistically significant measures that were not significant in the main model. Turning to table 8, both the sample of chapter eight cases using a missing indicator and the sample of all cases using a missing indicator show that obstruction of justice and ability to pay the financial penalty have a statistically significant effect on probation outcomes. These two models show that corporations that obstructed justice have increased odds of receiving probation and corporations that were able to pay their fine had decreased odds of receiving probation. Further, the model using all cases with a missing indicator reports that criminal history and whether the corporation is a franchise also have a statistically significant effect on probation. The model shows that corporations with a criminal history have increased odds of receiving probation while corporations that are a franchise have decreased odds of receiving probation.

THE EFFECTS OF DODD-FRANK ON CORPORATE SENTENCING OUTCOMES

Nearly crippling the global economic system, the 2008 financial crisis ushered in the collapse of the stock market as well as the failure of major financial institutions (Barak 2012; Barnett 2013). The crisis initiated new legislative action and resulted in the passage of the Dodd-Frank Act that called for sentencing guideline changes and harsher sanctions for certain financial and mortgage crimes. However, this legislation has been largely criticized for insufficiently regulating financial businesses and for its failure to prosecute the actors involved in creating the crisis (Pontell et al. 2014).

Notably, previous sentencing research on individual offenders highlights the important effect of policy changes on sentencing outcomes. As previously noted, Crow and Bales (2006)

argue that policy changes must be considered in sentencing research as these policy decisions shape judicial decision making. Using the focal concerns framework, Crow and Bales (2006) consider sentencing guideline changes as a practical constraint and find that these guideline changes have a direct effect on sentencing decisions because they reduce judicial discretion and limit sentencing options.

Using this theoretical connection between the focal concerns framework and policy reform, which was established by Crow and Bales (2006), this final set of analyses considers how the implementation of Dodd-Frank, as a practical constraint, affects judicial decision making in corporate cases. Given the criticisms of the Dodd-Frank legislation, this set of analyses will examine whether Dodd-Frank had an effect on sentencing outcomes. In particular, the analysis focuses on the interaction between the Dodd-Frank decision making for corporate crimes in general and for financial crimes, in particular. The following set of analyses considers Dodd-Frank through the practical constraints and consequences lens, and tests this framework using three outcome variables. As in the analyses testing the focal concerns paradigm, the first analysis uses fine category as an outcome, the second uses the fine placement above the sentencing guideline as the outcome, and the third employs probation as the outcome.

Comparing Cases Before and After Dodd-Frank Legislation

Table 9 displays the descriptive statistics for the chapter eight cases with complete data and compares cases sentenced before and after the Dodd-Frank legislation. The table displays the comparisons across the three outcome variables, the fine category, the fine placement above the guideline range, and probation. Using a chi-square test of significance, the table indicates some significant differences in the characteristics of cases sentenced before and after Dodd-Frank.

Among all three outcomes samples, the chi-square test shows statistically significant differences in three of the blameworthiness variables, the percentage of corporations with criminal history, the percentage of corporations that accepted responsibility[16], and the average offense level. These tests suggest that following Dodd-Frank, more of the cases have a criminal history, more cases accept responsibility, and have a higher average offense level. Of the practical constraints measures, two variables show statistically significant differences for cases sentenced before and after Dodd-Frank. Following Dodd-Frank, fewer corporations were able to pay their financial penalty and more of the corporations sentenced were incorporated outside of the US.[17] Finally, notable from table 9 is that fewer of the cases brought before the Federal courts for sentencing after Dodd-Frank were financial crimes. Whereas these preliminary analyses indicate some impact of this legislation, the multivariate regression analyses will allow us to control for the unique effect of all the variables in our models for the three outcome measures.

Financial Penalty

Table 10 reports the relative risk ratios for the multinomial logistic regression models predicting financial penalty for chapter eight federal corporate cases with complete data. These models contain the focal concerns variables discussed in the previous section and introduce several variables relating to the Dodd-Frank decision. These additional variables include a dichotomous time measure to indicate whether the case was sentenced before or after Dodd-Frank (0=2001-2011 and 1=2012-2017), a dichotomous variable to indicate whether the

[16] This difference in cases accepting responsibility is approaching significance ($p<.10$) in the sample of cases used with the fine outcome and the sample used for the probation outcome.
[17] This difference in country of incorporation is approaching significance ($p<.10$) in the sample of cases used with the fine outcome and the sample used for the probation outcome.

corporation was charged with a financial crime (1=financial crime and 0=other crimes), and a continuous time measure to control for whether sentences generally changed (more lenient or harsher) over time (0=2001, 1=2002, … and 16=2017). Additionally, these models introduce an interaction term between the dichotomous Dodd-Frank decision variable and the dichotomous financial crime variable. Because the typical crimes committed in the global financial crisis were financial crimes, the interaction identifies if sentences got tougher for those types of crimes typical of the crisis. The focus of these analyses will be on the Dodd-Frank effects rather than the remaining variables in the models that were reviewed in the prior set of analyses.

Recall that in the multinomial logistic regression models, the base category for the outcome measure of the fine penalty is $0-$99,999, the middle category is $100,000 to $999,999, and the highest fine category is > $1,000,000. The findings reported in table 10 will be interpreted relative to the omitted category, the baseline fine ($0-$99,999).Table 10 contains two panels—the first panel shows, the risk a corporation would have of receiving a fine in the middle category relative to receiving a fine in the base category, and the second panel shows the risk of receiving a fine in the high category relative to receiving a fine in the base category. Turning to the first column in table 10, which includes a model with only the Dodd-Frank variables but no interaction term, none of the variables are statistically significant. Column 2 in table 10 displays a model with the Dodd-Frank variables and the interaction term. None of the variables are statistically significant in comparing the middle fine category to the lowest fine category. However, the financial crime variable and the interaction term are statistically significant when comparing the highest fine category to the lowest fine category. The significant interaction suggest that the Dodd-Frank decision moderates the relationship between the type of crime and the fine outcome. This suggests that prior to the Dodd-Frank legislation financial crimes have a

reduced risk of receiving a fine in the highest fine category. And, after the Dodd-Frank decision, corporations that commit financial crimes have a 1.76 greater risk of receiving a fine in the highest fine category.[18]

Columns 3 and 4 reintroduce the focal concerns variables into the model with the Dodd-Frank variables, excluding the interaction term. Importantly, the variables, accept responsibility and trial, are included in separate models due to multicollinearity, but these models are discussed together because the results of the variables of interest are similar. Of the Dodd-Frank variables, whether a case was sentenced after Dodd-Frank is statistically significant in comparing the middle fine category to the lowest fine category. This finding suggests that corporations sentenced after Dodd-Frank are at about two times the risk of receiving a fine in the middle fine category.

Column 5 and column 6 in table 10 contain the results of the full model with the interaction term. Notably, table 11 displays the results from a set of sensitivity analyses to determine the robustness of the chapter eight results. The sensitivity analyses again include a sample of chapter eight cases with a missing indicator, all cases with complete data, and all cases using a missing indicator. These sensitivity results are discussed below in conjunction with the full models. Again, the variables, trial and acceptance of responsibility, are included in different models due to multicollinearity, but these models will be summarized in tandem.

The results of the full model show that corporations sentenced after the Dodd-Frank decision have over three times the risk of receiving a fine in the middle category. This finding is confirmed across sensitivity analyses. Additionally, in comparing the highest fine category to the base category, financial crimes and the interaction term are statistically significant. Therefore,

[18] The interaction effect is calculated by adding the coefficient for main effect (financial crime) and the coefficient for the interaction term. The result is than exponentiated to calculate the risk ratio.

corporations that commit financial crimes before Dodd-Frank have a reduced risk of receiving a fine in the highest fine category. This finding is robust across samples. Counter to hypothesis 4a, but confirming competing hypothesis 4b, after Dodd-Frank, corporations that commit a financial crime have almost four times the risk of receiving a fine in the highest category suggesting that the courts were applying harsher sanctions to corporations convicted of financial crimes after Dodd-Frank. These findings are robust across all sensitivity samples except the sample with all cases and a missing indicator. It is important to also note that the continuous time variable, which controls for general trends in punitivness over time, is not significant in the main models. However, this variable is significant and has a positive relationship with financial penalties in the model with all cases and a missing indicator. Finally, the pseudo R^2 for the full interaction model shows that the variables in the models explain 33 percent of the variation across the financial penalty categories. Next, we turn to the outcome measuring judges' decisions to set fines above the sentencing guidelines.

Sentence Placement

Table 12 displays estimates from the logistic regression analyses predicting sentence placement above guideline range. This analysis includes chapter eight federal corporate cases with complete data. These models contain the focal concerns variables discussed in the previous section and introduce several variables relating to the Dodd-Frank decision. The first column in table 12 presents the odds ratios for fine placement with only the Dodd-Frank variables and no interaction term. In this model, none of the variables are statistically significant. The second column in table 12 includes Dodd-Frank variables and the interaction term between the Dodd-Frank decision and whether the crime was a financial crime. In this model, the interaction term is

significant with the Dodd-Frank decision moderating the relationship between financial crimes and sentence placement. Therefore, the significant interaction suggests that financial crimes are treated differently before and after the Dodd-Frank decision. After Dodd-Frank, financial crimes have about half the odds of receiving a fine above the guideline range.

Columns 3 and 4 report the odds ratios for the models that include both the focal concerns variables and the Dodd-Frank variables. Again, the variables, trial and acceptance of responsibility, are included in separate models due to multicollinearity. The Dodd-Frank variables are not significant in these models.

Column 5 and column 6 contain the results of the full models that include the focal concerns variables, the Dodd-Frank variables, and the interaction term. Again, the variables, trial and acceptance of responsibility, are included in separate models due to multicollinearity, but the findings from these models will be discussed together. Sensitivity analyses also are conducted to test the robustness of the results and are displayed in table 13. The missing indicator models are excluded from the sensitivity analysis with the fine placement outcome due to too few cases in categories. The findings from these sensitivity analyses are reviewed in tandem with the full models. Additional sensitivity analyses are conducted for the fine placement outcome using Firth logistic regression (Firth 1993). The results of the Firth logistic regression are displayed in Appendix B. Again, Firth logistic regression reduces bias when there are a small number of cases in one of the outcome categories.

Relative to the Dodd-Frank measures, financial crimes and the interaction term are statistically significant. The statistically significant interaction term suggests that the Dodd-Frank decision moderates the relationship between financial crime and fine placement. Corporations that commit a financial crime have about three and a half times the odds of receiving a fine

above the guideline range before the Dodd-Frank decision. And, financial crimes sentenced after the Dodd-Frank legislation have about half the odds of receiving a fine above the guideline range. The Firth logistic regression model in Appendix B confirms this finding. However, note that in the sensitivity analysis with all cases with complete data, the financial crimes variable is statistically significant, but the interaction term is not, but is in the same direction. The pseudo R^2 for the final models show that the variables explain 32 percent of the variation for the fine placement variable. In the next section, the results are discussed for the analysis that uses probation as an outcome measure.

Probation

Table 14 displays parameter estimates from the logistic regression analysis predicting probation for chapter eight federal cases with complete data. The probation outcome is measured as a dichotomous variable with one indicating that the corporation received a probation sentence and zero indicating that the corporation did not receive probation. Again, these models build on the focal concerns models and include Dodd-Frank variables and an interaction term. The first column reports the model that only includes the Dodd-Frank variables. Of these variables, the financial crimes variable is statistically significant. Therefore, the model predicts that corporations that have committed a financial crime have 1.44 times greater odds of receiving probation. Turning now to the second column, which includes both the Dodd-Frank variables and the interaction term, the financial crime variable is again significant. Therefore, corporations that commit financial crimes have 1.51 times the odds of receiving probation.

Column 3 displays the model with the focal concerns variables and the Dodd-Frank variables. Importantly, the financial crime variable is no longer statistically significant with the inclusion of the focal concerns variables.

Column 4 displays the full model with the focal concerns variables, the Dodd-Frank variables, and the interaction term. Again, sensitivity analyses are conducted using three samples to test the robustness of the findings. The sensitivity analyses are displayed in table 15. In the full model with the interaction term, none of the Dodd-Frank variables are statistically significant. Importantly, the pseudo R^2 for the final probation model shows that the variables in the final model only explain 6 percent of the variation for the probation variable. Clearly, there are other factors, such as other organizational efficiency, for which no measures are available that contribute to the judge's decision to sentence a corporation with probation.

The following chapter summarizes the purpose of this dissertation and the findings of these tests of the hypotheses. The discussion continues by elaborating the substantive implications of these findings.

CHAPTER FIVE: DISCUSSSION AND CONCLUSION

The primary purpose of this dissertation is to understand patterns of sentencing in corporate crime cases. This goal is accomplished in two distinct ways. First, this dissertation extends the focal concerns framework to understand sentencing disparities in corporate crime cases. Using multiple indicators for each of the three focal concerns, the results find support for the theory at the corporate level. Second, using the focal concerns framework, this dissertation examines the Dodd-Frank legislation as a practical constraint on sentencing and reveals the nuanced effects of this legislation on the sentencing of corporate financial crimes.

This dissertation speaks to several gaps in the literature, as scant research has previously explored the sentencing of corporations. Importantly, this dissertation makes considerable theoretical contributions by considering corporate sentencing through the focal concerns framework. This theory, which is rooted in research on sentencing disparities, provides a critical lens for understanding sentencing at the corporate level. This research not only has important implications for the focal concerns framework, but also the role of guidelines in sentencing outcomes. While missing data plagues the Federal Sentencing Commission's dataset, various sensitivity analyses test the robustness of the core findings. The following sections of the chapter highlight and synthesize these important findings within the context of the prior research on sentencing.

THE EXTENSION OF THE FOCAL CONCERNS FRAMEWORK

One of the primary aims of this dissertation is to extend the focal concerns framework, a theory previously used to understand the sentencing of individuals, to examine corporate

sentencing. Recall, according to the focal concerns framework, judges consider three focal concerns, blameworthiness, protection of the community, and practical constraints, when making sentencing decisions (Steffensmeier et al. 1998). This dissertation finds support for the focal concerns framework at the corporate level as it uses multiple indicators for each aspect of the focal concerns framework, and each of the three focal concerns find support among some of their indicators. Each of the outcomes considered in these analyses are discussed separately in the following sections.

Financial Penalty

As previously discussed, fines are the most common criminal sanction used in the sentencing of corporations under the Chapter Eight guidelines. Thus, an examination of financial penalties generates interesting results. In many ways, the focal concerns framework extends to corporate sentencing when financial penalties are handed down. That is, judges do consider blameworthiness, the protection of the community, and practical constraints when deciding the appropriate fine for a corporation.

First, the results find support for the blameworthiness aspect of the focal concerns framework. Again there is much overlap between the blameworthiness and the culpability score assigned under the Chapter Eight guidelines. Recall, the culpability score is based on (1) aggravating circumstances – managerial tolerance of criminal behavior, history of criminal behavior, violation of previous criminal order, and obstruction of justice – and (2) mitigating circumstances – an effective compliance program, self-report of the crime, cooperation in the investigation, and acceptance of responsibility. Thus, the blameworthiness measures derived

from this culpability score should have importance in judges' sentencing decisions in corporate cases.

The results of the analysis reveal that a corporation's blameworthiness is fairly important in influencing judges' decisions. In particular, managerial tolerance of criminal behavior has a positive relationship with financial penalties. Therefore, if a manager tolerated the crime, then the corporation is more likely to receive a high fine. Similarly, in individual cases, judges consider the offender's participatory role in the crime (Steffensmeier et al. 1998). Therefore, similarly at the corporate level, judges also consider the role managers play in the crime and sentence corporations to higher fines when the manager plays an active role. While Piquero and Davis (2004) operationalize the fine outcome as a continuous variable, findings from this analysis are comparable to theirs. Similar to the findings in this dissertation, Piquero and Davis' (2004) analyses reveal that corporations with managerial tolerance of criminal wrongdoing have an increased financial penalty.

Not surprisingly, the offense level is positively associated with the financial penalty, with more severe offenses awarded higher fines. As discussed previously, judges determine the base fine amount using the offense level. Thus, higher offenses carry a higher penalty. The offense levels used in the Chapter Eight guidelines are the same offense levels used in the Chapter Two guidelines. Importantly, as detailed previously, the Chapter Two guidelines, use the 'just desserts' framework, which gives importance to the seriousness of the crime (Von Hirsh 1987). Because the offense levels used for corporate cases parallel those in the Chapter Two guidelines, the judges should treat the most serious crimes the most harshly, which this finding confirms. The most serious corporate offenders are also considered the most blameworthy and most deserving of severe sentences.

Additionally, acceptance of responsibility was found to reduce the financial penalty for corporations. Therefore, corporations that accept responsibly for the crime are rewarded for their cooperation and receive a lesser sentence. Importantly, the acceptance of responsibility measure is highly correlated with the trial measure, suggesting that corporations that take responsibility for a crime are often pleading guilty as well. Similar to individual cases, courts reward those corporations that admit responsibility through a lesser sentence for freeing up court resources by not going to trial. This finding confirms the results of Piquero and Davis (2004), who also found that acceptance of responsibility reduces fines.

Importantly, the analyses use several measures to operationalize the blameworthiness aspect of the focal concerns framework. While the models do find support for the effects of managerial tolerance of the crime, the offense level, and the acceptance of responsibility on financial penalties, the measure for obstruction of justice and criminal history are not significant. Interestingly, the culpability score considers both obstruction of justice and criminal history, so it is surprising that they are not significant here. Additionally, criminal history certainly plays an important role in judicial decision-making processes for individual cases (Steffensmeier et al. 1998). Whereas obstruction of justice may be more of a subjective judgement, criminal history would be much more objectively measured following sentencing guidelines that demarcate fines assigned for such criminal history. (The findings from the next set of analyses seem to solve this puzzle.) While it is surprising that the measures are not significant in this analysis, Piquero and Davis (2004) also find that obstruction of justice and prior criminal offending do not affect financial penalties. Thus, the results of the analysis show that particular aspects of blameworthiness, managerial tolerance, offense level, and acceptance of responsibility affect

sentencing outcomes with the most blameworthy corporations who receive the toughest sentences.

Further, the results of the analysis reveal that judges also consider the protection of the community element of the focal concerns framework when making sentencing decisions. As previously mentioned, this aspect of the focal concerns framework focuses on punishing the offender in order to protect the community from potential victimization from future offending. In judges' efforts to protect the community, they may consider the size of the corporation (number of employees or whether the corporation is a franchise) in determining the potential for future victimization. The results of the analysis reveal that larger corporations, with more employees and those that are franchises, are more likely to receive a harsher fine penalty. Thus, judges take into consideration the likelihood of potential future victimization in making sentencing decisions.

Importantly, these larger corporations may also be considered more powerful because of their size. Recall, the literature on individual sentencing suggests that more powerful individuals are often awarded leniency in the criminal justice system (Clinard and Yeager 1980; Tillman and Pontell 1992, Van Slyke and Bales 2012). However, counter to much of the literature on individual sentencing, this analysis indicates that these large and powerful corporations are actually disadvantaged in the criminal justice system. Importantly, other measures of corporate power (worth of the corporation or size of the legal team) might reveal more consistent findings with literature on individual sentencing. Perhaps more pertinent would be an investigation of the nature of those corporate cases that are disposed of with deferred prosecution agreements relative to the cases that go to court for sentencing.

Finally, these analyses consider the practical constraints and consequences aspect of the focal concerns framework. The results of the analysis show that corporations incorporated

outside of the U.S. receive the harshest fines. It could be that corporations incorporated outside of the U.S. get the highest fines because other sentencing options are limited as it is more challenging to sentence a corporation outside of the U.S. to probation or community service. Therefore, higher fines are the primary option for these corporations.

Additionally, the results reveal that corporations that have the ability to pay the fine have an increased likelihood of receiving a high fine. Importantly, this finding is the opposite of Piquero and Davis (2004) who find that corporations that are unable to pay receive the highest fines. This could be attributed to different time points of data used, as Piquero and Davis use data from 1991-2001, which predates important legislative decisions such as Booker. Further, this is an interesting finding in light of the literature on individual sentencing. Again, much of the literature on white-collar individuals suggests that the wealthiest individuals receive lenient sentences because affluent criminals have the resources to hire the best lawyers, make appeals, hire private investigators, and locate witnesses. That is, white-collar criminals can afford better legal talent and have higher quality legal representation than street criminals or those with few resources (Reiman and Leighton 2010). While many powerful and wealthy corporations can evade prosecution because of deferred prosecution agreements, when these corporations do end up at the sentencing phase, they are given harsh financial penalties and are not protected by their "status shield" (Tillman and Pontell 1992). Alternatively, it could also be that the more financially secure corporations (those that are able to pay the fine) receive the toughest sentence because they can absorb those costs. In individual cases, judges consider the economic importance of those actors in the community (Van Slyke and Bales 2012). Thus, the same is true here. Those corporations that are financially able will receive *proportionally* tougher sentences to not disrupt the crucial role the corporation plays in the economy.

Taken together, the results of these analyses find support for the three aspects of the focal concerns framework operating at the corporate level, though not all indicators of these concepts receive support. Blameworthy corporations with a high number of potential future victims receive the toughest sentences, but judges are constrained by practical factors such as the corporation's ability to pay the fine and the physical location of the corporation (within the U.S. or outside). Importantly, the focal concerns framework speaks to how race, sex, class, and age factor into sentencing disparities in the criminal justice system. With a study of corporations, this theoretical framework would argue that sentencing disparities occur between those corporations in different power positions. Some corporations are larger, with more employees, or are more powerful than others in that they have more financial and economic influence. Importantly, the results of this dissertation reveal that these aspects of power actually increase the harshness of criminal penalties in corporate cases. This finding may be more in line with the limited research on individual white-collar offenders that argues that these offenders are treated more harshly (Testa 2017, Weisburd 1991; Wheeler et al. 1982), because they considered more blameworthy (Wheeler et al. 1982). Related to financial penalty is the second outcome measure of fine placement, which is discussed below.

Sentence Placement

In addition to studying the focal concerns framework using the financial penalty as an outcome, this dissertation also considers the fine placement as an outcome measure. Specifically, this dissertation assesses whether judges went above the recommended sentencing guideline when deciding a fine. While judges have fine ranges that are calculated using the Chapter Eight sentencing guidelines, they have the option to go above that fine range. Note, the 2005 Booker

ruling gave judges more discretion and made these guidelines advisory rather than mandatory. While guideline departures do happen in corporate cases, it is important to note that these departures are a rare event with less than three percent of cases being sentenced above the guideline range. This might suggest that judges view the suggested guidelines as significantly harsh and choose to stay within those fine ranges. Importantly, the fine placement models reveal that only three of the fourteen focal concerns measures affected this sentencing outcome.

Two of the blameworthiness measures, criminal history, and offense level, have an effect on the placement of the fine above the guideline range. Criminal history has a positive relationship with fine placement with corporations with a criminal history more likely to receive a fine above the guideline range. This is similar to individual cases, where those with a criminal history receive tougher sentences (Steffensmeier et al. 1998). Interestingly, while criminal history *was not* significant for determining the actual fine, it is significant in determining if judges will go above the prescribed guideline range. Arguably, judges take more seriously repeat offenders and view these corporations as more blameworthy and deserving not just higher financial penalties but penalties that go beyond the sentencing guidelines. Because the deterrence doctrine is an underlying rational for the Chapter Eight sentencing guidelines, judges may hope to deter repeat offending corporations by handing down severe sentences by going above the guideline range.

Opposite to what was expected, the offense level seriousness decreased the likelihood of a fine being above the guideline range. Similarly, while Piquero and Davis (2004) assess fine placement as above the median fine point, they also reveal that offense seriousness (measured as base fine) decreased the likelihood of the fine being placed within the upper end of the range. One potential explanation for this could be that the most serious offenses already carry the

highest financial penalty. Therefore, judges may exercise their discretion by not being overly harsh and sentencing above the guidelines for those crimes that already carry the harshest penalties.

One of the practical constraints variables, ability to pay fine, had an effect on judges' decisions to sentence above the guideline range. Those corporations that were able to pay the fine had an increased chance of receiving a fine above the guideline range. This suggests that those who are financially able receive the harshest sentences. Again, economically powerful corporations may not be protected in the criminal justice system in the same way economically advantaged individuals are. However, judges may also want to maintain the economic integrity of those most economically vulnerable corporations, so they only go above the guideline range if the corporation can financially absorb that fine. Judges do not want to bankrupt or put corporations out of business, so they may only go above the guideline range for corporations that are financially able to take on the burden.

Importantly, many of the variables were not found to be significant in the fine placement model. One explanation for this might be that judges have complete discretion when deciding to go above the prescribed sentence. Therefore, unlike determining the financial penalty, which has specific criteria, similar guidelines do not exist when judges decide to go above the fine ranges. This total discretion could explain why important legal variables such as managerial tolerance of criminal wrongdoing, acceptance of responsibility, or obstruction of justice are not being considered when judges decide to go above the guideline range. Importantly, judges might rely on other variables not captured in this data, such as the actual number of victims, the total worth of the company, the relationship between the judge and the offender, and the remorse of the offender.

Probation

Finally, the last outcome measure considered in this analysis was probation. Probation is an important outcome to consider because of the deterrence literature on corporate crime. Critics of the deterrence doctrine argue that inconsistent and weak sentencing, primarily due to plea bargains, undermines the certainty and severity of punishment, thereby reducing the deterrent effect of corporate sentencing. Further, laws regulating corporate activity are often ambiguous, and set standards, rather than rules (Szott Moohr 2006; Podgor 1994). These vague and ambiguous standards are easier to get around than laws, which undermine the certainty of punishment and its potential deterrent capacity. In fact, a recent systematic meta-analysis of research on corporate crime deterrence reports that laws, punitive sanctions, and regulatory policies have little or no significant deterrent effect on corporate criminal behaviors (Schell-Busey et al. 2016). However, regulatory policies that call for inspections and inquiry into corporations offer hope in deterring offending (Schell-Busey et al. 2016). Recall, corporate probation requires frequent and unannounced inspections into the corporation. Thus, given the potential deterrent effect of probation; it is an important outcome to consider.

However, only one measure, country of incorporation, a practical constraint measure, is statistically significant in this model. Country of incorporation has a negative relationship with probation with countries outside the United States being less likely to receive probation. This is most likely because it is a practical challenge for courts to sentence corporations outside the United States to probation because probation requires monitoring. If the corporation is not physically located within the United States, this monitoring may present a challenge to the court. Thus, although international corporations play a crucial role in the global economic system, this practical barrier may keep these corporations from getting this sentence.

More interesting with the probation model is the number of predictors that are not explaining this outcome measure. Again, while the Chapter Eight guidelines dictate judges' decisions for the financial penalty; judges do not have similar guidelines for deciding probation. Therefore, many of the variables found to be significant in the financial penalty model overlap with characteristics of the case that are considered when judges determine the fine outcome using the Chapter Eight guidelines. However, judges have almost total discretion when determining whether to give corporations probation. Therefore, judges are not bound to any guidelines and are free to decide which corporations get probation and for how long. Unfortunately, the variables included here give little insight into how judges make their decision to give probation. This might suggest that judges consider factors outside of the focal concerns framework when making probation decisions, and that sentencing decisions around probation are made using other criteria.

Whereas only mixed support is found for the indicators of the three aspects of focal concerns, these results mostly mirror those of Piquero and Davis (2004) even though these authors examine cases from a different timeframe and use different measures for these sentencing outcomes. Based on the relative consistency between Piquero and Davis' study and the present study, these findings seem to be robust and instill confidence in the soundness of the conclusions. Furthermore, the sensitivity analyses provide further assurance of the robustness of these results.

THE EFFECTS OF DODD-FRANK ON CORPORATE SENTENCING

Crow and Bales (2006) highlight the importance of considering legislation and guideline changes in sentencing research. As they argue, legislative changes can be considered within the

focal concerns framework as a practical constraint, as guideline changes constrain sentencing options for court actors (Crow and Bales 2006). Following the work established by Crow and Bales (2006), this dissertation considers the Dodd-Frank decision as a practical constraint within the focal concerns framework and aims to understand the role of the Dodd-Frank legislation in shaping sentencing outcomes for corporations following its implementation. Recall that this set of analyses adds a dichotomous measure indicating the years before the Dodd-Frank legislation was implemented (coded as zero) and those years following (coded as one). In addition, an interaction term is created using this measure along with a dummy indicator for cases that are financial crimes.

Given the previous literature on Dodd-Frank and legislative changes following financial crises, competing hypotheses are tested regarding the Dodd-Frank legislation. Because of the criticisms of the Dodd-Frank legislation (Pontell et al. 2014), the null hypothesis is test that the Dodd-Frank legislation would have no effect on the harshness of punishment of financial crimes following the implementation of the legislation. On the other hand, it was hypothesized that, after Dodd-Frank was legislated, financial crimes would be sentenced more harshly than other types of corporate crimes, because financial crimes where the typical crime associated with the crisis. Again, because the outcome variables produce distinctive results, each outcome will be discussed and summarized separately below.

Financial Penalty

Using financial penalty as the outcome, the results of the analysis show that the Dodd-Frank legislation has a significant effect on the severity of sentencing for corporations. In particular, before the Dodd-Frank legislation, financial crimes have a negative relationship with

fine penalties. That is, corporations that commit financial crimes have a decreased likelihood of receiving a harsh financial penalty. However, after the Dodd-Frank decision, corporations that commit financial crimes are at a higher risk of receiving a high financial penalty.

This is a significant finding in light of the critiques of the Dodd-Frank legislation (Pontell et al. 2014). Recall, Pontell et al. (2014) argue that the Dodd-Frank legislation did little to increase punishment for white-collar offenders and did little to prevent future white-collar crises. Indeed, as Pontell et al. (2014) note, the government consciously chose to forego harsh punishment for those specifically involved with creating the global financial crisis. However, as this analysis shows, this legislation has had lasting effects for those corporations that are convicted of financial crime with sentences notably harsher for financial crimes after the Dodd-Frank decision. This might suggest that the legislation did in fact work to the extent that sentence became tougher for some types of crimes.

The significant interaction between financial crimes and the Dodd-Frank legislative decision speak to the arguments presented by Calavita and Pontell (1994) regarding the savings and loan crisis. As Calavita and Pontell (1994) argue, following the savings and loan crisis, there was a selective 'social movement' against white-collar crime (Katz 1980), which specifically targeted the financial crimes typical of the crisis. Calavita and Pontell (1994) find that crimes that threaten economic stability carry the harshest sentences. Similar to Calavita and Pontell (1994), the results of this dissertation support this selective crackdown on white-collar crimes. In particular, following the 2008 global financial crisis, and the Dodd-Frank legislation, sentences got tougher for financial crimes, the crime typically associated with the crisis.

Sentence Placement

The results of the fine placement model produce important results regarding judges' decision-making processes following the implementation of the Dodd-Frank legislation. The fine placement model suggests that before the Dodd-Frank legislation, corporations that commit financial crimes are more likely to receive a fine that was above the guideline range. Interestingly, after the Dodd-Frank legislation, corporations that commit financial crimes are less likely to get a sentence above the guideline range.

Therefore, as the previous results suggest, sentences did in fact, get tougher after Dodd-Frank for corporations convicted of a financial crime, but judges are also less likely to go above the prescribed guideline range following this legislative decision. Arguably, despite the sentencing guideline changes giving judges more discretion in their decisions, judges exercise their discretion by not going above the guideline ranges. As Crow and Bales (2006) and Engen and Steen (2000) argue, guideline changes often limit the discretion of judges, but courtroom actors find ways to readjust practices to account for these legislative changes. Further, Hagan and Palloni (1986) find that white-collar offenders were more likely to be imprisoned after Watergate, but that they were also sentenced for shorter lengths (Hagan and Palloni 1986). Similarly, this dissertation finds that judges, in fact, hand down stricter sentences as prescribed in sentencing guidelines; but judges are choosing to stay within the guidelines rather than being overly harsh and go above the proscribed ranges.

Probation

This dissertation also considers the effects of the Dodd-Frank legislation on probation as a sentencing outcome. Interestingly, none of the Dodd-Frank measures affect the probation

outcome. As previously discussed, the guidelines that dictate the financial penalty do not apply to probation. Probation is not among the sentencing guidelines for these crimes. Thus, judges have almost full discretion in deciding to sentence a corporation to probation and the length of that probation. Because the changes made from Dodd-Frank would specifically alter the guidelines for the financial penalty, it is unsurprising that Dodd-Frank had little effect on the probation outcome. Therefore, judges continue to operate with complete discretion when it comes to probation before and after the implementation of Dodd-Frank.

IMPLICATIONS

Importantly, little theoretical consideration has been given to sentencing decisions in corporate cases, so important theoretical implications may be drawn from this study. In many ways, judges operate in a similar manner when meting out sentences for both individual cases and corporate cases, and consider the three focal concerns when handing down sentences. The focal concerns framework, an individual level theory, may be applicable for understanding judges' sentencing rationales at the corporate level. We see this in the way that various indicators of each aspect of the focal concerns perspective find support in these analyses.

As previously noted, the focal concerns framework is rooted in the conflict perspective, as this theory attempts to explain the sentencing disparities that exist in the criminal justice system. This research has important implications for understanding those disparities. While rare, when powerful corporations advance to the sentencing phase, they are faced with tough treatment, and not granted the leniency often experienced by powerful individual offenders. This finding of harsher penalties for larger corporations may indicate that the cases that go before the court at the sentencing phase act as a scapegoat for those cases that are protected through

deferred prosecution agreements. Recall, corporations that take these deferred prosecution agreements are often afforded great leniency with almost half receiving no financial penalty at all (Garrett 2014); thus, these results are conditioned by the fact that the most powerful corporations do not end up in the sentencing data. Garrett (2014) finds that corporations with resources for strong legal defense teams often pursue these deferred prosecution agreements. Therefore, judges may be responding to policies demanding harsher penalties and making up for the leniency granted to those cases that are filtered out of the criminal justice system at the prosecution stage. Indeed, this may also speak to shifts in perceptions about the seriousness of corporate offenders in light of decades of major publicized white-collar events. Thus, judges, especially at the corporate level, may be experiencing a shift towards harsher treatment of the most blameworthy and responsible class of offenders who cause great physical harm (Reiman and Leighton 2010) and financial harm (Friedrichs 2010).

It could also be argued that judges give proportionally tougher sentences to those larger and wealthier corporations because they have the ability to absorb those costs without disrupting their business. In that sense, whether one is considering the deferred prosecution agreements or the harsh sentences given to corporations that can absorb the fines, courts are still operating to promote a pro-business environment as they consider the role of corporation in the economy when handing down sentences. Therefore, much in line with a conflict approach, one could argue that the criminal justice system does favor big businesses by awarding leniency through deferred prosecution agreements and by protecting economic integrity by awarding fines based on the corporation's financial abilities.

Focusing on the courts' decisions in sentencing corporations, this research also has important implications for the role of sentencing guidelines and the effects of the Dodd-Frank

legislation on sentencing outcomes. Interestingly, while Dodd-Frank was formulated to target and reduce the crimes of the most powerful corporations, given the role of deferred prosecution agreements, many of the most powerful corporations, who the law was intended for, do not end up at the sentencing phase in the criminal justice system. Therefore, because the largest and most powerful corporations evade punishment, the effects of the Dodd-Frank legislation, specifically an increase in the severity of sentences, falls on those smaller and less powerful corporations that do not have the legal resources to escape prosecution. Again, this might indicate that the less powerful corporations act as a scapegoat for those cases that negotiated deferred prosecution agreements.

Further, in many ways, the Chapter Eight guidelines are operating as intended in sentencing corporate cases. Indeed, the culpability score given under Chapter Eight, which dictates sentencing outcomes for corporations, seems to give the harshest sentences to the most blameworthy and serious offenders. Different from individual sentencing guidelines, which in recent decades operate primarily under the retribution, or 'just desserts' model (Von Hirsh 1987), recall that the corporate sentencing guidelines—that is, the Chapter Eight sentencing guidelines—promote restitution and deterrence (Murphy 2002; Nagel and Swenson 1993). Perhaps future policy-making considerations could be given to aspects of the Chapter Eight guidelines that also could function to reduce disparities in sentencing outcomes in individual cases as well.

However, it is important to note that while class differences certainly effect sentencing decisions at the individual level, race also continues to be one of the most salient predictors of sentencing disparities in the criminal justice system (Steffensmeier et al. 1998), which is, of course, not an issue at play in Chapter Eight sentencing (even though one could potentially test

the effects of the racial makeup of a corporation if those details of the cases were available). Nevertheless, different extra-legal variables may be at play among the factors that influence disparities in sentencing corporate cases—variables for which measures are not available within the Commission's corporate court data. The racial composition of a corporation and its influence on sentencing could be an important project for future research on sentencing corporate crimes.

LIMITATIONS

While this dissertation adds essential insight into the study of corporate sentencing, it is not without limitations. One limitation of this dissertation is that many of the largest and most powerful corporations that commit crimes will not appear in the Commission's sentencing data because of deferred prosecution agreements. As previously discussed, deferred prosecution (or non-prosecution) agreements, help these more prominent corporations avoid punishment and sentencing (Garrett 2014; Yeager 2016b). As Garrett (2014) notes, 250 corporate cases avoided criminal charges and sentencing in the past decade because of deferred prosecution agreements. Because prosecutors are often at a disadvantage when taking on the largest corporations, the experienced legal teams of the wealthiest corporations are able to negotiate these deferred prosecution agreements with the courts, which awards the most powerful corporations with leniency (Garrett 2014). Importantly, the cases that end up before the court and in the Commission's data are those corporations that were unable to avoid criminal charges because they lacked the financial resources or did not have the experienced legal teams that can navigate the complexities of the corporate criminal justice system.

While the most powerful corporations are not in the commission's data due to deferred prosecution agreements (Garrett 2014), some speculations can be drawn about how these cases

might impact the results. On the one hand, it could be argued that if these influential cases were not filtered out at the prosecution phase the most powerful corporations would in fact be awarded the same leniency at the sentencing stage. That is, if deferred prosecution agreements were eliminated, the most powerful corporations would instead receive comparably light sentences at the sentencing stage. On the other hand, judges may also respond to the policy-makers' pressures for harsher sentencing for any powerful corporation that comes before the court. Because the results of this dissertation suggest that the larger and more powerful corporations—those with the most employees and the ability to absorb financial penalties—receive tougher sentences, it is reasonable to argue that the corporations that receive deferred agreements would also receive the toughest sentences, as these cases are the largest and most powerful corporations.

A second limitation of the dissertation is selection bias due to large numbers of missing cases in the dataset. Recall that Alexander et al. (2000) reported these limitations of the Commission's data. As Alexander et al. (2000) note in their focus on publicly-traded corporations, that because of recording error, the Commission's data is missing some of these corporate cases that were convicted and brought before the court. In particular, these missing cases have some of the largest fines relative to the Commission's data (Alexander et al. 2000). Beyond Alexander's work, the Commission's data for the years of interest contain high percentages of missing information on several of the key variables of interest. For example, the measures obstruction of justice, tolerance of criminal wrongdoing, acceptance of responsibility, and offense level have over 50 percent missing. Again, missing data on cases can cause methodological issues and may lead to selection bias in the analysis when a large number of cases are excluded (Berk and Ray 1982). In order to compensate for the large amount of missing data, sensitivity analyses are conducted to test the robustness of the results. Using missing

indicator models as a sensitivity check attempts to reduce any bias caused by the missing data, but it is crucial to acknowledge this as a limitation of the study. As Simpson (2018) notes, reliable data continues to be a barrier for researchers studying corporate criminality. Importantly, this dissertation cannot draw generalizations about the sentencing of all corporations, but rather just the corporations that are in this dataset as many corporations are still missing from the data.

Additionally, the cases analyzed in this dissertation only capture a small proportion of all corporate criminality. That is, this dissertation only includes those cases that are criminally charged on the federal level. It is important to note that civil actions are often taken against corporations, but these civil cases will not show up in the Commission's data.

A final limitation of the dissertation is that the Commission's sentencing data on corporations does not include information on the characteristics of judicial district where the case was sentenced. As sentencing on individual white-collar offenders suggests contextual variations in judicial districts shape sentences outcomes for white-collar criminals, with some judicial districts being more proactive in their sentencing (Hagan et al. 1980; Nagel and Hagan 1982). While the Commission's data includes information on the judicial district for individual cases, this information is not provided for the corporate cases, so these contextual variations cannot be assessed in this dissertation.

FUTURE RESEARCH

The findings from this dissertation highlight the need for continued research in the area of corporate sentencing. As previously noted, one limitation of this research is that it only captures a small proportion of corporate crime. Therefore, future research should consider all cases, including civil cases, in order to gain a full understanding of corporate misconduct. Importantly,

some scholars have begun to recognize and manage this data limitation. In particular, Simpson and Yeager (2015) have proposed a complete dataset on corporate wrongdoings that would include criminal, civil, and regulatory misconduct. This type of database would be crucial for future research on the punishment of corporate wrongdoers.

Furthermore, future research would also benefit greatly from supplemental interviews with judges. While the results of the quantitative analysis can provide insight into the focal concerns processes at play, future research should continue to explore judicial decision-making processes through qualitative inquiry. In particular, the results of these analyses suggest that judges use great discretion when deciding to go above the guidelines or when deciding to give a corporation a probation sentence. Therefore, future research is needed to understand how judges make these decisions. Interviews with judges may capture these mechanisms not measured in this dissertation and may lead to a better understanding of what factors lead to guideline departures and probation decisions. Additionally, future research that includes interviews with judges should also speak to the reasons why guideline departures decreased following the implementation of Dodd-Frank. This research might also consider whether the courts response to Dodd-Frank dissipated over time.

Finally, future research should also continue to consider the role of prosecutors in creating sentencing disparities at the corporate level. As previously discussed, prosecutors play an essential role in shaping whether a corporate case continues to the sentencing phase. However, prosecutors also decide with what crime a corporation is charged and often negotiate plea deals. This role of prosecutors has shown to be vital in individual sentencing cases. For example, recall that Engen and Steen (2000) find evidence that prosecutors often change their practices to induce guilty pleas for lesser charges as sentencing options change. Therefore, as the

literature on individual sentencing suggests, prosecutors play an equally important part as judges do in shaping sentencing disparities. Thus, future research on sentencing at the corporate level should consider the effect of both judges and prosecutors on sentencing outcomes.

REFERENCES

Albonetti, Celesta A. 1986. "Criminality, Prosecutorial Screening, and Uncertainty: Toward a Theory of Discretionary Decision making in Felony Case Processings." *Criminology* 24(4): 623-644.

Albonetti, Celesta A. 1987. "Prosecutorial Discretion: The Effects of Uncertainty." *Law and Society Review* 21(2): 291-313.

Albonetti, Celesta A. 1991. "An Integration of Theories to Explain Judicial Discretion." *Social Problems*, 38(2): 247-266.

Alexander, Cindy R., Jennifer Arlen, and Mark A. Cohen. 2000. "Evaluating Trends in Corporate Sentencing: How Reliable are the US Sentencing Commission's Data." *Federal Sentencing Reporter,* 13(2): 108-113.

Alexander, Cindy R. and Mark A. Cohen. 2011. "The Causes of Corporate Crime: An Economic Perspective". Pp. 11-37 in *Prosecutors in the Boardroom: Using Criminal Law to Regulate Corporate Conduct*, edited by Anthony S. Barkow and Rachel E. Barkow. New York, NY: New York University Press.

Anderson, Amy L., and Cassia Spohn. 2010. "Lawlessness in the Federal Sentencing Process: A test for Uniformity and Consistency in Sentence Outcomes." *Justice Quarterly*, 27(3): 362-393.

Balsmeier, Phillip, and Jennifer Kelly. 1996. "The Ethics of Sentencing White-Collar Criminals." *Journal of Business Ethics*, 15(2): 143-152.

Barak, Gregg. 2012. *Theft of a Nation: Wall Street Looting and Federal Regulatory Colluding*. Lanham, MD: Rowman & Littlefield.

Barnett, Cynthia. 2000. “The Measurement of White-Collar Crime using Uniform Crime Reporting (UCR) Data.” *US Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Division*.

Barnett, Harold. 2013. “And Some with a Fountain Pen: Mortgage Fraud, Securitization, and the Subprime Bubble.” Pp. 104-129 in *How They Got Away with it: White Collar Criminals and the Financial Meltdown*, edited by Susan Will, Stephen Handelman, and David C. Brotherton. New York, NY: Columbia University Press.

Beccaria, Cesare. 1963. *On Crimes and Punishments*. New York, NY: Prentice-Hall.

Benson, Michael L. and Esteban Walker. 1988. “Sentencing the White-Collar Offender.” *American Sociological Review,* 53(2): 294-302.

Bentham, Jeremy. 1948. *An Introduction to the Principles of Morals and Legislation*. New York, NY: Hafner.

Berk, Richard A. and Subhash C. Ray. 1982. “Selection Biases in Sociological Data.” *Social Science Research,* 11(4): 352-398.

Bonger, Willem Adriaan. 1916. *Criminality and Economic Conditions*. Boston, MA: Little, Brown, and Company.

Bowman III, Frank O. 2003. “The Sarbanes-Oxley Act and What Came After.” *Federal Sentencing Reporter*. 15(4): 231-233.

Braithwaite, John.1984. *Corporate Crime in the Pharmaceutical Industry*. New York, NY: Routledge & Kegan Paul.

Braithwaite, John, and Gilbert Geis. 1982. “On Theory and Action for Corporate Crime Control.” *Crime & Delinquency* 28(2): 292-314.

Cafruny, Alan W. and Herman M. Schwartz. 2013. “Exploring the Global Financial Crisis.” Pp. 1-12 in *Exploring the Global Financial Crisis*, edited by Alan W. Cafruny and Herman M. Schwartz. Boulder, CO: Lynne Rienner Publishers.

Chibe, Russell J. 2006. “A Golden Age of White-Collar Criminal Prosecution.” *Journal of Criminal Law & Criminology*, 96(2): 389-395.

Calavita, Kitty, and Henry N. Pontell. 1990. “‘Heads I Win, Tails You Lose’: Deregulation, Crime, and Crisis in the Savings and Loan Industry.” *Crime & Delinquency*, 36(3): 309-341.

Calavita, Kitty, and Henry N. Pontell. 1993. “Savings and Loan Fraud as Organized Crime: Toward a Conceptual Typology of Corporate Illegality.” *Criminology* 31(4): 519-548.

Calavita, Kitty, and Henry N. Pontell. 1994. “The State and White-Collar Crime: Saving the Savings and Loans.” *Law and Society Review* 28(2): 297-324.

Calavita, Kitty, Robert Tillman, and Henry N. Pontell. 1997. “The savings and loan debacle, financial crime, and the state.” *Annual Review of Sociology* 23(1): 19-38.

Carroll, John S., and John W. Payne. 1976. “The Psychology of the Parole Decision Process: A Joint Application of Attribution Theory and Information Processing Psychology.” Pp. 109-123 in *Cognition and Social Behavior*, edited by John S. Carroll and John W. Payne. Hillsdale, NJ: Erlbaum.

Chambliss, William J. 1969 *Crime and the Legal Process*. New York, NY: McGraw-Hill.

Christie, Les. 2009. “Foreclosures up a record 81% in 2008.” *CNN Money*, January 15.

Claessens, Stijn, Giovanni Dell’Ariccia, Deniz Igan, and Luc Laeven. 2010. “Cross-Country Experiences and Policy Implications from the Global Financial Crisis.” *Economic Policy* 25(62): 267-293.

Clinard, Marshall B. and Richard Quinney. 1973. *Criminal Behavior Systems: A Typology*. New York, NY: Holt, Rinehart and Winston.

Clinard, Marshall B. and Peter Yeager. 1980. *Corporate Crime: The First Comprehensive Account of Illegal Practices among America's Top Corporations*. New York, NY: Free Press.

Coleman, James William. 2005. *The Criminal Elite: Understanding White-Collar Crime*. 6th edition. New York, NY: Worth Publishers.

Comey Jr., James B. 2009. Go Directly to Jail: White Collar Sentencing after the Sarbanes-Oxley Act. Harvard Law Review, 122 (6), 1728-1749.

Conklin, John E. 1977. *Illegal but not Criminal: Business Crime in America*. Englewood Cliffs, NJ: Prentice-Hall.

Conniff, Christopher P., Steven S. Goldschmidt, and Helen Gugel. 2013. "Sentencing Guidelines for Insider Trading: Recent Amendments Create Greater Disparity." *Federal Sentencing Reporter* 26(1): 43-48.

Conrad, Charles. 2004. "The Illusion of Reform: Corporate Discourse and Agenda Denial in the 2002 'Corporate Meltdown.'" *Rhetoric & Public Affairs* 7(3): 311-338.

Cressy, Donald R. 1953. *Other People's Money*. Glencoe, IL: Free Press.

Crow, Matthew S., and William Bales. 2006. "Sentencing Guidelines and Focal Concerns: The Effect of Sentencing Policy as a Practical Constraint on Sentencing Decisions." *American Journal of Criminal Justice* 30(2): 285-304.

Dinkoff, Allan. 2011 "Corporate Compliance Programs after Dodd-Frank." Retrieved from https://www.weil.com/~/media/files/pdfs/corporate_compliance_post_dodd-frank_aelc_oct.pdf

Dodd-Frank Wall Street Reform and Consumer Protection Act, H.R. 4173, 111th Congress. 2010.

Doerner, Jill K., and Stephen Demuth. 2009. "The Independent and Joint Effects of Race/Ethnicity, Gender, and Age on Sentencing Outcomes in US Federal Courts." *Justice Quarterly* 27(1): 1-27.

Engen, Rodney L., and Sara Steen. 2000. "The Power to Punish: Discretion and Sentencing Reform in the War on Drugs." *American Journal of Sociology* 105(5): 1357-1395.

Eitle, David J. 2000. "Regulatory Justice: A Re-Examination of the Influence of Class Position on the Punishment of White-Collar Crime." *Justice Quarterly,* 17(4):809-839.

Etzioni, Amitai. 1993. "The US Sentencing Commission on Corporate Crime: A Critique." *The Annals of the American Academy of Political and Social Science* 525(1): 147-156.

Fasenfest, David. 2010. "Neoliberalism, Globalization and the Capitalist World Order." *Critical Sociology,* 36(5): 627-631.

Ferguson, Niall. 2008. *The Ascent of Money: A Financial History of the World*. New York, NY: Penguin.

Firth, David. 1993. "Bias Reduction of Maximum Likelihood Estimates." *Biometrika* 80(1): 27-38.

Friedrichs, David. 2010. *Trusted Criminals: White Collar Crime in Contemporary Society.* 4th edition. Belmont, CA: Cengage Learning.

Forslund, Morris A. 1969. "Age, Occupation, and Conviction Rates of White and Negro Males: A Case Study." *Rocky Mountain Social Science Journal.* 141-146.

Foster, John Bellamy and Fred Magdoff. 2009. *The Great Financial Crisis: Causes and Consequences*. New York, NY: NYU Press.

Galvin, Miranda A. 2015. "Sentencing Corporate Crime: Responses to Scandal and Sarbanes-Oxley." Master's Thesis, Department of Criminology and Criminal Justice, University of Maryland.

Garrett, Brandon. 2014. *Too Big to Jail: How Prosecutors Compromise with Corporations*. Cambridge, MA: Harvard University Press.

Giordano, Peggy C. 1983. "Sanctioning the High-Status Deviant - an Attributional Analysis." *Social Psychology Quarterly,* 46(4): 329-342.

Hagan, John. 1974. "Extra-Legal Attributes and Criminal Sentencing: An Assessment of a Sociological Viewpoint." *Law & Society Review,* 8(3): 357-384.

Hagan, John L. and Ilene H. Nagel. 1982. "White-Collar Crime, White-Collar Time: The Sentencing of White-Collar Offenders in the Southern District of New York." *American Criminal Law Review,* 20: 259-289.

Hagan, John, Ilene H. Nagel, and Celesta Albonetti. 1980. "The Differential Sentencing of White-Collar Offenders in 10 Federal District Courts." *American Sociological Review,* 45(5): 802-820.

Hagan, John, and Alberto Palloni. 1986. "Club Fed and the Sentencing of White-Collar Offenders Before and After Watergate." *Criminology,* 24(4): 603-621.

Hagan, John, and Patricia Parker. 1985. "White-Collar Crime and Punishment: The Class Structure and Legal Sanctioning of Securities Violations." *American Sociological Review,* 50(3): 302-316.

Harvey, David. 2005. *A Brief History of Neoliberalism*. New York, NY: Oxford University Press.

Harvey, David. 2007. “Neoliberalism as Creative Destruction.” *The Annals of the American Academy of Political and Social Science,* 610(1): 21-44.

Izraeli, Dove, and Mark S. Schwartz. 1998. “What can we learn from the US Federal Sentencing Guidelines for Organizational Ethics?” *Journal of Business Ethics,* 17(9-10): 1045-1055.

Johnson, Brian D. 2005. “Contextual Disparities in Guidelines Departures: Courtroom Social Contexts, Guideline Compliance, and Extralegal Disparities in Criminal Sentencing.” *Criminology* 43(3): 761-796.

Johnson, Brian D., Jeffery T. Ulmer, and John H. Kramer. 2008. “The Social Context of Guidelines Circumvention: The Case of Federal District Courts.” *Criminology,* 46(3): 737-783.

Katz, Jack. 1980. "Social Movement Against White-Collar Crime" in Criminology Review Yearbook, edited by Egon Bittner and Sheldon Messinger. Beverly Hills: Sage.

King, Gary, and Langche Zeng. 2001. “Explaining Rare Events in International Relations.” *International Organization* 55(3): 693-715.

Klein, Dorie, and June Kress. 1976. “Any Woman’s Blues: A Critical Overview of Women, Crime, and the Criminal Justice System.” *Crime and Social Justice,* 0(5): 34-50.

Konings, Martijn. 2010. “Neoliberalism and the American State.” *Critical Sociology,* 36(5): 741-765.

Kotz, David M. 2015. *The Rise and fall of Neoliberal Capitalism*. Cambridge, MA: Harvard University Press.

Kramer, John H., and Jeffery T. Ulmer. 2009. *Sentencing Guidelines: Lessons from Pennsylvania*. Boulder, CO: Lynne Rienner Publishers.

Kutateladze, Besiki L., Nancy R. Andiloro, Brian D. Johnson, and Cassia C. Spohn. 2014. "Cumulative Disadvantage: Examining Racial and Ethnic Disparity in Prosecution and Sentencing." *Criminology* 52(3): 514-551.

Lin, Ken-Hou, and Donald Tomaskovic-Devey. 2013. "Financialization and U.S. Income Inequality, 1970–2008." *American Journal of Sociology*, 118(5): 1284–1329.

Little, Roderick JA, and Nathaniel Schenker. 1995. "Missing Data." Pp. 39-75 in *Handbook of Statistical Modeling for the Social and Behavioral Sciences*, edited by Gerhard Arminger, Clifford C. Clogg, Michael E. Sobel. Boston, MA: Springer.

Lizotte, Alan J. 1978. "Extra-Legal Factors in Chicago's Criminal Courts: Testing the Conflict Model of Criminal Justice." *Social Problems* 25(5): 564-580.

Maddan, Sean, Richard D. Hartley, Jeffery T. Walker, and Mitchell Miller. 2012. "Sympathy for the Devil: An Exploration of Federal Judicial Discretion in the Processing of White-Collar Offenders." *American Journal of Criminal Justice*, 37(1): 4–18.

March, James G., and Herbert Alexander Simon. 1958. *Organizations*. New York, NY: Wiley.

McBarnet, Doreen. 2006. "After Enron will 'Whiter than White Collar Crime Still Wash?" *British Journal of Criminology* 46(6): 1091-1109.

McKendall, Marie, Beverly DeMarr, and Catherine Jones-Rikkers.2002. "Ethical Compliance Programs and Corporate Illegality: Testing the Assumptions of the Corporate Sentencing Guidelines." *Journal of Business Ethics* 37(4): 367-383.

McMichael, Philip. 2017. *Development and Social Change: A Global Perspective.* 7th edition. Thousand Oaks, CA: Sage Publications.

Miethe, Terance D., and Charles A. Moore. 1986. “Racial Differences in Criminal Processing: The Consequences of Model Selection on Conclusions about Differential Treatment.” *Sociological Quarterly* 27(2): 217-237.

Miller, Walter. 1962. “Lower Class Culture as a Generating Milieu for Gang Delinquency.” *Journal of Social Issues*, 14(3): 5-19.

Moore, Charles A. 1987. “Taming the Giant Corporation: Some Cautionary Remarks on the Deterrability of Corporate Crime.” *Crime & Delinquency*, 33(3):379-402.

Murphy, Diana E. 2002. “The Federal Sentencing Guidelines for Organizations: A Decade of Promoting Compliance and Ethics.” *Iowa Law Review*, 697-719.

Nagel, Stuart. 1969. *The Legal Process from a Behavioral Respective*. Homewood, Illinois: The Dorsey Press.

Nagel, Ilene H. and John L. Hagan. 1982. “The Sentencing of White-Collar Criminals in Federal-Courts: A Socio-Legal Exploration of Disparity.” *Michigan Law Review*, 80(7): 1427-1465.

Nagel, Ilene H., and Winthrop M. Swenson. 1993. “The Federal Sentencing Guidelines for Corporations: Their Development, Theoretical Underpinnings, and some Thoughts about their Future.” *Washington University Law Review*, 71 (2): 205-259.

Nguyen, Tomson H. and Henry N. Pontell. 2010. “Mortgage Origination Fraud and the Global Economic Crisis.” *Criminology & Public Policy*, 9(3): 591-612.

Obama, Barack. 2009. “Speech on the Economy.”

O'Connor, John. 2010. “Marxism and the Three Movements of Neoliberalism.” *Critical Sociology*, 36 (5): 691-715.

Piquero, Alex R. and Greg Pogarsky. 2002. “Beyond Stafford and Warr's Reconceptualization of Deterrence: Personal and Vicarious Experiences, Impulsivity, and Offending Behavior.” *Journal of Research in Crime and Delinquency,* 39(2): 153-186.

Piquero, Nicole Leeper, and Jason L. Davis. 2004. “Extralegal Factors and the Sentencing of Organizational Defendants: An Examination of the Federal Sentencing Guidelines.” *Journal of Criminal Justice,* 32(6): 643-654.

Podgor, Ellen S. 2007. “The Challenge of White-Collar Sentencing.” *Journal of Criminal Law & Criminology,* 97(3): 731-759.

Pontell, Henry N. and Gilbert Geis. 2014. "The Trajectory of White-Collar Crime Following the Great Economic Meltdown." *Journal of Contemporary Criminal Justice,* 30(1): 70-82.

Pontell, Henry N., William K. Black, and Gilbert Geis. 2014. “Too Big to Fail, Too Powerful to Jail? On the Absence of Criminal Prosecutions after the 2008 Financial Meltdown.” *Crime, Law and Social Change,* 61(1): 1-13.

Queen, Evelyn E. 1995. “Corporate Sentencing Guidelines.” Pp. 57-69 in *Corporate Misconduct: The legal, Societal, and Management Issues*, edited by Margaret P. Spencer and Ronald R. Westport, CT: Quorum Books.

Quinney, Richard. 1970. *The Social Reality of Crime*. NY, New York: Little, Brown and Company.

Reiman, Jeffrey and Leighton, Paul. 2010. *The Rich Get Richer and the Poor get Prison: Ideology, Class, and Criminal Justice*. 9th edition. Boston, MA: Allyn & Bacon.

Rockness, Howard, and Joanne Rockness. 2005. “Legislated ethics: From Enron to Sarbanes-Oxley, the impact on corporate America.” *Journal of Business Ethics* 57(1): 31-54.

Rubin, Donald B. 1977. “Formalizing Subjective Notions About the Effect of Nonrespondents in Sample Surveys.” *Journal of the American Statistical Association* 72:538-543.

Rubin, Donald B. 1987. *Multiple Imputation for Nonresponse in Surveys.* New York, NY: John Wiley.

Savelsberg, Joachim. 1992. “Law That Does Not Fit Society: Sentencing Guidelines as a Neoclassical Reaction to the Dilemmas of Substantivized Law.” *American Journal of Sociology* 97(5): 1346-1381.

Schell-Busey, Natalie, Sally S. Simpson, Melissa Rorie, and Mariel Alper. 2016. “What works? A Systematic Review of Corporate Crime Deterrence.” *Criminology & Public Policy,* 15(2): 387-416.

Sellin, Thorsten. 1928. “The Negro Criminal A Statistical Note.” *The Annals of the American Academy of Political and Social Science* 140(1): 52-64.

Shapiro, Susan P. 1985. “The Road Not Taken: The Elusive Path to Criminal Prosecution for White-Collar Offenders.” *Law & Society Review,* 19(2): 179-217.

Shapiro, Susan P. 1990. “Collaring the Crime, Not the Criminal: Reconsidering the Concept of White-Collar Crime.” *American Sociological Review,* 55(3):346-365.

Shenk, J. Frederick and Klaus, Patsy A. 1984. “The Economic Cost of Crime to Victims.” Special Report . US. Department of Justice: Bureau of Justice Statics.

Silberfarb, Michael D. 2004. “Justifying punishment for white-collar crime: A utilitarian and Retributive analysis of the Sarbanes-Oxley Act.” *BU Public Interest Law Journal,* 13 (1): 95-115.

Simon, Herbert A. 1957. *Administrative Behavior: A Study of Decision Making Processes in Administrative Organizations*. New York, NY: Macmillian.

Simpson Sally S. 2002. *Corporate Crime, Law, and Social Control*. New York, NY: Cambridge University Press.

Simpson, Sally S. 2013. "White-Collar Crime: A Review of Recent Developments and Promising Directions for Future Research." *Annual Review of Sociology,* 39: 309-331.

Simpson, Sally S. 2018. "Reimagining Sutherland 80 Years after White-Collar Crime." *Criminology*,1-19.

Simpson, Sally S., and Peter C. Yeager. 2015. "Building a Comprehensive White-Collar Violations Data System, Final Technical Report."

Snider, Laureen. 2013. "The Technological Advantages of Stock Market Traders." Pp. 151-170 in *How They Got Away with it: White Collar Criminals and the Financial Meltdown*, edited by Susan Will, Stephen Handelman, and David C. Brotherton. New York, NY: Columbia University Press.

Spohn, Cassia. 1990. "The Sentencing Decisions of Black and White Judges: Expected and Unexpected Similarities." *Law & Society Review,* 24 (5): 1197-1216.

Spohn, Cassia, and David Holleran. 2000. "The Imprisonment Penalty Paid by Young, Unemployed Black and Hispanic Male Offenders." *Criminology,* 38(1): 281-306.

Steffensmeier, Darrell, and Stephen Demuth. 2006. "Does Gender Modify the Effects of Race–Ethnicity on Criminal Sanctioning? Sentences for Male and Female White, Black, and Hispanic defendants." *Journal of Quantitative Criminology* 22(3): 241-261.

Steffensmeier, Darrell, Jeffery Ulmer, and John Kramer. 1998. "The Interaction of Race, Gender, and Age in Criminal Sentencing: The Punishment Cost of being Young, Black, and Male." *Criminology,* 36(4): 763-798.

Sudnow, David. 1965. “Normal Crimes: Sociological Features of the Penal Code in a Public Defender Office.” *Social Problems* 12(3): 255-276.

Sutherland, Edwin H. 1949. *White Collar Crime.* New York, NY: Dryden Press.

Moohr, Geraldine Szott. 2006. “What the Martha Stewart Case Tells Us About White Collar Criminal Law.” *Houston Law Review* 43(3): 591-619.

Testa, Alexander. 2017. “Examining Federal Criminal Sentencing of White-Collar and Common Property Offenders: The Case of Embezzlement and Larceny.” *Criminal Justice Policy Review*, 0(0):1-27.

Thompson, James D. 1967. *Organizations in Action.* New York, NY: McGraw-Hill.

Tillman, Robert, and Henry N. Pontell. 1992. “Is Justice Collar-Blind: Punishing Medicaid Provider Fraud.” *Criminology,* 30(4): 547-574

Tombs, Steve, and Dave Whyte. 2003. “Unmasking the Crimes of the Powerful.” *Critical Criminology,* 11(3): 217-236.

Ulmer, Jeffery T., and Mindy S. Bradley. 2006. “Variation in Trial Penalties among Serious Violent Offenses.” *Criminology* 44(3): 631-670.

Ulmer, Jeffery T., and Brian Johnson. 2004. “Sentencing in Context: A Multilevel Analysis.” *Criminology* 42(1): 137-178.

Unnever, James D., Charles E. Frazier, and John C. Henretta. 1980. “Race Differences in Criminal Sentencing.” *The Sociological Quarterly* 21(2): 197-206.

United States Sentencing Commission. 2006. “Final Report on the Impact of United States v. Booker On Federal Sentencing.” *United States Sentencing Commission*. [online] Available at: https://www.ussc.gov/sites/default/files/pdf/news/congressional-testimony-and-reports/submissions/200603-booker/Booker_Report.pdf

United States Sentencing Commission. 2012. “Amendments to the Sentencing Guidelines.” *United States Sentencing Commission*. [online] Available at: https://www.ussc.gov/sites/default/files/pdf/amendment-process/reader-friendly-amendments/20120430_RF_Amendments.pdf

United States Sentencing Commission. 2016a. “Fines under the Organizational Guidelines.” *United States Sentencing Commission*. [online] Available at: https://www.ussc.gov/sites/default/files/pdf/training/primers/2016_Primer_Organizational_Fines.pdf.

United States Sentencing Commission. 2016b. “United States Sentencing Commission Guidelines Manual.” *United States Sentencing Commission*. [online] Available at: https://www.ussc.gov/sites/default/files/pdf/guidelines-manual/2016/GLMFull.pdf

United States Sentencing Commission. 2018. “Departures and Variances.” *United States Sentencing Commission*. [online] Available at: https://www.ussc.gov/sites/default/files/pdf/training/primers/2018_Primer_Departure_Variance.pdf

United States Sentencing Commission. 2019. *United States Sentencing Commission*. [online] Available at: https://www.ussc.gov/about-page.

Van Slyke, Shanna, and William D. Bales. 2012. “A Contemporary Study of the Decision to Incarcerate White-Collar and Street Property Offenders.” *Punishment & Society*, 14(2): 217-246.

Von Hirsh, Andrew, Kay A. Knapp, and Michael Tonry. 1987. “The Sentencing Commission and Guidelines.” Boston, MA: Northeastern University Press.

Weber, Max. 1968. *Economy and Society*. New York: Bedminster Press.

Weisburd, David. 1991. *Crimes of the Middle Classes: White-Collar Offenders in the Federal Courts*. New Haven, CT: Yale University Press.

Weisburd, David, Elin Waring, and Stanton Wheeler. 1990. "Class, Status, and the Punishment of White-Collar Criminals." *Law & Social Inquiry*, 15(2): 223-243.

Wheeler, Stanton, and Mitchell Lewis Rothman. 1982. "The Organization as Weapon in White-Collar Crime." *Michigan Law Review* 80: 1403.

Wheeler, Stanton, David Weisburd, and Nancy Bode. 1982. "Sentencing the White-Collar Offender: Rhetoric and Reality." *American Sociological Review,* 47(5): 641-659.

Will, Susan. 2013. "America's Ponzi Culture." Pp. 45-67 in *How They Got Away with it: White Collar Criminals and the Financial Meltdown*, edited by Susan Will, Stephen Handelman, and David C. Brotherton. New York, NY: Columbia University Press.

Will, Susan, Stephen Handelman, and David Brotherton. 2013. "Epilogue: Can They Still get Away With It?" Pp. 315-331 in *How They Got Away with it: White Collar Criminals and the Financial Meltdown*, edited by Susan Will, Stephen Handelman, and David C. Brotherton. New York, NY: Columbia University Press.

Williams, Bryan L., Sylvia Brown, and Michael Greenberg. 1999. "Determinants of Trust Perceptions among Residents Surrounding the Savannah River Nuclear Weapons Site." *Environment and Behavior* 31(3): 354–371.

Wolfgang, Marvin E. and Marc Riedel. 1973. "Race, Judicial Discretion, and the Death Penalty," 119-133.

Yeager, Peter Cleary. 2016a. "The Elusive Deterrence of Corporate Crime." *Criminology & Public Policy* 15(2): 439-451.

Yeager, Peter Cleary. 2016b. “The Practical Challenges of Responding to Corporate Crime.” in *The Oxford Handbook of White-Collar Crime*, edited by Shanna Van Slyke, Michael Benson, and Francis Cullen. New York, NY: Oxford University Press.

Zandi, Mark. *Financial shock: A 360 Look at the Subprime Mortgage Implosion, and How to Avoid the Next Financial Crisis*. Upper Saddle River, NJ: FT Press.

Zimmerman, Martin, and Tom Petruno. 2008. “Wall Street braces for more Worries over Lehman’s fall-out and AIG’s fate pervade the Market.” *Los Angeles Times,* September 16.

Table 1. Descriptive Statistics for Federal Corporate Cases, 2002-2017 (with Missing).

	All Cases (N=2,672)	All Chapter Eight Cases (N=1,250)
	Percentage	**Percentage**
Dependent Variables		
Fine Category		
$0 - $99,999	59.24	64.48
$100,000 - $999,999	22.83	20.64
> $1,000,000	17.85	14.88
Missing	00.07	00.00
Probation		
No Probation	28.41	27.20
Probation	71.44	72.72
Missing	00.15	00.08
Sentence Placement		
Not Above Guideline	62.13	79.04
Above Guideline	01.57	02.64
Not Applicable	05.46	00.00
Missing	30.84	18.32
Blameworthiness		
Criminal History		
No Criminal History	58.98	73.76
Criminal History	14.78	14.80
Missing	26.24	11.44
Accept Responsibility		
Did not Accept	07.19	13.92
Accepted	39.45	80.08
Missing	53.37	06.00
Obstruction of Justice		
Did not Obstruct	43.23	87.84
Obstructed Justice	02.77	05.84
Missing	54.00	06.32
Tolerate Wrongdoing		
Did not Tolerate	19.69	39.60
Tolerated Wrongdoing	26.83	54.40
Missing	53.48	06.00
Offense Level		
Offense Level	50.07	93.92
Missing	49.93	06.08
Community Protection		
Ownership Structure		
Closely-Held	54.60	66.16
Not Closely-Held	23.28	23.76
Missing	22.12	10.08
Franchise		
Not a Franchise	65.53	77.60
Franchise	11.45	10.80
Missing	23.02	11.60
Number of Employees		
< 50 Employees	43.53	57.20
51 – 99 Employees	05.09	05.76

Table 1 (continued).

100 – 499 Employees	06.55	08.56
> 500 Employees	05.16	04.96
Missing	39.67	23.52
Practical Constraints		
Ability to Pay		
Unable to Pay Fine	31.14	39.92
Able to Pay Fine	55.46	52.40
Missing	13.40	07.68
Financial Status		
Financially Distressed	32.82	42.80
Financially Secure	40.57	42.88
Missing	26.61	14.32
Incorporation		
Inside the U.S.	76.91	86.72
Outside the U.S.	10.97	06.88
Missing	12.13	06.40
Financial Crisis		
Dodd-Frank		
Before Dodd-Frank	65.83	73.36
After Dodd-Frank	34.17	26.64
Missing	00.00	00.00
Financial Crimes		
Non-Financial Crime	60.89	40.16
Financial Crime	39.11	59.84
Missing	00.00	00.00
Controls		
Trial		
Plea	92.81	90.72
Trial	07.00	09.12
Missing	00.19	00.16
Booker		
Before Booker Ruling	23.43	28.56
After Booker Ruling	76.57	71.44
Missing	00.00	00.00
Criminal Purpose		
Not Criminal Purpose	88.92	94.32
For Criminal Purpose	03.41	02.72
Missing	07.67	02.96

Table 2. Descriptive Statistics across Samples for Federal Corporate Cases, 2002-2017 (without Missing).

	All Cases	All Chapter Eight Cases	Chapter Eight Cases with Complete Data using Fines as Outcome (N = 759)	Chapter Eight Cases with Complete Data using Sentence Placement as Outcome (N = 668)	Chapter Eight Cases with Complete Data using Probation as Outcome (N=758)
	Percentage/ Mean	**Percentage/ Mean**	**Percentage/ Mean**	**Percentage/ Mean**	**Percentage/ Mean**
Dependent Variables					
Fine Category					
$0 - $99,999	59.29%	64.48%	68.51%	--	--
$100,000 - $999,999	22.85%	20.64%	21.87%	--	--
> $1,000,000	17.87%	14.88%	09.62%	--	--
Sentence Placement					
Not Above Guideline	89.83%	96.77%	--	95.80%	--
Above Guideline	02.27%	03.23%	--	04.20%	--
Not Applicable	07.90%	00.00%	--	00.00%	--
Probation					
No Probation	28.45%	27.22%	--	--	20.05%
Probation	71.55%	72.78%	--	--	79.95%
Blameworthiness					
Criminal History					
No Criminal History	79.69%	83.29%	82.48%	83.08%	82.45%
Criminal History	20.04%	16.71%	17.52%	16.92%	17.55%
Accept Responsibility					
Did not Accept	15.41%	14.81%	13.97%	14.37%	13.98%
Accepted	84.59%	85.19%	86.03%	85.63%	86.02%
Obstruction of Justice					
Did not Obstruct	93.98%	93.77%	93.68%	93.41%	93.67%
Obstructed Justice	06.02%	06.23%	06.32%	06.59%	06.33%
Tolerate Wrongdoing					
Did not Tolerate	42.32%	42.13%	39.66%	39.07%	39.58%
Tolerated Wrongdoing	57.68%	57.87%	60.34%	60.93%	60.42%
Offense Level	17.47	17.56%	16.93	16.90	16.93

Table 2 (continued).

Community Protection					
Ownership Structure					
Closely-Held	70.11%	73.58%	74.31%	74.40%	74.27%
Not Closely-Held	29.89%	26.42%	25.69%	25.60%	25.73%
Franchise					
Not a Franchise	85.12%	87.78%	88.93%	88.92%	89.05%
Franchise	14.88%	12.22%	11.07%	11.08%	10.95%
Number of Employees					
< 50 Employees	75.15%	74.79%	77.34%	77.25%	77.31%
51 – 99 Employees	08.44%	07.53%	07.91%	07.49%	07.92%
100 – 499 Employees	10.86%	11.19%	09.62%	10.48%	09.63%
> 500 Employees	08.56%	06.49%	05.14%	04.79%	05.14%
Practical Constraints					
Ability to Pay					
Unable to Pay Fine	35.96%	43.24%	43.21%	42.96%	43.27%
Able to Pay Fine	64.04%	56.76%	56.79%	57.04%	56.73%
Financial Status					
Financially Distressed	44.72%	49.95%	48.48%	48.95%	48.42%
Financially Secure	55.28%	50.05%	51.52%	51.05%	51.58%
Incorporation					
Inside the U.S.	87.52%	92.65%	95.78%	96.11%	95.78%
Outside the U.S.	12.48%	07.35%	04.22%	03.89%	04.22%
Financial Crisis					
Dodd-Frank					
Before Dodd-Frank	65.83%	73.36%	73.65%	71.86%	73.61%
After Dodd-Frank	34.17%	26.64%	26.35%	28.14%	26.39%
Financial Crimes					
Non-Financial Crime	60.89%	40.16%	37.42%	37.87%	37.47%
Financial Crime	39.11%	59.84%	62.58%	62.13%	62.53%
Controls					
Trial					
Plea	92.99%	90.87%	90.65%	90.42%	90.63%
Trial	07.01%	09.13%	09.35%	09.58%	09.37%

Table 2 (continued).

Booker					
Before Booker Ruling	23.43%	28.56%	26.75%	26.20%	27.78%
After Booker Ruling	76.57%	71.44%	73.25%	73.80%	73.22%
Criminal Purpose					
Not Criminal Purpose	96.31%	97.20%	97.63%	97.46%	97.63%
For Criminal Purpose	03.69%	02.80%	02.37%	02.54%	02.37%

Table 3. Multinomial Logistic Regression Predicting Financial Penalty for Chapter Eight Federal Corporate Cases with Complete Data, 2002-2017 (N = 759).

		Blameworthiness Variables	Protection of Community Variables	Practical Constraints and Consequences Variables	Control Variables	Full Model (excluding accept)	Full Model (excluding trial)
$100,000-$999,999							
	Criminal History	1.06 (.25)				.92 (.25)	.89 (.24)
	Accept Responsibility	.74 (.20)				--	.78 (.25)
	Obstruction of Justice	1.43 (.52)				1.64 (.69)	1.47 (.60)
	Tolerate Wrongdoing	2.83** (.58)				2.36** (.58)	2.37** (.58)
	Offense Level	1.01 (.01)				1.09** (.02)	1.09** (.02)
	Not Closely-Held		.56** (.13)			.52** (.14)	.53** (.14)
	Franchise		3.95** (1.11)			4.15** (1.34)	4.07** (1.32)
	51 – 99 Employees		2.00** (.62)			1.34 (.47)	1.32 (.47)
	100 – 499 Employees		2.55** (.72)			1.77* (.60)	1.80* (.61)
	> 500 Employees		2.31 (1.32)			1.15 (.71)	1.13 (.69)
	Able to Pay Fine			7.54** (1.80)		13.72** (3.90)	13.72** (3.91)
	Financially Secure			.92 (.05)		.95 (.06)	.94 (.06)
	Outside U.S.			1.56 (.88)		1.19 (.70)	1.22 (.71)

Table 3 (continued).

	Trial				.93 (.32)	.79 (.32)	--
	After Booker Ruling				1.01 (.20)	1.16 (.28)	1.16 (.28)
	For Criminal Purpose				1.06 (.62)	1.08 (.83)	.96 (.74)
	Constant	.19** (.07)	.26** (.03)	.09** (.02)	.32** (.05)	.01** (.00)	.01** (.01)
> $1,000,000							
	Criminal History	1.45 (.46)				.88 (.37)	.91 (.38)
	Accept Responsibility	.52* (.18)				--	.39** (.17)
	Obstruction of Justice	1.22 (.58)				1.66 (.94)	1.80 (1.01)
	Tolerate Wrongdoing	4.88** (1.75)				2.35* (1.06)	2.38* (1.07)
	Offense Level	1.14** (.02)				1.25** (.04)	1.25** (.04)
	Not Closely-Held		.88 (.28)			.68 (.28)	.66 (.27)
	Franchise		4.40** (1.63)			4.43** (2.18)	3.69** (1.81)
	51 – 99 Employees		1.80 (.92)			1.46 (.88)	1.47 (.88)
	100 – 499 Employees		2.97** (1.23)			1.57 (.91)	1.75 (.98)
	> 500 Employees		28.60** (13.30)			16.85** (9.84)	16.01** (9.39)

Table 3 (continued).

	Able to Pay Fine			6.30** (2.19)		28.71** (13.76)	27.92** (13.16)
	Financially Secure			.98 (.08)		.97 (.10)	.96 (.10)
	Outside U.S.			12.96** (5.98)		9.12** (5.68)	9.47** (5.90)
	Trial				4.24** (1.34)	3.63** (1.67)	--
	After Booker Ruling				1.95** (.65)	1.50 (.66)	1.43 (.63)
	For Criminal Purpose				.80 (.64)	.60 (.81)	.73 (.97)
	Constant	.01** (.00)	.07** (.01)	.03** (.01)	.07** (.02)	.00** (.00)	.00** (.00)
	Log Likelihood (d.f. = 758)	-557.96	-552.69	-538.20	-607.76	-421.62	-424.49
	LR Chi^2	123.89	134.42	163.42	24.29	396.57	390.83
	Pseudo R^2	.10	.11	.13	.02	.32	.32

Note: Table entries are risk rate ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 4. Multinomial Logistic Regression for Sensitivity Analyses Predicting Financial Penalty for Federal Corporate Cases, 2002-2017.

		Chapter Eight Cases using Missing Indicator (excluding accept) (N = 1250)	Chapter Eight Cases using Missing Indicator (excluding trial) (N= 1250)	All Cases with Complete Data (excluding accept) (N = 784)	All Cases with Complete Data (excluding trial) (N = 784)	All Cases using Missing Indicator (excluding accept) (N = 2670)	All Cases using Missing Indicator (excluding trial) (N = 2670)
$100,000-$999,999							
	Criminal History	.94	.92	.89	.87	1.20	1.18
		(.21)	(.21)	(.24)	(.23)	(.19)	(.18)
	Missing Indicator	.82	.82	--	--	.83	.83
		(.49)	(.49)			(.21)	(.21)
	Accept Responsibility	--	.76	--	.76	--	.68*
			(.19)		(.24)		(.16)
	Missing Indicator	--	.31	--	--	--	.88
			(.39)				(.71)
	Obstruction of Justice	1.45	1.31	1.64	1.46	1.33	1.21
		(.49)	(.45)	(.67)	(.58)	(.45)	(.41)
	Missing Indicator	4.48	4.96	--	--	.42	.41
		(7.07)	(7.38)			(.38)	(.37)
	Tolerate Wrongdoing	1.92**	1.95**	2.39**	2.41**	1.84**	1.87**
		(.37)	(.37)	(.58)	(.58)	(.33)	(.33)
	Missing Indicator	.12	.29	--	--	2.46	2.12
		(.19)	(.58)			(2.30)	(2.45)
	Offense Level	1.08**	1.08**	1.09**	1.08**	1.07**	1.06**
		(.01)	(.01)	(.02)	(.02)	(.02)	(.01)
	Missing Indicator	6.40**	6.02**	--	--	4.37**	4.09**
		(3.41)	(3.20)			(1.41)	(1.33)
	Not Closely-Held	.64**	.65**	.52**	.53**	.78	.79
		(.14)	(.14)	(.14)	(.14)	(.11)	(.11)
	Missing Indicator	2.68	2.66	--	--	1.86**	1.87**
		(1.64)	(1.63)			(.48)	(.48)
	Franchise	3.76**	3.80**	4.20**	4.12**	2.50**	2.47**
		(1.02)	(1.03)	(1.35)	(1.33)	(.46)	(.46)
	Missing Indicator	1.20	1.24	--	--	.97	.97
		(.46)	(.48)			(.20)	(.20)
	51 – 99 Employees	1.56	1.53	1.45	1.41	1.93**	1.92**
		(.51)	(.50)	(.50)	(.49)	(.45)	(.44)

Table 4 (continued).

	100 – 499 Employees	1.99**	2.05**	1.72	1.74*	2.02**	2.04**
		(.58)	(.60)	(.58)	(.59)	(.46)	(.46)
	> 500 Employees	1.08	1.09	1.17	1.15	2.17**	2.17**
		(.58)	(.58)	(.71)	(.70)	(.76)	(.76)
	Missing Indicator	1.04	1.04	--	--	1.61**	1.60**
		(.25)	(.25)			(.25)	(.25)
	Able to Pay Fine	10.74**	10.84**	13.77**	13.82**	11.19**	11.21**
		(2.40)	(2.42)	(3.88)	(3.90)	(1.91)	(1.91)
	Missing Indicator	3.25**	3.15**	--	--	5.32**	5.28**
		(1.22)	(1.18)			(1.23)	(1.23)
	Financially Secure	.94	.96	.94	.94	1.08	1.09
		(.18)	(.18)	(.06)	(.06)	(.15)	(.16)
	Missing Indicator	1.27	1.27	--	--	1.07	1.07
		(.50)	(.50)			(.25)	(.26)
	Outside U.S.	1.73	1.76	1.11	1.13	4.70**	4.70**
		(.72)	(.74)	(.64)	(.65)	(1.09)	(1.09)
	Missing Indicator	1.15	1.19	--	--	.88	.89
		(.47)	(.49)			(.18)	(.18)
	Trial	.86	--	.81	--	.99	--
		(.27)		(.33)		(.24)	
	Missing Indicator	.00	--	--	--	1.35	--
		(.00)				(1.83)	
	After Booker Ruling	1.10	1.10	1.16	1.16	1.16	1.17
		(.21)	(.21)	(.28)	(.28)	(.15)	(.15)
	For Criminal Purpose	1.00	.96	.98	.87	.82	.82
		(.55)	(.53)	(.74)	(.66)	(.31)	(.31)
	Missing Indicator	1.66	1.67	--	--	1.13	1.14
		(.99)	(1.00)			(.28)	(.28)
	Constant	.01**	.01**	.01**	.01**	.01**	.01**
		(.00)	(.01)	(.00)	(.01)	(.00)	(.01)
> $1,000,000							
	Criminal History	1.06	1.06	1.12	1.15	1.48*	1.52*
		(.35)	(.34)	(.43)	(.44)	(.32)	(.32)
	Missing Indicator	1.38	1.37	--	--	2.12**	2.11*
		(.92)	(.91)			(.60)	(.60)

Table 4 (continued).

Accept Responsibility	--	.40** (.13)	--	.37** (.15)	--	.30** (.09)
Missing Indicator	--	.16 (.26)	--	--	--	.65 (.63)
Obstruction of Justice	1.61 (.72)	1.70 (.75)	1.45 (.81)	1.55 (.85)	1.70 (.70)	1.53 (.64)
Missing Indicator	4.72 (8.77)	4.64 (8.52)	--	--	1.90 (1.60)	1.77 (1.53)
Tolerate Wrongdoing	3.80** (1.31)	3.69** (1.26)	2.43** (1.04)	2.47** (1.05)	2.62** (.76)	2.70** (.79)
Missing Indicator	.27 (.53)	.72 (1.78)	--	--	.52 (.45)	.32 (.36)
Offense Level	1.17** (.02)	1.18** (.02)	1.21** (.03)	1.21** (.03)	1.13** (.02)	1.13** (.02)
Missing Indicator	94.40** (58.80)	109.78** (68.14)	--	--	17.40** (7.31)	17.45** (7.40)
Not Closely-Held	.70 (.22)	.69 (.21)	.83 (.31)	.82 (.31)	1.43* (.27)	1.41* (.26)
Missing Indicator	3.03 (2.04)	3.06 (2.06)	--	--	2.18** (.65)	2.15** (.64)
Franchise	5.82** (2.06)	4.99** (1.75)	5.54** (2.48)	4.66** (2.08)	5.47** (1.18)	5.30** (1.14)
Missing Indicator	1.85 (.87)	1.78 (.83)	--	--	1.20 (.30)	1.20 (.29)
51 – 99 Employees	2.76** (1.24)	2.84** (1.27)	1.32 (.77)	1.33 (.76)	2.53** (.85)	2.60** (.87)
100 – 499 Employees	2.81** (1.14)	3.05** (1.23)	2.07 (1.05)	2.26 (1.12)	4.05** (1.16)	4.33** (1.24)
> 500 Employees	13.75** (6.53)	14.13** (6.70)	12.52** (7.05)	11.95** (6.77)	17.13** (5.79)	17.65** (5.96)
Missing Indicator	2.00** (.70)	1.96 (.68)	--	--	2.55** (.58)	2.52** (.57)

Table 4 (continued).

	Able to Pay Fine	16.91** (5.56)	16.24** (5.21)	27.63** (12.57)	27.13** (12.21)	19.86** (5.21)	19.74** (5.19)
	Missing Indicator	2.71 (1.42)	2.45 (1.28)	--	--	5.15** (1.72)	5.05** (1.69)**
	Financially Secure	.83 (.25)	.86 (.25)	.98 (.10)	.97 (.09)	1.35 (.29)	1.37 (.30)
	Missing Indicator	1.32 (.72)	1.24 (.68)	--	--	1.28 (.41)	1.25 (.40)
	Outside U.S.	7.63** (3.21)	7.51** (3.15)	7.96** (4.69)	8.29** (4.87)	14.68** (3.52)	14.96** (3.59)
	Missing Indicator	1.40 (.66)	1.50 (.70)	--	--	1.08 (.25)	1.14 (.26)
	Trial	3.68** (1.30)	--	3.63** (1.64)	--	2.59** (.71)	--
	Missing Indicator	7.57 (24.04)	--	--	--	1.33 (2.10)	--
	After Booker Ruling	1.98** (.59)	1.85** (.55)	1.69 (.74)	1.59 (.69)	1.42* (.27)	1.43* (.27)
	For Criminal Purpose	1.38 (.95)	1.57 (1.09)	.42 (.52)	.48 (.60)	1.42 (.62)	1.61 (.70)
	Missing Indicator	1.46 (.95)	1.62 (1.05)	--	--	1.33 (.39)	1.39 (.41)
	Constant	.00** (.00)	.00** (.00)	.00** (.00)	.00** (.00)	.00* (.00)	.00** (.00)
	Log Likelihood	-750.24	-754.28	-443.34	-445.75	-1831.21	-1830.07
	LR Chi^2	729.83	721.74	415.03	410.22	1436.89	1439.18
	Pseudo R^2	.33	.32	.32	.32	.28	.28

Note: Table entries are risk rate ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity. If there are coefficients presented for a variable, but not for the corresponding missing indicator, this denotes that there are no missing cases for the variable.

*p<.10 (two-tailed test)

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

Table 5. Logistic Regression Predicting Sentence Placement Above Guideline Range for Chapter Eight Federal Corporate Cases, 2002-2017 (N = 668).

	Blameworthiness Variables	Protection of Community Variables	Practical Constraints and Consequences Variables	Control Variables	Full Model (Excluding Accept)	Full Model (Excluding Trial)
Criminal History	2.90** (1.29)				2.63** (1.21)	2.67** (1.23)
Accept Responsibility	1.39 (1.12)				--	1.81 (1.54)
Obstruction of Justice	.49 (.54)				.35 (.40)	.41 (.47)
Tolerate Wrongdoing	1.84 (.84)				1.99 (1.00)	2.04 (1.03)
Offense Level	.78** (.04)				.80** (.04)	.80** (.04)
Not Closely-Held		.45 (.25)			.43 (.27)	.44 (.27)
Franchise		1.26 (.74)			1.22 (.78)	1.28 (.82)
51 – 99 Employees		.98 (.74)			.69 (.60)	.72 (.62)
100 – 499 Employees		1.05 (.66)			.69 (.52)	.68 (.51)
> 500 Employees		1.72 (1.40)			2.20 (2.03)	2.26 (2.08)
Able to Pay Fine			21.67** (22.14)		9.10** (9.52)	9.24** (9.69)
Financially Secure			.98 (.12)		.95 (.14)	.95 (.14)
Trial				.69 (.52)	1.00 (.91)	--
After Booker Ruling				1.31 (.62)	2.09 (1.13)	2.12 (1.15)
For Criminal Purpose				1.48 (1.57)	1.70 (2.25)	2.04 (2.60)

Table 5 (continued).

Constant	.39 (.38)	.05** (.01)	.00** (.00)	.04** (.04)	.04** (.06)	.02** (.04)
Log Likelihood (d.f. = 667)	-89.97	-114.75	-104.13	-379.23	-83.10	-82.83
LR Chi^2	52.50	2.95	24.20	1.26	66.25	66.79
Pseudo R^2	.23	.01	.10	.00	.29	.29

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity. Country of Incorporation is excluded from the analysis due to too few cases in the category of incorporation outside the U.S.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 6. Logistic Regression for Sensitivity Analyses Predicting Sentencing Placement Above Guideline Range for Federal Corporate Cases, 2002-2017 (N = 690).

	All Cases with Complete Data (excluding accept)	**All Cases with Complete Data (excluding trial)**
Criminal History	3.77**	3.80**
	(1.50)	(1.52)
Accept Responsibility	--	2.69
		(2.15)
Obstruction of Justice	.36	.43
	(.38)	(.46)
Tolerate Wrongdoing	2.11	2.11
	(1.00)	(1.00)
Offense Level	.90**	.90**
	(.03)	(.03)
Not Closely-Held	.95	.97
	(.45)	(.46)
Franchise	1.22	1.30
	(.66)	(.71)
51 – 99 Employees	.95	.99
	(.60)	(.69)
100 – 499 Employees	.75	.74
	(.47)	(.47)
> 500 Employees	1.34	1.34
	(1.01)	(1.02)
Able to Pay Fine	16.29**	16.85**
	(16.86)	(17.44)
Financially Secure	1.06	1.05
	(.12)	(.13)
Trial	.67	--
	(.56)	
After Booker Ruling	1.83	1.86
	(.95)	(.97)
For Criminal Purpose	1.81	2.11
	(2.23)	(2.51)
Constant	.01**	.00**
	(.01)	(.00)
Log Likelihood	-103.00	-102.16
LR Chi^2	59.06	60.73
Pseudo R^2	.22	.23

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity. Country of Incorporation is excluded from the analysis due to too few cases in the category of incorporation outside the U.S. The missing indicator models are excluded from the sensitivity analysis due to too few cases in the missing indicator categories.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 7. Logistic Regression Predicting Probation for Chapter Eight Federal Corporate Cases, 2002-2017 (N = 758).

	Blameworthiness Variables	Protection of Community Variables	Practical Constraints and Consequences Variables	Control Variables	Full Model
Criminal History	1.00 (.24)				1.12 (.29)
Accept Responsibility	.82 (.24)				.87 (.41)
Obstruction of Justice	1.64 (.75)				1.62 (.77)
Tolerate Wrongdoing	1.06 (.20)				1.40 (.30)
Offense Level	1.01 (.01)				1.01 (.01)
Not Closely-Held		1.10 (.23)			1.18 (.27)
Franchise		.65 (.18)			.72 (.21)
51 – 99 Employees		1.37 (.52)			1.22 (.48)
100 – 499 Employees		1.03 (.33)			.85 (.29)
> 500 Employees		.40 (.14)			.45 (.71)
Able to Pay Fine			.69 (.13)		.76 (.16)
Financially Secure			1.05 (.06)		1.06 (.06)
Outside U.S.			.19** (.07)		.21** (.08)
Trial				1.42 (.49)	.96 (.55)
After Booker Ruling				1.06 (.22)	1.00 (.22)
For Criminal Purpose				.81 (.47)	.80 (.48)
Constant	3.85** (1.51)	4.26** (.51)	5.12** (.89)	3.74** (.65)	3.56** (2.07)
Log Likelihood (d.f. = 757)	-378.19	-373.48	-366.81	-379.23	-361.02
LR Chi^2	3.33	12.76	26.09	1.26	37.69
Pseudo R^2	.00	.02	.03	.00	.05

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 8. Logistic Regression for Sensitivity Analyses Predicting Probation for Federal Corporate Cases, 2002-2017.

	Chapter Eight Cases using Missing Indicator (N = 1247)	**All Cases with Complete Data (N = 783)**	**All Cases using Missing Indicator (N = 2670)**
Criminal History	1.27	1.06	1.54**
	(.27)	(.26)	(.24)
Missing Indicator	.60	--	.54**
	(.24)		(.10)
Accept Responsibility	1.24	.73	.75
	(.38)	(.34)	(.18)
Missing Indicator	2.15	--	.56
	(2.81)		(.38)
Obstruction of Justice	2.47**	1.55	2.38**
	(.99)	(.73)	(.93)
Missing Indicator	1.55	--	.68
	(2.10)		(.38)
Tolerate Wrongdoing	1.10	1.38	.92
	(.18)	(.30)	(.14)
Missing Indicator	.39	--	2.11
	(.74)		(1.59)
Offense Level	1.01	1.01	1.01
	(.01)	(.01)	(.01)
Missing Indicator	1.04	--	1.79**
	(.41)		(.45)
Not Closely-Held	1.02	1.21	.90
	(.18)	(.27)	(.11)
Missing Indicator	.70	--	.75
	(.30)		(.15)
Franchise	.86	.69	.77
	(.64)	(.20)	(.12)
Missing Indicator	.64	--	.76
	(.19)		(.20)
51 – 99 Employees	1.14	1.24	1.11
	(.38)	(.49)	(.28)
100 – 499 Employees	.96	.96	.90
	(.27)	(.33)	(.19)
> 500 Employees	.49**	.43**	.43**
	(.16)	(.17)	(.76)
Missing Indicator	.85	--	.85
	(.16)		(.16)
Able to Pay Fine	.66**	.74	.66**
	(.11)	(.15)	(.33)
Missing Indicator	.33**	--	.33**
	(.09)		(.09)

Table 8 (continued).

Financially Secure	1.22	1.06	1.22
	(.20)	(.06)	(.20)
Missing Indicator	1.15	--	1.15
	(.38)		(.38)
Outside U.S.	.31**	.22**	.31**
	(.09)	(.08)	(1.09)
Missing Indicator	.44**	--	.44**
	(.14)		(.14)
Trial	1.28	.81	1.28
	(.27)	(.46)	(.49)
After Booker Ruling	.91	1.02	.91
	(.15)	(.23)	(.15)
For Criminal Purpose	1.02	.91	1.02
	(.44)	(.54)	(.44)
Missing Indicator	3.21**	--	3.21**
	(1.49)		(1.49)
Constant	2.95**	4.31*	2.95**
	(1.14)	(2.44)	(1.14)
Log Likelihood	-648.31	-370.08	-648.31
LR Chi^2	164.56	41.81	164.56
Pseudo R^2	.11	.05	.11

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. If there are coefficients presented for a variable, but not for the corresponding missing indicator, this denotes that there are no missing cases for the variable.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 9. Descriptive Statistics for Chapter Eight Cases Sentenced Before and After Dodd-Frank Across Three Outcomes (without Missing).

	Fines		Departure Status		Probation	
	Before Dodd-Frank (N = 559)	**After Dodd-Frank (N = 200)**	**Before Dodd-Frank (N = 480)**	**After Dodd-Frank (N = 188)**	**Before Dodd-Frank (N = 558)**	**After Dodd-Frank (N = 200)**
	Percentage	**Percentage**	**Percentage**	**Percentage**	**Percentage**	**Percentage**
Dependent Variables						
Fine Category						
$0 - $99,999	70.48	63.00	--	--	--	--
$100,000 - $999,999	21.29	23.50	--	--	--	--
> $1,000,000	08.23	13.50	--	--	--	--
Departure Status						
Not Above Guideline	--	--	95.83	95.74	--	--
Above Guideline	--	--	04.17	04.26	--	--
Probation						
No Probation	--	--	--	--	21.51	16.00
Probation	--	--	--	--	78.49	84.00
Blameworthiness						
Criminal History						
No Criminal History	84.79**	76.00**	85.83**	76.06**	84.77**	76.00**
Criminal History	15.21**	24.00**	14.17**	23.94**	15.23**	24.00**
Accept Responsibility						
Did not Accept	15.38	10.00	16.04**	10.11**	15.41	10.00
Accepted	84.62	90.00	83.96**	89.89**	84.59	90.00
Obstruction of Justice						
Did not Obstruct	93.38	94.50	93.13	94.15	93.37	94.50
Obstructed Justice	06.62	05.50	06.88	05.85	06.63	05.50
Tolerate Wrongdoing						
Did not Tolerate	39.18	41.00	38.13	41.49	39.07	41.00
Tolerated Wrongdoing	60.82	59.00	61.88	58.51	60.93	59.00
Offense Level (mean)	16.18**	19.02**	16.11**	18.91**	16.18**	19.02**
Community Protection						
Ownership Structure						
Closely-Held	76.03	69.50	76.04	70.21	75.99	69.50
Not Closely-Held	23.97	30.50	23.96	29.79	24.01	30.50
Organization Type						
Not a Franchise	88.73	89.50	88.54	89.89	88.89	89.50
Franchise	11.27	10.50	11.46	10.11	11.11	10.50
Number of Employees						
< 50 Employees	76.21	80.50	76.04	80.32	76.16	80.50
51 – 99 Employees	08.05	07.50	07.71	06.91	08.06	07.50

Table 9 (continued).

100 – 499 Employees	10.91	06.00	12.08	06.38	10.93	06.00
> 500 Employees	04.83	06.00	04.17	06.38	04.84	06.00
Practical Constraints						
Ability to Pay						
Unable to Pay Fine	40.79**	50.00**	40.00**	50.53**	40.86**	50.00**
Able to Pay Fine	59.21**	50.00**	60.00**	49.47**	59.14**	50.00**
Financial Status						
Financially Distressed	47.23	52.00	47.08	53.72	47.13	52.00
Financially Secure	52.77	48.00	52.92	46.28	52.87	48.00
Incorporation						
Inside the U.S.	96.60	93.50	97.08**	93.62**	96.59	93.50
Outside the U.S.	03.40	06.50	02.92**	06.38**	03.41	06.50
Financial Crisis						
Financial Crimes						
Non-Financial Crime	35.60	42.50	36.04	42.55	35.66	42.50
Financial Crime	64.40	57.50	63.96	57.45	64.34	57.50
Controls						
Trial						
Plea	89.80	93.00	89.58	92.55	89.78	93.00
Trial	10.20	07.00	10.42	07.45	10.22	07.00
Criminal Purpose						
Not Criminal Purpose	97.67	97.50	97.50	97.34	97.67	97.50
For Criminal Purpose	02.33	02.50	02.50	02.66	02.33	02.50

** Significant difference in cases before and after Dodd-Frank $p < .05$ (two-tailed test)

Table 10. Multinomial Logistic Regression Predicting Financial Penalty for Chapter Eight Federal Corporate Cases with Complete Data with Dodd-Frank Variables, 2002-2017 (N = 759).

		Dodd-Frank Variables	Dodd-Frank Variables with Interaction	Full Model with Dodd-Frank Variables (excluding accept)	Full Model with Dodd-Frank Variables (excluding trial)	Full Model with Dodd-Frank Variables and Interaction (excluding accept)	Full Model with Dodd-Frank Variables and Interaction (excluding trial)
$100,000-$999,999							
	Criminal History	--	--	.87 (.34)	.84 (.23)	.88 (.24)	.85 (.23)
	Accept Responsibility	--	--	--	.74 (.24)	--	.73 (.23)
	Obstruction of Justice	--	--	1.59 (.65)	1.41 (.58)	1.60 (.65)	1.42 (.58)
	Tolerate Wrongdoing	--	--	2.36** (.58)	2.37** (.58)	2.34** (.58)	2.35** (.58)
	Offense Level	--	--	1.09** (.02)	1.09** (.02)	1.09** (.02)	1.09** (.02)
	Not Closely-Held	--	--	.57** (.15)	.58** (.16)	.57** (.15)	.58** (.16)
	Franchise	--	--	4.18** (1.36)	4.07** (1.33)	4.17** (1.36)	4.03** (1.33)
	51 – 99 Employees	--	--	1.36 (.49)	1.33 (.48)	1.33 (.48)	1.31 (.47)
	100 – 499 Employees	--	--	1.88* (.64)	1.92* (.66)	1.88* (.65)	1.93* (.66)
	> 500 Employees	--	--	1.10 (.68)	1.08 (.67)	1.08 (.67)	1.07 (.66)
	Able to Pay Fine	--	--	14.58** (4.21)	14.43** (4.16)	14.52** (4.19)	14.38** (4.14)
	Financially Secure	--	--	.94 (.06)	.94 (.06)	.94 (.06)	.94 (.06)

Table 10 (continued).

	Outside U.S.	--	--	1.23 (.73)	1.25 (.74)	1.25 (.74)	1.26 (.75)
	Sentencing Year	.97 (.04)	.97 (.04)	.90 (.07)	.91 (.07)	.90 (.07)	.91 (.07)
	After Dodd-Frank	1.58 (.56)	1.71 (.71)	3.00** (1.60)	2.99** (1.59)	3.22** (1.91)	3.24** (1.93)
	Financial Crime	.88 (.16)	.93 (.20)	1.01 (.22)	.98 (.21)	1.06 (.27)	1.03 (.26)
	Dodd-Frank*Financial	--	.85 (.35)	--	--	.88 (.44)	.87 (.43)
	Trial	--	--	.79 (.33)	--	.80 (.33)	--
	After Booker Ruling	--	--	1.58 (.67)	1.53 (.65)	1.58 (.67)	1.53 (.65)
	For Criminal Purpose	--	--	1.09 (.85)	.97 (.75)	1.06 (.83)	.93 (.73)
	Constant	.38** (.09)	.37** (.09)	.01** (.00)	.01** (.01)	.01** (.00)	.01** (.00)
> $1,000,000							
	Criminal History	--	--	.88 (.38)	.89 (.38)	.86 (.37)	.87 (.37)
	Accept Responsibility	--	--	--	.36** (.16)	--	.39** (.17)
	Obstruction of Justice	--	--	1.55 (.89)	1.70 (.96)	1.58 (.94)	1.78 (.17)
	Tolerate Wrongdoing	--	--	2.33* (1.06)	2.36* (1.06)	2.58** (1.19)	2.58** (1.19)
	Offense Level	--	--	1.24** (.04)	1.25** (.04)	1.24** (.04)	1.25** (.04)

Table 10 (continued).

Not Closely-Held	--	--	.73 (.31)	.73 (.31)	.75 (.32)	.75 (.32)
Franchise	--	--	4.58** (2.28)	3.68** (1.82)	5.15** (2.62)	4.11** (2.08)
51 – 99 Employees	--	--	1.45 (.88)	1.48 (.89)	1.93 (1.18)	1.97 (1.19)
100 – 499 Employees	--	--	1.76 (1.04)	1.92 (1.11)	1.77 (1.06)	1.93 (1.12)
> 500 Employees	--	--	16.61** (9.71)	15.59** (9.15)	16.94** (10.04)	15.86** (9.42)
Able to Pay Fine	--	--	28.21** (13.63)	28.55** (13.68)	29.53** (14.65)	29.44** (14.42)
Financially Secure	--	--	.97 (.10)	.95 (.10)	.99 (.10)	.97 (.10)
Outside U.S.	--	--	8.05** (5.23)	8.82** (5.72)	9.56** (6.38)	10.24** (6.80)
Sentencing Year	1.06 (.06)	1.06 (.06)	.97 (.12)	.91 (.11)	.94 (.12)	.88 (.11)
After Dodd-Frank	1.12 (.54)	.54 (.32)	2.01 (1.72)	2.89 (2.44)	.64 (.64)	.93 (.93)
Financial Crime	.75 (.19)	.47** (.15)	.77 (.28)	.75 (.28)	.40** (.18)	.41** (.18)
Dodd-Frank*Financial	--	3.71** (2.06)	--	--	8.90** (7.57)	8.03** (6.75)
Trial	--	--	3.99** (1.93)	--	4.05** (1.99)	--
After Booker Ruling	--	--	1.35 (1.04)	1.87 (1.39)	1.51 (1.18)	2.09 (1.59)
For Criminal Purpose	--	--	.59 (.81)	.71 (.96)	.83 (1.10)	1.01 (1.33)

Table 10 (continued).

	Constant	.10** (.04)	.14** (.05)	.00** (.00)	.00** (.00)	.00** (.00)	.00** (.00)
	Log Likelihood (d.f. = 758)	-615.12	-611.82	-418.51	-421.32	-414.18	-417.23
	LR Chi^2	9.57	16.18	402.78	397.17	411.45	405.34
	Pseudo R^2	.01	.01	.32	.32	.33	.33

Note: Table entries are risk rate ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 11. Multinomial Logistic Regression for Sensitivity Analyses Predicting Financial Penalty for Federal Corporate Cases with Dodd-Frank Variables, 2002-2017.

		Chapter Eight Cases using Missing Indicator (excluding accept) (N = 1250)	Chapter Eight Cases using Missing Indicator (excluding trial) (N= 1250)	All Cases with Complete Data (excluding accept) (N = 784)	All Cases with Complete Data (excluding trial) (N = 784)	All Cases using Missing Indicator (excluding accept) (N = 2670)	All Cases using Missing Indicator (excluding trial) (N = 2670)
$100,000-$999,999							
	Criminal History	.93 (.21)	.92 (.21)	.86 (.23)	.84 (.23)	1.18 (.18)	1.17 (.18)
	Missing Indicator	.86 (.51)	.87 (.52)	--	--	.84 (.21)	.84 (.21)
	Accept Responsibility	--	.70 (.17)	--	.74 (.23)	--	.64* (.15)
	Missing Indicator	--	.26 (.34)	--	--	--	.78 (.62)
	Obstruction of Justice	1.50 (.51)	1.36 (.47)	1.61 (.66)	1.44 (.59)	1.40 (.47)	1.28 (.43)
	Missing Indicator	5.16 (7.52)	5.43 (7.94)	--	--	.46 (.42)	.45 (.42)
	Tolerate Wrongdoing	1.93** (.37)	1.95** (.38)	2.39** (.58)	2.41** (.59)	1.87** (.33)	1.89** (.34)
	Missing Indicator	.11 (.17)	.28 (.55)	--	--	2.06 (1.94)	1.87 (2.14)
	Offense Level	1.08** (.01)	1.08** (.01)	1.09** (.02)	1.08** (.02)	1.07** (.01)	1.06** (.01)
	Missing Indicator	2.87 (1.78)	5.48** (2.91)	--	--	4.07** (1.32)	3.83** (1.25)
	Not Closely-Held	.66* (.15)	.67* (.15)	.57** (.15)	.58** (.15)	.76* (.11)	.76* (.11)
	Missing Indicator	2.87* (1.78)	2.79* (1.74)	--	--	1.94** (.51)	1.95** (.51)
	Franchise	3.82** (1.04)	3.84** (1.05)	4.26** (1.39)	4.13** (1.35)	2.52** (.47)	2.49** (.46)
	Missing Indicator	1.10 (.43)	1.13 (.44)	--	--	.95 (.20)	.95 (.20)
	51 – 99 Employees	1.51 (.50)	1.49 (.49)	1.45 (.51)	1.41 (.50)	1.91** (.44)	1.89** (.44)

Table 11 (continued).

100 – 499 Employees	2.05**	2.13**	1.77*	1.80*	2.04**	2.06
	(.60)	(.63)	(.60)	(.61)	(.46)	(.47)
> 500 Employees	1.10	1.10	1.09	1.09	2.16**	2.16**
	(.59)	(.59)	(.67)	(.67)	(.76)	(.76)
Missing Indicator	1.00	.99	--	--	1.55	1.54**
	(.25)	(.25)			(.25)	(.25)
Able to Pay Fine	10.74**	10.82**	14.76**	14.64**	10.67**	10.64**
	(2.42)	(2.44)	(4.23)	(4.20)	(1.83)	(1.83)
Missing Indicator	3.48**	3.35**	--	--	5.26**	5.21**
	(1.31)	(1.27)			(1.24)	(1.23)
Financially Secure	.93	.95	.93	.93	1.05	1.06
	(.18)	(.18)	(.06)	(.06)	(.15)	(.15)
Missing Indicator	1.25	1.25	--	--	1.06	1.07
	(.50)	(.50)			(.26)	(.26)
Outside U.S.	1.64	4.65	1.16	1.18	4.60**	4.59**
	(.70)	(.70)	(.67)	(.69)	(1.07)	(1.07)
Missing Indicator	1.26	1.32	--	--	.89	.90
	(.53)	(.55)			(.18)	(.19)
Sentencing Year	.97	.97	.91	.91	1.03	1.03
	(.06)	(.05)	(.07)	(.07)	(.04)	(.04)
After Dodd-Frank	1.46	1.49	2.77*	2.73*	.80	.80
	(.72)	(.74)	(1.61)	(1.59)	(.24)	(.24)
Financial Crime	.71*	.68*	1.07	1.04	.66**	.65**
	(.14)	(.14)	(.27)	(.26)	(.10)	(.09)
Dodd-Frank*Financial	1.12	1.11	.98	.99	1.29	1.29
	(.43)	(.42)	(.47)	(.48)	(.33)	(.33)
Trial	.91	--	.80	--	1.06	--
	(.29)		(.33)		(.26)	
Missing Indicator	.00	--	--	--	1.25	--
	(.02)				(1.68)	
After Booker Ruling	1.11	1.08	1.60	1.55	.94	.94
	(.36)	(.35)	(.68)	(.65)	(.20)	(.20)

Table 11 (continued).

	For Criminal Purpose	.98 (.55)	.95 (.53)	.97 (.74)	.86 (.66)	.84 (.32)	.86 (.32)
	Missing Indicator	1.71 (1.03)	1.73 (1.04)	--	--	1.17 (.29)	1.18 (.29)
	Constant	.01** (.01)	.02** (.01)	.01** (.00)	.01** (.01)	.01** (.00)	.02** (.01)
> $1,000,000							
	Criminal History	1.20 (.40)	1.16 (.38)	1.06 (.42)	1.07 (.42)	1.42 (.31)	1.47* (.31)
	Missing Indicator	1.78 (1.23)	1.79 (1.22)	--	--	2.17** (.60)	2.10** (.60)
	Accept Responsibility	--	.34** (.11)	--	.32** (.14)	--	.26** (.08)
	Missing Indicator	--	.09 (.15)	--	--	--	.55 (.55)
	Obstruction of Justice	1.65 (.77)	1.80 (.82)	1.35 (.79)	1.48 (.84)	1.72 (.72)	1.57 (.67)
	Missing Indicator	4.45 (8.62)	4.40 (8.39)	--	--	1.97 (1.76)	1.86 (1.69)
	Tolerate Wrongdoing	3.77** (1.32)	3.67** (1.27)	2.61** (1.14)	2.61** (1.14)	2.70** (.79)	2.77** (.81)
	Missing Indicator	.38 (.78)	1.54 (3.99)	--	--	.45 (.41)	.28 (.33)
	Offense Level	1.17** (.02)	1.18** (.02)	1.20** (.03)	1.21** (.03)	1.13** (.02)	1.13** (.02)
	Missing Indicator	70.96** (44.56)	87.65** (54.82)	--	--	14.41** (6.14)	15.00** (6.43)
	Not Closely-Held	.67 (.21)	.68 (.22)	.90 (.35)	.93 (.36)	1.32 (.25)	1.30 (.25)
	Missing Indicator	2.76 (1.95)	2.83 (1.98)	--	--	2.28** (.69)	2.26** (.28)

Table 11 (continued).

Franchise	6.76**	5.50**	6.29**	5.05**	5.62**	5.38**
	(2.47)	(1.97)	(2.92)	(2.33)	(1.22)	(1.17)
Missing Indicator	1.67	1.58	--	--	1.15	1.13
	(.82)	(.76)			(.29)	(.28)
51 – 99 Employees	2.85**	2.97**	1.61	1.65	2.44**	2.51**
	(1.31)	(1.35)	(.96)	(.97)	(.83)	(.85)
100 – 499 Employees	2.87**	3.11**	2.43*	2.60*	4.14**	4.42**
	(1.20)	(1.28)	(1.27)	(1.33)	(1.20)	(1.28)
> 500 Employees	15.05**	15.01**	12.97**	12.18**	16.98**	17.48**
	(7.43)	(7.39)	(7.40)	(6.98)	(5.82)	(5.99)
Missing Indicator	1.87*	1.88	--	--	2.18**	2.16**
	(.68)	(.68)			(.51)	(.50)
Able to Pay Fine	17.65**	16.77**	27.62**	28.02**	18.40**	18.15**
	(5.97)	(5.51)	(12.89)	(13.02)	(4.88)	(4.83)
Missing Indicator	2.55	2.28	--	--	5.26**	5.14**
	(1.40)	(1.24)			(1.81)	(1.78)
Financially Secure	.72	.75	.98	.97	1.28	1.29
	(.22)	(.23)	(.10)	(.10)	(.28)	(.28)
Missing Indicator	1.04	.92	--	--	1.36	1.30
	(.60)	(.53)			(.44)	(.42)
Outside U.S.	6.28**	6.25**	7.66**	8.22**	13.74**	14.04**
	(2.79)	(2.76)	(4.77)	(5.11)	(3.33)	(3.41)
Missing Indicator	1.69	1.86	--	--	1.19	1.26
	(.82)	(.90)			(.28)	(.30)
Sentencing Year	1.08	1.04	.93	.87	1.10**	1.09*
	(.09)	(.08)	(.11)	(.10)	(.05)	(.05)
After Dodd-Frank	.34	.45	1.26	1.80	.71	.77
	(.23)	(.31)	(1.27)	(1.60)	(.26)	(.28)
Financial Crime	.26**	.27**	.37**	.38**	.47**	.46**
	(.08)	(.08)	(.16)	(.16)	(.10)	(.10)
Dodd-Frank*Financial	4.52**	4.00**	5.72**	5.35**	1.79	1.65
	(2.47)	(2.16)	(4.29)	(3.96)	(.61)	(.56)

Table 11 (continued).

	Trial	4.93** (1.84)	--	4.40** (2.12)	--	3.15** (.88)	--
	Missing Indicator	3.78 (12.01)	--	--	--	1.16 (1.88)	--
	After Booker Ruling	1.16 (.55)	1.34 (.63)	1.62 (1.21)	2.18 (1.60)	.73 (.21)	.76 (.22)
	For Criminal Purpose	1.61 (1.12)	1.91 (1.32)	.47 (.60)	.55 (.70)	1.40 (.62)	1.66 (.73)
	Missing Indicator	1.63 (1.08)	1.78 (1.18)	--	--	1.56 (.47)	1.61 (.49)
	Constant	.00** (.00)	.00** (.00)	.00** (.00)	.00** (.00)	.00** (.00)	.00** (.00)
	Log Likelihood	-737.21	-742.11	-435.90	-438.59	-1817.05	-1816.08
	LR Chi^2	755.88	746.09	429.91	424.53	1465.21	1467.15
	Pseudo R^2	.34	.33	.33	.33	.29	.29

Note: Table entries are risk rate ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity. If there are coefficients presented for a variable, but not for the corresponding missing indicator, this denotes that there are no missing cases for the variable.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 12. Logistic Regression Predicting Sentence Placement Above Guideline Range for Chapter Eight Federal Corporate Cases with Dodd-Frank Variables, 2002-2017 (N = 668).

	Dodd-Frank Variables	Dodd-Frank Variables with Interaction	Full Model with Dodd-Frank Variables (excluding accept)	Full Model with Dodd-Frank Variables (excluding trial)	Full Model with Dodd-Frank Variables and Interaction (excluding accept)	Full Model with Dodd-Frank Variables and Interaction (excluding trial)
Criminal History	--	--	2.33* (1.11)	2.35* (1.12)	2.62** (1.27)	2.64** (1.28)
Accept Responsibility	--	--	--	2.03 (1.75)	--	1.73 (1.49)
Obstruction of Justice	--	--	.39 (.44)	.45 (.51)	.35 (.40)	.36 (.42)
Tolerate Wrongdoing	--	--	2.04 (1.05)	2.08 (1.07)	1.87 (.97)	1.90 (.99)
Offense Level	--	--	.79** (.04)	.80** (.04)	.79** (.04)	.79** (.04)
Not Closely-Held	--	--	.40 (.25)	.41 (.26)	.41 (.27)	.43 (.27)
Franchise	--	--	1.25 (.81)	1.35 (.89)	.99 (.66)	1.05 (.71)
51 – 99 Employees	--	--	.66 (.58)	.69 (.59)	.66 (.59)	.69 (.61)
100 – 499 Employees	--	--	.67 (.51)	.65 (.50)	.86 (.67)	.83 (.65)
> 500 Employees	--	--	2.37 (2.27)	2.37 (2.28)	2.86 (2.82)	2.90 (2.84)
Able to Pay Fine	--	--	9.89** (10.53)	10.07** (10.71)	10.23** (10.85)	10.28** (10.90)
Financially Secure	--	--	.94 (.14)	.94 (.14)	.90 (.13)	.90 (.14)
Sentencing Year	1.03 (.08)	1.04 (.08)	1.06 (.15)	1.06 (.15)	1.07 (.15)	1.06 (.15)
After Dodd-Frank	.80 (.59)	2.07 (1.85)	1.14 (1.17)	1.08 (1.12)	4.31 (5.12)	4.09 (4.88)
Financial Crime	1.31 (.54)	2.35 (1.34)	1.70 (.79)	1.78 (.82)	3.50** (2.13)	3.60** (2.18)

Table 12 (continued).

Dodd-Frank*Financial	--	.18* (.17)	--	--	.09** (.09)	.09** (.10)
Trial	--	--	.86 (.81)	--	.96 (.90)	--
After Booker Ruling	--	--	1.43 (1.20)	1.45 (1.21)	1.31 (1.12)	1.35 (1.14)
For Criminal Purpose	--	--	1.47 (2.09)	1.77 (2.40)	1.57 (2.19)	1.84 (2.52)
Constant	.03** (.02)	.02** (.01)	.03** (.04)	.01** (.02)	.02** (.03)	.01** (.02)
Log Likelihood (d.f. = 667)	-115.92	-114.14	-81.97	-81.61	-79.20	-78.98
LR Chi^2	.61	4.18	68.50	69.22	74.05	74.49
Pseudo R^2	.00	.02	.29	.30	.32	.32

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity. Country of incorporation is excluded from the analysis due to too few cases in the category of incorporation outside the U.S.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 13. Logistic Regression for Sensitivity Analyses Predicting Sentencing Placement Above Guideline Range for Federal Corporate Cases with Dodd-Frank Variables, 2002-2017 (N = 690).

	All Cases with Complete Data with Dodd-Frank Variables and Interaction (excluding accept)	**All Cases with Complete Data with Dodd-Frank Variables and Interaction (excluding trial)**
Criminal History	3.16** (1.31)	3.20** (1.34)
Accept Responsibility	--	3.17 (2.62)
Obstruction of Justice	.37 (.39)	.41 (.44)
Tolerate Wrongdoing	2.10 (1.01)	2.10 (1.01)
Offense Level	.89** (.03)	.89** (.03)
Not Closely-Held	.97 (.47)	.97 (.48)
Franchise	1.23 (.67)	1.34 (.74)
51 – 99 Employees	.80 (.59)	.83 (.61)
100 – 499 Employees	.72 (.47)	.69 (.46)
> 500 Employees	1.46 (1.16)	1.42 (1.13)
Able to Pay Fine	19.01** (19.81)	19.62** (20.45)
Financially Secure	1.05 (.12)	1.04 (.12)
Sentencing Year	1.00 (.13)	1.01 (.14)
After Dodd-Frank	3.35 (3.76)	2.81 (3.19)
Financial Crime	3.27** (1.94)	3.37** (2.00)
Dodd-Frank*Financial	.54 (.48)	.56 (.50)
Trial	.52 (.45)	--
After Booker Ruling	1.41 (1.16)	1.36 (1.12)
For Criminal Purpose	1.73 (2.27)	2.00 (2.52)

Table 13 (continued).

Constant	.00** (.00)	.00** (.00)
Log Likelihood	-99.24	-98.32
LR Chi^2	66.57	68.40
Pseudo R^2	.25	.26

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. The variables Trial and Accept are included in separate models due to multicollinearity. Country of incorporation is excluded from the analysis due to too few cases in the category of incorporation outside the U.S. The missing indicator models are excluded from the sensitivity analysis due to too few cases in the missing indicator categories.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 14. Logistic Regression Predicting Probation for Chapter Eight Federal Corporate Cases with Dodd-Frank Variables, 2002-2017 (N = 758).

	Dodd-Frank Variables	Dodd-Frank Variables with Interaction	Full Model with Dodd-Frank Variables	Full Model with Dodd-Frank Variables and Interaction
Criminal History	--	--	1.07 (.28)	1.08 (.28)
Accept Responsibility	--	--	.85 (.41)	.85 (.41)
Obstruction of Justice	--	--	1.62 (.77)	1.61 (.77)
Tolerate Wrongdoing	--	--	1.41 (.31)	1.40 (.30)
Offense Level	--	--	1.01 (.02)	1.01 (.02)
Not Closely-Held	--	--	1.17 (.27)	1.16 (.27)
Franchise	--	--	.73 (.22)	.73 (.22)
51 – 99 Employees	--	--	1.22 (.49)	1.20 (.48)
100 – 499 Employees	--	--	.90 (.31)	.91 (.32)
> 500 Employees	--	--	.46 (.19)	.46 (.19)
Able to Pay Fine	--	--	.78 (.17)	.79 (.17)
Financially Secure	--	--	1.05 (.06)	1.05 (.06)
Outside U.S.	--	--	.20** (.08)	.20** (.08)
Sentencing Year	1.00 (.04)	1.00 (.04)	1.03 (.07)	1.03 (.07)
After Dodd-Frank	1.52 (.55)	1.69 (.72)	1.33 (.64)	1.51 (.82)
Financial Crime	1.44** (.27)	1.51** (.32)	1.18 (.24)	1.25 (.28)
Dodd-Frank*Financial	--	.82 (.36)	--	.78 (.36)
Trial	--	--	.99 (.58)	.99 (.58)
After Booker Ruling	--	--	.77 (.29)	.76 (.29)

Table 14 (continued).

For Criminal Purpose	--	--	.80 (.49)	.80 (.48)
Constant	2.96** (.68)	2.87** (.69)	3.35** (2.05)	3.21* (1.99)
Log Likelihood	-376.45	-376.34	-358.75	-358.61
LR Chi^2	6.83	7.04	42.22	42.50
Pseudo R^2	.01	.01	.06	.06

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Table 15. Logistic Regression for Sensitivity Analyses Predicting Probation for Federal Corporate Cases with Dodd-Frank Variables, 2002-2017.

	Chapter Eight Cases using Missing Indicator (N = 1247)	**All Cases with Complete Data (N = 783)**	**All Cases using Missing Indicator (N = 2670)**
Criminal History	1.22	1.00	1.54**
	(.26)	(.25)	(.24)
Missing Indicator	.58	--	.54
	(.23)		(.10)
Accept Responsibility	1.08	.71	.80
	(.23)	(.33)	(.16)
Missing Indicator	2.01	--	.59
	(2.60)		(.40)
Obstruction of Justice	2.39**	1.55	2.36**
	(.96)	(.74)	(.92)
Missing Indicator	1.65	--	.71
	(2.32)		(.40)
Tolerate Wrongdoing	1.11	1.38	.92
	(.18)	(.30)	(.14)
Missing Indicator	.32	--	2.00
	(.62)		(1.48)
Offense Level	1.02	1.01	1.01
	(.01)	(.01)	(.01)
Missing Indicator	1.13	--	1.86
	(.45)		(.47)
Not Closely-Held	1.08	1.20	.93
	(.19)	(.28)	(.11)
Missing Indicator	.77	--	.76
	(.33)		(.15)
Franchise	.82	.70	.76
	(.19)	(.20)	(.12)
Missing Indicator	.60	--	.76
	(.18)		(.12)
51 – 99 Employees	1.13	1.23	1.11
	(.38)	(.49)	(.28)
100 – 499 Employees	1.01	1.01	.89
	(.28)	(.35)	(.19)
> 500 Employees	.49**	.43**	.42**
	(.16)	(.17)	(.09)
Missing Indicator	.82	--	.79
	(.16)		(.11)
Able to Pay Fine	.69**	.77	.81**
	(.11)	(.16)	(.10)
Missing Indicator	.35**	--	.55
	(.10)		(.10)
Financially Secure	1.24	1.04	1.56**
	(.21)	(.06)	(.20)
Missing Indicator	1.18	--	1.19
	(.39)		.23

Table 15 (continued).

Outside U.S.	.31**	.20	.75*
	(.09)	(.08)	(.11)
Missing Indicator	.46	--	.83
	(.14)		(.14)
Sentencing Year	.94	1.01	.95
	(.04)	(.07)	(.03)
After Dodd-Frank	2.63**	1.72	1.30
	(1.10)	(.90)	(.31)
Financial Crime	1.30	1.22	.96
	(.22)	(.27)	(.12)
Dodd-Frank*Financial	.55*	.89	1.00
	(.18)	(.40)	(.20)
Trial	--	.83	--
		(.48)	
Missing Indicator	--	--	--
After Booker Ruling	1.14	.83	1.33
	(.31)	(.32)	(.25)
For Criminal Purpose	1.05	.91	.95
	(.45)	(.55)	(.24)
Missing Indicator	3.28**	--	1.40
	(1.53)		(.29)
Constant	3.06**	4.14**	3.87**
	(1.10)	(2.48)	(1.16)
Log Likelihood	-645.46	-367.14	-1454.81
LR Chi^2	171.54	47.68	276.71
Pseudo R^2	.12	.06	.09

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. The Trial variable is excluded from the missing indicator models due to too few cases in the missing indicator category.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

APPENDICES

Appendix A

Firth Logistic Regression for Sensitivity Analyses Predicting Sentencing Placement Above Guideline Range for Federal Corporate Cases, 2002-2017 (N = 668).

	Chapter Eight Cases with Complete Data (excluding accept)	**Chapter Eight Cases with Complete Data (excluding trial)**
Criminal History	2.49**	2.54**
	(1.09)	(1.11)
Accept Responsibility	--	1.51
		(1.14)
Obstruction of Justice	.54	.61
	(.51)	(.58)
Tolerate Wrongdoing	1.85	1.89
	(.89)	(.91)
Offense Level	.82**	.82**
	(.04)	(.04)
Not Closely-Held	.49	.51
	(.28)	(.29)
Franchise	1.27	1.33
	(.75)	(.80)
51 – 99 Employees	.83	.86
	(.65)	(.66)
100 – 499 Employees	.78	.77
	(.54)	(.53)
> 500 Employees	2.28	2.34
	(1.90)	(1.94)
Able to Pay Fine	5.86**	5.95**
	(5.04)	(5.12)
Financially Secure	.98	.97
	(.13)	(.13)
Trial	1.14	--
	(.93)	
After Booker Ruling	1.91	1.94
	(.98)	(.99)
For Criminal Purpose	2.12	2.48
	(2.49)	(2.76)
Constant	.06**	.04**
	(.07)	(.06)
Penalized Log Likelihood	-72.03	-71.67
Wald Chi^2	37.08	36.81

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. The variables trial and accept are included in separate models due to multicollinearity. Country of incorporation is excluded from the analysis due to too few cases in the category of incorporation outside the U.S.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)

Appendix B

Firth Logistic Regression for Sensitivity Analyses Predicting Sentencing Placement Above Guideline Range for Federal Corporate Cases with Dodd-Frank Variables, 2002-2017 (N = 668)

	Full Model with Dodd-Frank Variables and Interaction (excluding accept)	**Full Model with Dodd-Frank Variables and Interaction (excluding trial)**
Criminal History	2.46** (1.12)	2.49** (1.13)
Accept Responsibility	--	1.41 (1.06)
Obstruction of Justice	.54 (.51)	.56 (.53)
Tolerate Wrongdoing	1.70 (.83)	1.72 (.84)
Offense Level	.81** (.04)	.81** (.04)
Not Closely-Held	.48 (.28)	.49 (.29)
Franchise	1.04 (.64)	1.09 (.68)
51 – 99 Employees	.80 (.64)	.83 (.66)
100 – 499 Employees	.96 (.69)	.94 (.67)
> 500 Employees	2.80 (2.47)	2.84 (2.48)
Able to Pay Fine	6.28** (5.45)	6.31** (5.46)
Financially Secure	.93 (.13)	.93 (.13)
Sentencing Year	1.06 (.15)	1.06 (.14)
After Dodd-Frank	3.50 (3.90)	3.33 (3.71)
Financial Crime	2.96* (1.66)	3.03** (1.69)
Dodd-Frank*Financial	.12** (.12)	.13** (.12)
Trial	1.10 (.92)	--
After Booker Ruling	1.26 (1.02)	.30 (1.03)

Appendix B (continued).

For Criminal Purpose	1.89 (2.35)	2.18 (2.62)
Constant	.03** (.04)	.02** (.03)
Penalized Log Likelihood	-64.83	-64.52
Wald Chi^2	40.30	40.10

Note: Table entries are odds ratios. Standard errors of estimates are in parentheses. The variables trial and accept are included in separate models due to multicollinearity. Country of incorporation is excluded from the analysis due to too few cases in the category of incorporation outside the U.S.
*p<.10 (two-tailed test)
**p <.05 (two-tailed test)