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EXPLORING ORGANIZATIONAL RECIDIVISM WITH A FOCUS ON FEDERAL ENVIRONMENTAL CRIME

By

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A Dissertation

Submitted to the Graduate Faculty

of the

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in Partial Fulfillment of the Requirements

for the Degree

Doctor of Philosophy

Grand Forks, ND

May
2023

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This dissertation, submitted by Isaac Mvula in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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PERMISSION

Title	Exploring organizational recidivism with a focus on federal environmental crime
Department	Criminal Justice
Degree	Doctor of Philosophy

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Isaac Mvula
2023

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Thank you for all your support, guidance and unshakable belief in me. I will forever love you both.

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Thank you for your love, support and inspiration. You are a source of unending pride and joy! Dad loves and appreciates you more than you will ever know!

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We made it! This is as much your accomplishment as it is mine. My appreciation for your love and unfailing support through innumerable challenges is beyond my capacity to put into words. All I can say is thank you!

ABSTRACT

This dissertation explores the recidivism rates of organizational offenders convicted of federal environmental crimes. Individual recidivism has received considerable attention from researchers over the years. This is not so with organization recidivism. This dissertation aims at putting greater light on this subject. The study focuses on environmental crime because of the critical need to preserve the earth's ability to sustain life. Federal environmental criminal prosecution data maintained by the EPA was the study population. The population included prosecutions of organizational offenders from 1994 to 2013. The total number of organizational prosecutions was 736 and the total number of organizational offenders convicted was 788. While the study's main aim was to provide a descriptive analysis of the recidivism rates of organizational offenders convicted of federal environmental crimes, it also provides analysis of the organizational offenders, their statutory violations and the sanctions meted out by the courts. The analysis yielded recidivism rates far lower than those that typically apply to individual offenders. These results raised a number of questions and observations that should be of interest to policy makers and future researchers.

CHAPTER ONE

INTRODUCTION

The rise of the corporation and organizational crime

The mid-19th century saw the rise and consolidation of the business organization - especially in its corporate form - as a centerpiece of the modern industrial economy, a transformation that continued into the 20th century. For the United States (US), the corporation became the primary economic mechanism that spurred the development of entrepreneurial and technical innovations that changed the country from an agrarian to a modernized industrial economy (Wright, 2014). Through this process, the corporation secured the position of being the country's most dominant form of economic organization, a reality that continues to this day. This development is hardly just an American phenomenon. Corporate power and influence have spread around the world. Capitalist corporations are to be found even at the heart of erstwhile socialist/communist states like Russia and China. The global prominence of corporate behemoths like Apple, Samsung, Amazon, Microsoft, Facebook, Google and Alibaba (just to name a few) not only underscores the global domination of this organizational form, but also serves to show that this state of affairs is unlikely to change any time soon (Govindarajan et al, 2019).

For the US, the impact of corporations has not been limited to the economic sphere. Their influence has impacted the larger American experience, going back to the pioneering days of the early European immigrants. Then, corporations were used by the settlers in their efforts to colonize the New World and its native inhabitants, as well as in the proselytization of their brand of Christianity (Glickman, 2016). These early corporate entities appeared on charters granted by European monarchs of the day (Parker, 2014; Phillips, 2020; Spencer, 2014;). It must be borne in mind though that these corporations were not like their modern counterparts. The latter emerged

in the early part of the 19th century. For the US, the first industrial corporation (the Boston Manufacturing Company) was formed in 1813. This was the first enterprise to combine organizational and mechanical approaches (known as the Waltham-Lowell System) and waterpower to create a full-scale, integrated manufacturing factory (Unger, 2013). As a unique combination of limited liability (in legal form), division of labor, advanced manufacturing equipment, and the efficient usage of water-power, the Boston Manufacturing Company became a dominant and highly profitable textile manufacturer (Kirtley & Kirtley, 2011) whose innovative systems were widely copied by others, to similar effect. The rise of the industrial corporation and concomitant technological advances in areas like energy production (from steam to oil and later electricity), telegraphy, steel production and transportation brought about rapid social and economic changes that culminated in what is known as the American Industrial Revolution. Integral to this process was the ability to organize such enterprises as limited liability corporations[1], a legal form which proved to be the most effective way of doing business in the new economic environment. Thus, at the end of the 19th and the beginning of the 20th century, the US economy came to be dominated by massive corporations like Standard Oil Company (Priest, 2011) and Carnegie Steel Company (Kobus, 2015). While it is indisputable that the corporation, as the central organizational form for the Industrial Revolution, yielded high levels of material prosperity, it came with its own problems. One was the rise of organizational crime.

Up to the late 19th century, corporations were rarely prosecuted. This changed in the early years of the 20th century as corporations proliferated, especially in the manufacturing sector. Perhaps as a result of the lack of legal sanction, society saw a rise in the harms corporations inflicted on people and the environment, which led the US government to start creating laws

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[1] A limited liability corporation is a legal person under the law. It is a legal construct that allows people, including other corporations, to organize and collectively invest their resources in an economic venture while limiting their liability or exposure inherent in such investments. See Morley (2016) for a detailed discussion of the subject.

against such offenders (Beale, 2013). As the reach and complexity of the modern corporation expanded, so did the variety of organizational criminality. Over time organizational crimes expanded to include securities frauds, consumer safety violations, accounting frauds, Ponzi schemes, and tax evasion, among others. Concomitantly, public awareness regarding the costs that such crimes can wreak upon society grew, leading to calls for greater government intervention. To meet this challenge, the US government started developing related regulatory mechanisms. This means that, beyond the promulgation of laws against corporate crime, the US government started creating a regulatory framework empowered to enforce these laws. So, as an example, when the Sherman Antitrust Act of 1890 was passed, the Department of Justice (DOJ) was given the regulatory responsibility to monitor antitrust activities and the ability to bring suits against violators (Grandy, 1993). Over time more of such statutes came into effect, creating regulatory agencies like the Occupational Safety and Health Administration (OSHA) and Securities and Exchange Commission (SEC). Additionally, the criminal justice system developed a system of fines to be levied against offending organizations.

As time passed, this fine-based punitive approach proved inadequate as a deterrence to corporate offending. Organizational crime continued to subject individuals, society and the environment to significant harm. This situation led to the general feeling that the criminal justice system was letting big and wealthy organizational offenders off easy by fining them insignificant amounts for criminal wrongdoing (Gruner, 2007). Some further argued that the relative paucity of such fines made them nothing more than the "cost of doing business" (Cullen et al., 2015). This led to the growth of calls for the improvement of the government's handling of organizational crime, especially corporate crime.

It was not until 1984 that the opportunity to carry out such systemic improvements presented itself, with the passing of the Sentencing Reform Act. This act led to the creation of the United States Sentencing Commission (USSC) which was charged with the responsibility of developing a system of sentencing guidelines and policy statements aimed at reducing unwarranted disparities and promoting transparency and proportionality in federal sentencing (USSC, 2020). Even though the commission was focused on reforming individual-offender sentencing (Yang, 2014), nothing prevented it from developing sentencing guidelines for organizational offenders (Nagel & Swenson, 1993). And so, after developing individual sentencing guidelines (which were issued in 1987), the commission commenced work on developing federal organizational sentencing guidelines (FOSG). After four years of work, the FOSG were issued in 1991 (Murphy, 2002).

At their core, the FOSG introduced three developments aimed at combating organizational crime. First was an upward revision of the criminal fines for organizational offenders, in order to enhance their deterrent effect. Second was emphasizing the importance of organizational self-policing (as indicated by the existence of an effective compliance and ethics program) as a preemptive measure aimed at reducing the likelihood of criminal violation. Third was the introduction of organizational probation as a tool that would enhance the court's ability to ensure that convicted organizational offenders comply with conditions imposed under given sentences. The USSC felt that the combination of the above would enhance the US federal criminal justice system's effectiveness in controlling organizational crime (Steer, 2001).

Why study organizational recidivism re: environmental crime?

As alluded to above (and discussed in later chapters), organizational crime in its various forms can be particularly costly to society. Over time, the US government developed various le-

gal, regulatory and judicial mechanisms to control such criminality. Unfortunately, a review of literature showed that very little effort has been expended in studying the effectiveness of such crime control measures, especially when it comes to determining their relationship with organizational criminal recidivism.

The dissertation's focus on environmental crime is based on two reasons. First, environmental crimes are especially egregious because their harms go beyond human beings. They affect other life forms and the environment upon which all life is dependent. This makes environmental crime especially problematic because unlike other types of criminal violation, these crimes can lead to ecosystem collapse which in turn could lead to the extinction of numerous species and expose human civilization to the risk of collapse (Rhodes, 2018). Second, such crimes are not always confined to the violator's immediate society or country. Environmental crimes can be transnational, meaning that they can spill over borders and impact the wellbeing of people in other locations and countries who may not be able to secure justice for harms suffered - especially if the culprits are from more powerful countries. As such, this study explores the prevalence of organizational offending and recidivism with specific emphasis on environmental crime.

Structure of dissertation

This dissertation is presented in eight chapters. Following the introductory chapter, the second chapter provides background and context to the study. Specifically, it presents the social and theoretical developments that informed the efforts that yielded the US organizational crime control system. It does so by providing a historical overview of the emergence of corporate criminality in America and the costs that such crimes can wreak on society. It also discusses the de-

velopment of organizational crime as a theoretical concept and presents a typology of such crimes.

The third chapter looks at the history of the US government's regulatory and judicial responses to organizational criminality. The fourth chapter looks at the idea of corporate criminal liability and how the US criminal justice system rationalizes it, and the theories of punishment that underpin US sentencing practice.

The fifth chapter looks at literature on green criminology, recidivism and the effectiveness of the federal organizational crime control interventions (with specific emphasis on environmental crime control). With green criminology, the chapter discusses how it became a criminological specialty and a review of the current state of research in the area. With recidivism, the chapter presents the concept and reviews literature as it relates to organizational offenders. Regarding organizational crime control, the chapter reviews literature on the effectiveness of the US government's efforts at controlling organizational crime.

The sixth chapter looks at methodological issues. It presents the type of research design employed by the dissertation. It examines the rationale behind this design, the data to be analyzed and the variables of interest. Given that organizational recidivism can have different definitions, this chapter also offers the operational definition that is used in this dissertation.

The seventh chapter presents the study's results, while chapter eight discusses the findings including the limitations of both the study and its methods. The study's implications for future research efforts are also discussed.

CHAPTER TWO

ORGANIZATIONAL CRIME: HISTORY AND CONCEPTUAL EVOLUTION

This chapter provides the historical context of organizational crime. It has three main sections. The first section looks at the emergence of organizational crime as a problem and the cost with which such crime burdens society. The second section presents the evolution of organizational crime as a theoretical concept, and the third section discusses the various types of organizational crime using a victim-based, stakeholder typology.

The emergence of organizational crime

Organizational offending has been a part of American life since colonial times (Golden et al., 2011). But it wasn't until the advent of the Second Industrial Revolution, during the second part of the 19th century, that organizational offenses emerged as a serious issue[2]. The fundamental economic, technological, and social changes caused by this revolution unleashed other social forces whose impact would not only be profound, but also increased the risk of organizational harm. One of these forces was the massive migration to American cities by people seeking to take advantage of economic opportunities in the expanding industrial economy. These economic immigrants came from both internal (rural to urban migration) and external (European immigrants) sources. This resulted in the rapid growth of American cities (Hirschman & Mogford, 2009). With this demographic flux came a significant up-tick in urban criminality, an observation that was to later form the basis of social disorganization criminological theories. But of interest here is the rise of another form of criminality - corporate crime (Allerfeldt, 2011). As the modern industrial economy expanded so did the power of the corporate entity. Combining this

[2] The First Industrial Revolution refers to the shift from agrarian to industrial production. This period lasted to the middle of the 19th century (Trew, 2014). The Second Industrial Revolution lasted from the late nineteenth to early 20th century (Sutthiphisal, 2006). It was characterized by rapid strides in technological innovation.

power with limited social controls, the American corporation became highly exploitative. Factories pursued profit with complete disregard to employee safety (Stuart, 2013). Further, large corporations engaged in monopolistic practices that came to be seen as a matter of serious social concern (B. Johnson, 2020). In response, the US government implemented a series of reforms popularly known as Progressive Era reforms (e.g., antitrust laws) to meet this challenge. Despite this, the range and breadth of corporate harms kept growing, exposing society to enormous cost as discussed in the section below.

The cost of organizational crime

Evidence shows that organizational harms can be exceptionally costly to society. Regarding white-collar crime, one estimate claims that, taking all things into consideration, the cost of such crime can be reasonably estimated to be between ten and twenty times the economic cost of personal and household crimes combined (Clinard & Yeager, 2010; Friedrichs, 1996). When one applies these multiples to the estimated cost of personal crime, the cost of white-collar crime enters the realm of the fantastic. According to the Federal Bureau of Investigation (FBI), property crime in the US for the year 2018 cost its victims $16.4 billion dollars (FBI, 2019). Based on the multiples given, this would mean that for the same year, the cost of white-collar crime was between $164 and $328 billion dollars. As for environmental crime, most estimates focus on the cost of illegal exploitation of natural resources without making a distinction between individual and organizational violators. The United Nations estimated the cost of such crimes, especially as they occur in the developing world, to be between $70 and $213 billion per annum (Nellemann et al., 2014). The World Bank provided its own estimate, putting the number between $1 and $2 trillion per year (World Bank, 2019). While the disparity indicates the methodological issues related to putting a financial measure on the damage caused by environmental crimes, it is clear

that such crimes can be very destructive, especially when one bears in mind that these estimates only touch on the illegal exploitation of natural resources. As well, these figures do not include the estimated financial cost of harms caused by pollution by corporations and other organizational actors in the course of business.

Beyond white-collar crime, fraud and environmental crime, organizations can also inflict harm on human beings, as employees and/or customers, and engage in significant tax evasion. When all this is considered, it becomes clear how eminently problematic organizational crime is to society.

Further to the above, there is another point that should be borne in mind. Unlike traditional crime, organizational crime includes harms caused by a special group of organizational offenders. These are organizations that provide money laundering and tax evasion services, both of which are illegal. Entities that offer such services include law and accountancy firms, international banks and even real estate agencies, and have been dubbed by some as "the pinstripe mafia" (Mitchell & Sikka, 2011). While the services they provide are illegal by themselves (per the Money Laundering Act of 1986 and 26 US Code § 7201), the pinstripe mafia are particularly pernicious because their services are offered to other criminal actors who inflict substantial harm to society. Often, such criminal actors prey upon resource-rich countries (often through corruption, and in some cases violence), sow social conflict or exploit vulnerable populations for their own benefit. This results in practices like drug-trafficking, illegal arms dealing, illegal exploitation of natural resources and human trafficking. Such actors need the services of money launderers to help them clean (that is, remove the taint of illegality from) their ill-gotten gains and integrate them into the legitimate economy (Schneider & Windischbauer, 2008).

It is estimated that criminal organizations generate money equivalent to 3.6% of the global Gross Domestic Product (GDP), 75% of which (that is, 2.7% of global GDP) is laundered (United Nations Office on Drugs and Crime, 2011). The World Bank estimate of the global GDP for 2019 was $88 trillion (World Bank, 2020). Based on these figures, global criminal proceeds for 2018 would be approximately $3.2 trillion, of which almost $2.4 trillion would have been laundered. It can be argued that without the money laundering services of the pinstripe mafia, the harmful practices that yield these massive cash flows would be significantly less appealing. In response, governments have taken every opportunity to impose stiff fines on banks found to be involved in such behaviors, as an effort to deter such misconduct. As an example, in 2012 the global banking giant Hongkong and Shanghai Banking Corporation (HSBC) was fined $1.9 billion for helping Mexican drug lords launder their massive proceeds from drug trafficking (Aspan, 2012). The same can be said for tax evasion, as studies have estimated that as much as $32 trillion of unpaid taxes are stashed away in tax havens. Of this amount, an estimated $12 trillion was spirited out of the so-called developing, poor countries of the world (Henry, 2012). Again, without the involvement of the pinstripe mafia, as the Pandora Papers and other similar investigative discoveries have shown, these crimes would be very hard, even impossible, to carry out (Levi, 2022).

As pointed out earlier, the insidiousness of the pinstripe mafia is that the illegal services they offer enable other criminal actors to carry out very costly and harmful crimes. Additionally, pinstripe mafia services typically lead to cross-border transfers of illegal funds, turning crimes into multi-jurisdictional affairs that can make control and prosecution efforts quite challenging. It must be noted though that for organizational crime, this multi-jurisdictionality is not limited to the efforts of the pinstripe mafia. Organizations, especially multinational corporations, can com-

mit crimes in different jurisdictions due to the fact that they can exist and operate in different locations at the same time via international branches and subsidiaries.

Theoretical development of organizational crime

The concept of organizational crime traces its origins to the concept of white-collar crime that was developed by Edwin Sutherland (1949/1983). Sutherland defined white-collar crime as "crime committed by a person of respectability and high social status in the course of his occupation" (p. 7). It is worthwhile to note that in developing the concept of white-collar crime, Sutherland was himself extending a concept introduced by an earlier author by the name of E.A. Ross, who coined the term "white-collar criminaloids" in reference to offenders he described as "society's most dangerous foe, more redoubtable by far than the plain criminal, because he sports the livery of virtue and operates on a titanic scale" (Ross, 1907, p. 59).

When the concept of white-collar crime was developed, it was hailed as a conceptual breakthrough that would allow society to understand and therefore deal more effectively with related crimes. But in time, it became clear that the term lacked the clarity required to allow for useful analysis of the crimes it represented (Friedrichs, 2002). Especially problematic was the fact that the term lumped together crimes by both individual and organizational offenders (Payne, 2012). In order to solve this categoric heterogeneity, white-collar criminals were separated into two general groups: individuals and corporations. This division led to the creation of two sub-categories of white-collar crimes: occupational (individual-level) crime and corporate (organizational-level) crime (Clinard & Quinney, 1973). According to this typology, occupational crime was defined as violation of legal codes in the course of an activity in a legitimate occupation; and corporate crime was defined as the class of offenses committed by corporate officials for their corporations and the offenses of the corporation itself. Given that this definition of "cor-

porate crimes" does not preclude the inclusion of crimes by non-corporate organizations (for example, trusts or partnerships), others suggested changing the concept of "corporate crime" to "organizational crime" (Gerber & Jensen, 2007). This (organizational crime) is the term that was chosen for this dissertation precisely because it includes criminality by non-corporate organizational offenders. So, in line with the Clinard-Quinney typology, organizational crimes can be defined as the class of offenses committed by organizational officials for their organizations and the offenses of the organization itself.

Perhaps as an emphasis of the need to have conceptual clarity regarding organizational criminality, it is important to stress the difference between such crimes and traditional crimes. There are three noteworthy qualities that apply to organizational but not to traditional (individual) crime. First, with organizational offending (that is where the organization itself is found to have violated the law) the violator is an invisible and artificial legal entity. With such an offender "there is no body to kick and no soul to damn" (Coffee, 1981). Second, organizational crimes include violations (e.g., antitrust violations and financial statement fraud) that can only be committed within an organizational context (Wheeler & Rothman, 1982). This can make organizational crimes complicated, multi-personal and multi-jurisdiction affairs. Third, as discussed above, the scope of cost and damage due to organizational crime is often significantly greater when compared to the cost of and damage caused by individual crime (SEC, 2009). From a crime control perspective, these qualities mean that efforts aimed at punishing or minimizing organizational crimes cannot be based on assumptions that apply to traditional crimes. These are a different class of crime that require appropriate solutions whose effectiveness would depend on the existence of a comprehensive conceptual framework that would enable society to design sensible policies.

Types of offenses by organizational entities

This section discusses in greater detail the different types of organizational offenses and the genealogy of social response to the harms they cause. This discussion will follow a victim-based, stakeholder typology. Stakeholders are people and other entities who have significant interests vested in an organization. These include employees, customers, investors, and society in general (with regard to environmental and tax crimes), and in the final analysis, these are the people/entities that are harmed or victimized by organization crime - hence the term "victim-based stakeholder". This typological approach is taken to not only show the variety of harm caused by organizational offenders but also emphasize that fact that these crimes are not victimless. Additionally, the section provides historical context to social responses to these offenses that eventually led to their criminalization. Although the title of the dissertation puts primary focus on environmental crime, other types of organizational offenses are also discussed to provide greater context to the subject.

Offenses against the environment

Environmental degradation due to human processes has long been considered a problematic issue. It is only relatively recent that it has been admitted as an area of serious criminological study and analysis (Barclay & Bartel, 2015), mainly due to the emergence of the term "green criminology," which is discussed in greater detail in chapter five. As such, the concept of environmental crime has not yet acquired a settled, standard, definition. In the meantime, there are various definitions of what constitutes environmental crime. Two are provided here. The first one, which is strictly legalistic, defines environmental crime as "an unauthorized act or omission that violates the law and is therefore subject to criminal prosecution and criminal sanctions" (Situ & Emmons, 2000, p. 3). The second one defines these crimes as "illegal activities harming the

environment and aimed at benefitting individuals or groups or companies from the exploitation of, damage to, trade or theft of natural resources including, but not limited to, serious crimes and transnational organized crime" (Nellemann et al., 2016).

Concerns regarding environmental degradation go back to mid-19th century America, as echoed by the pioneering work of George Perkins Marsh. Fundamentally influenced by the writings of a 19th century German explorer named Alexander von Humboldt, Marsh wrote a book entitled *Man and Nature* in 1864 (Wulf, 2017). In it he implored his fellow citizens to carefully consider their impact on the environment in their pursuit of progress and prosperity, lest they led the country down the same path of decline suffered by ancient civilizations that had been similarly careless in the treatment of their environments (Garvey, 2009). He wrote this book during a time when America was starting to experience the deleterious environmental effects of the First Industrial Revolution. The advent of the Second Industrial Revolution in the late 19th and early 20th century only added to the concerns that he raised. Although Marsh's work did not yield immediate legal response, it is credited with being a work whose influence would lead others into taking environmental conservation seriously. Another similarly impactful text appeared in the early 1960's. Entitled *Silent Spring*, it was authored by Rachel Carson 1962, almost 100 years after *Man and Nature*. The book was written to highlight the effects of pesticides on bird life and their unintended consequence of creating insecticide resistant pests (Woods, 2017). The book is credited with playing a significant role in creating the political impetus that led to the establishment of the Environmental Protection Agency (EPA) (Kisfalvi & Maguire, 2011). The establishment of the EPA ushered in a regimen of statutes and regulations aimed at controlling environmental crimes. While it is true that environmental crimes can be committed by individuals, evidence shows that the most significant of such crimes tend to be committed by corporations.

One well-known example is the Love Canal debacle in Niagara Falls where irresponsibly dumped chemicals leached into the ground, leading to various physical defects suffered by near-by residents years after the offending organizations left (Gibbs, 2011). Another example is the 1989 Exxon Valdez oil spill disaster which significantly harmed the ecology of northern Prince William Sound and a wide surrounding area in Alaska, the effects of which were still felt years later (Gill et al., 2012). A third one, caused in large part by insufficient corporate safety practices at an offshore drilling rig owned by the global conglomerate British Petroleum (BP), is the oil spill off the coast of Texas in the Gulf of Mexico that was even worse than the Exxon Valdez disaster (Sylves & Comfort, 2012).

Environmental degradation by American corporations is not limited to the US. Due to their multi-jurisdictional presence, such corporations can do environmental harm to societies far removed from American shores. Taking advantage of lax institutional frameworks, especially in the so-called Third World, American companies have undertaken commercial activities that have left legacies of serious ecological harm (Katz, 2010). As the Love Canal tragedy (among others) showed, environmental damage by corporations can be especially problematic and hard to quantify because the related deleterious effects can take years, even decades, to manifest themselves.

Noncompliance with the tax code

Non-compliance of tax law is another antisocial activity engaged in by corporations. Tax law non-compliance refers to the deliberate non-payment or under-payment of tax that should have been paid were the taxpayer following the law. Tax law non-compliance is antisocial to the extent that it creates a "tax gap." This is the shortage in public revenue that limits the state's ability to provide beneficial public services (Darby & Lemaster, 2007; Gemmell & Hasseldine, 2012). Tax non-compliance tends to be a rather challenging subject for theoretical analysis for at

least two reasons. First, the subject is fraught with definitional ambiguity because it uses different terms that are fairly proximate but can carry significantly dissimilar meanings. These include tax evasion, tax avoidance, tax minimization and tax fraud. While these terms carry different meanings, they are sometimes used interchangeably, thus creating confusion around the subject. Second, there is the matter of moral ambivalence. While some people believe that tax non-compliance is categorically problematic because it contravenes the law, others believe that it is the right of the citizen to find as many ways as possible to minimize tax payments to the government. This has led to the creation of a problematic division between "tax avoidance" and "tax evasion." Tax avoidance is defined as the attempt at minimizing one's tax bill by taking advantage of "loopholes" in often complex and contradictory tax laws - that is, seeking to maximize one's tax position by meeting the letter and not the spirit of the law. This is generally understood to be unproblematic. Tax evasion, on the other hand, is the illegal contravention of tax laws (Degl'Innocenti & Rablen, 2017). The question becomes, where does one draw the line? Perhaps the distinguishing characteristic is whether the tax savings in question are not hidden and are easily accessible in the official or formal economy - as in the case of tax avoidance - or they are moved into the "shadow economy," away from the reach of competent authorities - as is typically the case with tax evasion (Buehn & Schneider, 2012). Ultimately, the difference lies between the complexity of the tax law in question. In any case, non-compliance pulls significant quantities of money away from the public purse, and where such non-compliance is legally proscribed it becomes a criminal issue whose scale makes it a social problem requiring serious attention and response.

Frequently, parties seeking to minimize their tax burden will use the corporate form as part of their schemes. A popular technique is to create special purpose entities (anonymous shell

companies) in low-tax jurisdictions, into which money is transferred to avoid paying taxes at the higher rates applicable in the home jurisdiction. This "off-shore shell game" can be repeated depending on the level of anonymity required by the principals in question (Allred et al., 2017). Regardless of whether one calls such tax non-compliance activities "avoidance" or "evasion," the fact is that they result in significant losses in public finance, something that has caused governments all over the world to take serious measures in response. While evidence shows that tax non-compliance is particularly costly to developing and emerging economies, First World economies are not spared from the harmful effects of such schemes (Slemrod, 2007). It is estimated that the US federal government loses at least $441 billion dollars annually from tax non-compliance schemes (Internal Revenue Service [IRS], 2019a). Beyond depriving society-at-large of its share of tax revenue, tax non-compliance schemes effectively shift the burden of taxation towards the powerless and less privileged. This is because such people are unable to afford the expertise needed to design such schemes and are more likely to suffer the negative consequences of reduced governmental resources.

Offenses against employees

Corporate irresponsibility can threaten employee life and health. Unsafe working conditions and exposure to defective and toxic products due to negligence or deliberate criminality can cause harms that can lead to needless injury, illness and loss of human life. Beyond physical injury and death, toxic corporations can also expose employees to harassment (sexual or otherwise), abuse and discrimination that can prove very damaging to one's wellbeing.

In the case of the US, instances of employee injury and illness resulting from corporate behavior became especially problematic as more and more employees became exposed to unsafe working conditions during the industrial revolution. With the modern factory rapidly achieving

efficiencies in production, small scale producers were replaced by big corporate manufacturers. This created demand for factory labor that attracted masses of local people and external immigrants who came flocking in numbers that were typically more than could be absorbed by the job market. This resulted in the creation of highly populated urban communities with reservoirs of cheap and politically weak labor at the disposal of the industrialists. Together with emerging concepts of Social Darwinism that rationalized the rapaciousness of the elites and the extant environment of cutthroat competition (Weikart, 2009), there was very little interest placed on improving workplace safety. As a result, employees came to be exposed to a high risk of disability from injury, illness or even death. To combat this problem, advocates for employee safety started pushing for government intervention to improve workplace conditions. One result of such efforts was the creation of the Bureau of Labor within the Department of the Interior in 1884, the precursor to the Bureau of Labor Statistics (Goldberg & Moye, 1985). The aim behind this bureau was to collect data on the working conditions of the industrial laborer to be used as a rational basis for designing needed interventions. Although the establishment of the bureau may have been a step in the right direction for labor, its impact on industrial safety was insignificant because eighty years after the creation of the bureau, matters regarding occupational health were still a subject of great concern. This is reflected in the fact that in 1968, when President Lyndon Johnson called for the enactment of the Occupational Safety and Health Act, government numbers showed that workplace fatalities, and job-related injuries and illnesses were unacceptably high (US Congress, 1971).

Regarding work-related fatalities, the modern factory brought with it significant exposure to preventable workplace deaths. The early 20th century saw a significant number of such fatalities. In 1907, a reported 362 men and boys were killed in a coal mine explosion in Monongah,

West Virginia, an event that still stands as the worst coal mining workplace disaster in US history (Tropea, 2013). In the 1911 Triangle Shirtwaist Factory fire in Manhattan, New York, 146 people died due to an unsafe workplace environment (Mercurio & Randall, 2016). Concerned with the rising urgency of the issue, several leading manufacturing companies met in Milwaukee, Wisconsin, in 1912 to discuss what could be done to improve industrial safety. This meeting was referred to as the First Cooperative Safety Congress, which laid the foundation for the formation of the National Safety Council in 1913. A copy of the transcript of the proceedings shows that the estimated number of workplace fatalities at that time stood between 18 and 20 thousand (Association of Iron and Steel Engineers, 1912). In 1913, Bureau of Labor Statistics documented approximately 23,000 workplace fatalities, among a workforce numbering 38 million (Leon, 2016). This meant that there was one fatality per 1,652 employees. Spurred by these facts, more and more people came to believe that improvements were needed urgently. Perhaps the leading personality in this effort was Dr. Alice Hamilton who in 1908 started researching the problem of occupational injuries and fatalities (Baron & Brown, 2009). In no small measure due to the efforts of people like her, workplace safety became a priority, resulting in meaningful reductions in the rates of occupational fatalities. Thus, when the Occupational Health and Safety Administration (OSHA) was formed in 1971, there were about 14,000 workplace fatalities out of a workforce of 56 million, dropping the fatality rate to 1 in 4,000 employees. In 2019, the Bureau of Labor Statistics' data on workplace injuries, illnesses and fatalities show that there were 5,333 job-related fatalities (DOL, 2020d) among a workforce of 164 million (DOL, 2020a) - yielding a fatality rate of 1 in 30,665 employees. As the numbers show, significant improvements have been made over the years, but the problem remains.

While such improvements are true for the domestic American workplace, the specter of occupational fatalities related to foreign corporations owned or dominated by American corporations remains a significant issue. Through the use of offshore subcontractors, much of America's industrial base has been outsourced to low-cost locations such as China, Bangladesh, and Honduras. Unfortunately, this transplantation of manufacturers also means the exportation of related potential occupational safety risks for employees (Milberg & Amengual, 2008). OSHA has no jurisdiction over such operations in foreign locations and most of these countries do not have comprehensive occupational safety regulations. This has resulted in incidences like the 1984 Union Carbide factory gas leak in Bhopal, India, which immediately killed over 3,000 people, with as many as 8,000 more dying later (Sinha, 2009). In 2013, another incident occurred in Bangladesh where a clothes factory, whose corporate customers included Walmart, collapsed due to unsafe building conditions (Al-Mahmood & Banjo, 2013). The factory was housed in a building that was designed for commercial and not industrial purposes. In the aftermath of the disaster, it was ascertained that over 1,200 people lost their lives.

Beyond risks posed to life and limb, the workplace can also be an environment that can expose employees to psychological abuse. This can come in the form of harassment and discrimination. People in powerful positions in the workplace can use that power to exploit and abuse the less powerful. In the US, the first significant response to the challenge of workplace harassment and discrimination was the passage of the Civil Rights Act of 1964 (Aiken et al., 2013). This act focused mainly on racial discrimination, with gender discrimination added later as an amendment. Over time, the list of proscribed workplace behaviors increased to include sexual harassment and discrimination based on ethnicity, national origin, religion, age, sexual orientation and physical disability. For the most part, workplace offenses are covered by civil laws. But

in some cases, like stalking and cyber-bullying, workplace harassment could become a criminal matter (Henderson, 2009; Chaplin, 2010). And while criminal workplace harassment will typically attach to the individual perpetrator, there is always a risk that managers and the employer organizations could be held liable.

Offenses against customers

Corporations can also inflict criminal harm on customers through the sale of products or services that cause economic loss, injury, disease, even death. Although the concept of caveat emptor ("let the buyer beware") applies to the US consumer landscape, legal practice has also evolved the concept of the warranty or guarantee. That is, while it is the responsibility of the consumer to be careful when purchasing goods, the supplier is also legally bound to ensure that the goods supplied meet implied guarantees or warranties. One of these warranties is that the buyer receives goods that fit their description and have the quality and fitness for their intended purpose (Brower, 2011; White, 2016). Typically, when a seller supplies products or services that do not meet agreed description, quality or fitness for purpose, the buyer could charge the seller with breach of contract and bring a civil case. In situations where consumer safety violations are criminalized, the supplier could face criminal sanction (Cartwright, 2007).

For the US, efforts directed at creating legislative and regulatory responses to consumer safety violations started at the end of the 19th century. The first of such efforts was the promulgation of antitrust laws. Up to that time the United States saw the growth of huge monopolistic business entities that dominated their respective industries and effectively eliminated competition. Operating on the belief that competition is good for the economy and that monopolies are bound to expose the consumer to exploitative and abusive practices, political efforts were mounted to break these monopolistic structures. This resulted in the enactment of the Sherman

Antitrust Act in 1890 (Grandy, 1993). Later the Federal Trade Commission Act was passed in 1914, leading to the creation of the Federal Trade Commission (FTC) which was charged with the authority to regulate competition and ensure that there were no anti-competitive practices in the economy (Holt, 1922/2010). In the same year the Clayton Act was passed, providing more clarity on important matters introduced by the Sherman Act.

Another area of concern was food safety. Triggered by the writer Upton Sinclair, whose 1906 novel *The Jungle* portrayed the harsh conditions workers faced in the meat packing industry, there arose nation-wide interest in how food was prepared by industrial operations (Sinclair, 1906/2003). This resulted in a consumer movement that led to the creation of legislation designed to ensure that the food industry did not expose the public to contaminated products through negligence or fraud. In the same year of the book's publication, two pieces of legislation were put into force by the US government - the Pure Food and Drug Act and the Meat Inspection Act (Fortin, 2017). Over time, more laws and regulations were established (including those focusing on drug safety), eventually coalescing in the formation of the Food and Drug Administration (FDA) in 1927. Initially known as the Food, Drug and Insecticide Administration, the organization's name was shortened to its present form in 1930 (Borchers et al., 2007).

Yet another area of consumer concern is false advertising. As with food safety, efforts in regulating advertising practices were driven by another wave of consumer activism. This happened in the 1920’s and 30’s, with people feeling that they were not getting enough “bang” for their “bucks” due to suspicious and non-objective advertising practices. As with the food safety movement, this wave of consumer activism was spurred by the publication of influential books on the subject. One of these books was by authors Stuart Chase and Frederick Schlink, *Your Money's Worth*, which was published in 1927 (Stole, 2006). Interest in this book generated the

political impetus to regulate advertising. Both the FTC and the FDA took on this responsibility, with the former focusing on false advertising and the latter on false product labeling (US Government Accountability Office, 2011).

In the 1960's another wave of consumer activism swelled up. Technological advances yielded mass production of affordable technological products. This resulted in the widespread ownership of consumer products like automobiles and household appliances. With widespread consumption of such products, product safety issues arose. These concerns were at the center of Ralph Nader's criticism of the automobile industry and the unsafe cars it produced. As a result of Nader's efforts, the government enacted the National Traffic and Motor Vehicle Safety Act in 1966 (Soderlind, 2001). Other legislation followed, further enhancing the government's regulatory structure aimed at allaying consumer concerns.

Beyond antitrust abuses, false advertising and product and food safety, the American consumer has also been a prime target of financial swindlers. Such exploitation is especially prevalent in the consumer financial sector - among businesses that offer credit cards, mortgages, and other consumer financial products. At the core of such financial exploitation is the problem of information asymmetry. While the concept of caveat emptor applies in this case as well (thus placing reasonable responsibility upon the consumer to have some working knowledge of the financial industry), consumers are vulnerable to exploitation because most lack the necessary sophistication to understand the complex products that dishonest peddlers have to offer. These crimes can exact an enormous toll on victims and society in general. A good example of this was the sub-prime lending fraud that caused an economic recession in the United States that lasted three years, from 2007 to 2009. At the heart of this were dishonest mortgage brokers who prac-

ticed predatory lending on unsuspecting and unsophisticated consumers (Demyanyk & Van Hemert, 2011).

Offenses against investors

Investors are entities that hold debt or equity interests in given enterprises with the intention of generating financial returns. Such returns can be in the form of interest, dividends and/or capital gains. Investors can be individuals or corporate bodies. At their core, crimes against investors involve schemes that mislead investors into taking positions in propositions that are in fact fraudulent and/or loss-making. Essentially such crimes are based on deliberate misrepresentations regarding the nature and viability of the given investment opportunities. Such misrepresentations can be made by either individuals or organizations. Given the tenor of this study, primary interest falls on organizational offenders.

Organizational investor crime is almost exclusively committed by corporate offenders because they are the ones that are most likely to offer investors what they want - return on investment. Corporate investor crime picked up in the mid to late 19th century, as incorporation became easier and economic prosperity grew. One of the hallmarks of such crime is its complexity due to the use of arcane accounting and financial terminology, which in some cases are applied in combination with complex corporate structures designed to hide the truth from the unsuspecting investor. One of the first corporate crimes against investors that employed corporate structural complexity as its central strategy was the Credit Mobilier scandal of the 1860's (Kens, 2009). Credit Mobilier was a corporate entity created by the top management of Union Pacific Railroad, a company that had been chartered by the US government to construct a railroad from the Missouri River to the Pacific Ocean. Credit Mobilier was engaged, as a subcontractor, to do the actual construction work. The company then proceeded to overcharge Union Pacific, to the

detriment of the latter, while enriching its owners. In the end, at least $23 million (well over $600 million in 2020 dollars) was pocketed by the schemers, causing severe losses to the rest of Union Pacific's stock and bond holders (George, 2016). This scandal was effectively a precursor to financial crimes that used Special Purpose Entities[3] (SPE's) as their main weapon, as was the case with the Enron scandal that happened more than one hundred years later (Lundblad & Davidson, 2011). The only difference between the two was that the Enron scandal was on a much greater scale, with dozens of SPE's, leading to losses that ran in the billions of dollars.

At the turn of the 20th century, another investor fraud scheme came to prominence. The scheme came to be referred to by the name of the first person widely known to have used it on a massive scale - Charles Ponzi. At its base, this scheme exploits greed and gullibility. This is done by luring investors with promises of great returns - as much as fifty or even one hundred percent on one's investment (Peterson-Kramer & Buckhoff, 2012). In reality, the promoter uses the invested funds for his/her personal indulgences, while paying off some earlier investors. Of course, the promoter eventually runs out of new investors to cover the scheme and it inevitably collapses (Artzrouni, 2009). Although there is evidence that such schemes existed before Ponzi (George, 2012), it was the scale that he managed to achieve that made his name synonymous with it. Charles Ponzi ran his scheme in the 1920's and when it collapsed, his unwitting investors lost over $20 million. Remarkably, around the same time Ponzi was doing this, another swindler by the name of Leo Koretz, who was a trained lawyer, was also busy running an almost identical scam. By the time he was caught Koretz had burned through over $30 million of investor money (Jobb, 2015). Years later, another fraudster would run his own corporate Ponzi scheme. Bernie Madoff, using essentially the same logic that Charles Ponzi used, managed to create a Ponzi

[3] A Special Purpose Entity (SPE), also referred to as a Special Purpose Vehicle (SPV) (Gorton & Souleles, 2005; Sainati et al, 2017) is a legal entity created by a corporation to fulfill a narrow or specific purpose.

scheme of an exponentially greater scale. Over time, he grew it to over sixty billion dollars. When it collapsed, his investors lost about $20 billion (Jackall, 2010).

Investment frauds and swindles of the early 20th century would eventually contribute to the Great Crash of 1929 (Wilmarth, 2016). In response to this, the US government created the SEC. In order to protect investors, the SEC required stringent corporate financial reporting, especially from publicly traded companies. This spurred the development of comprehensive and ultimately complex accounting rules. Ironically, while such developments had the intention of reducing problematic information asymmetry, the result was a complex maze of reporting standards that did not seem to improve the quality of information provided (Said, 2011). Further, this maze of complexity created loopholes and grey areas that not only led to even more problematic information asymmetries (Glassman, 2006; Monga & Chasan, 2015), but could be manipulated to take advantage of under-informed or unsophisticated investors. In the hands of an assiduous and skillful person, these loopholes could be manipulated to present a far rosier account of a reporting entity's financial affairs than reality would suggest. Thus, the unintended consequence of the rise of comprehensive reporting standards was the emergence of accounting fraud.

Accounting fraud among publicly traded firms picked up in mid-20th century America. During the 1960’s and early 70’s, companies like Westec, Four Seasons Nursing Centers Inc., among others suffered bankruptcies amid allegations of accounting fraud and lax auditing (Markham, 2006). Again, the solution suggested was to improve the quality of financial reporting. This time, the thinking was that focus should be on improving the process of producing financial reporting standards which to that point had operated on an ad-hoc basis (Ochoa, 2011). This resulted in the creation of the Financial Accounting Standards Board (FASB) in the early 1970's. This board was to be a well-resourced independent primary promulgator of accounting

rules also known as GAAP (Generally Accepted Accounting Principles). Unfortunately, perhaps inevitably, this arrangement became politicized as various stakeholders, especially the government (through the SEC, which in effect had delegated the rule-making responsibility to the FASB, and other regulatory agencies) and professional accountants (on behalf of themselves and their clients) would bring pressure upon FASB to create rules that met their needs (Gipper et al., 2013). As a result, American GAAP became a collection of very convoluted and cumbersome rules that were open to misinterpretation, making deceptive financial reporting an even greater risk.

One example of such rules was the Statement of Financial Accounting Standard 140 (SFAS 140) which was supposed to provide guidance on how corporations reported their dealings with special purpose entities (SPE's). Unfortunately, corporations can use such entities to create artificial transactions (for example, sales) to inflate reported financial results. SFAS 140 was supposed to control this practice. But the political nature of FASB's standard-setting process produced a significantly compromised product which made it possible for disingenuous corporations to still use SPE's to create illegitimate sales to boost reported financial performance. In fact, such was the state of the rule that in a joint communication with the International Accounting Standards Board (IASB), the FASB itself felt that the standard was "irretrievably broken" (FASB & IASB, 2008).

Another problematic rule that opened the door to reporting obfuscation was known as mark-to-market accounting. At its base, this rule was meant to allow companies to recognize as income or loss any changes in the market values of given assets. So, for example Company A buys stock in Company B for $100, and in a year the value of that stock rises to $300. Mark-to-market rules would allow Company A to record and recognize $200 as income on its income

statement. It should be noted here that traditional accounting rules would not allow this. Traditionally, Company A would only be allowed to recognize a gain or loss on Company B stock upon selling the security. The problem with the mark-to-market approach was with companies that held assets that in all practicality could not be sold in the open market. In this case, mark-to-market rules allowed companies to come up with theoretical estimates of the value such assets would command if they were sold. If done properly, mark-to-market accounting can produce useful information (Schuetze, 2007). But because of its vague and rather general nature, the FASB's rule effectively allowed for speculative and even fraudulent accounting by corporations. Most knowledgeable and astute observers have argued that the abuse of SPE's and mark-to-market accounting played a pivotal role in the fraud that brought down Enron, perhaps the modern-day poster child of corporate accounting fraud (Gwilliam & Jackson, 2008).

Another factor that added to the likelihood of publicly traded firms engaging in accounting fraud was industrial deregulation. Starting in the early 1970's, the US economy saw the rolling back of regulations that controlled corporate behavior in various industries. Most of the regulations targeted by supporters of deregulation were instituted during the Progressive Era and the post-Great Depression period. The former aimed at controlling anti-trust practices in the market while the latter focused on preventing the recurrence of the kind of fraud and malfeasance that led to the Great Crash of 1929. Those in favor of deregulation argued that the removal of such archaic rules was needed to free the market and allow the entrepreneurial spirit to manifest unfettered. Another advantage of deregulation, some argued, would be the removal of the specter of regulatory capture, where regulatory agencies end up being controlled by the very entities they are supposed to control - and thereby defeating the very purpose for which regulations were created (Cortese, 2011). All in all, it was argued that the removal of regulations would lead to the

creation of greater economic efficiencies that would in turn create greater value for society. Supporters of deregulation argued that unfettering of the entrepreneurial impulse would increase competition, which in capitalist theory is a good thing for the marketplace. Further, the argument went, deregulation would create greater value for the investor from efficiencies unleashed by the enhanced competition. Naturally, this type of thinking led investors to expect deregulation to deliver greater profits. But for all this to happen, corporations would need resources, that is investor capital, to make the necessary operational adjustments to succeed in the deregulated environment.

Deregulation or not, investor capital is needed to survive and thrive. And since investors look for one thing, return on investment, it is only those companies that indicate success that can attract such capital. One of the best generally accepted indicators of financial success is growth. As a result of deregulation and the resulting competition, companies found themselves pressured to grow and control as much market share as possible. This led to industrial consolidation (Azar et al., 2017), as weak firms either fell by the wayside or got gobbled up by their larger counterparts (Davis & Wolfram, 2012). This put great pressure on corporations to report positive financial results. On one hand, companies that sought growth needed to report good numbers to attract the capital needed to make acquisitions. On the other hand, companies that saw this acquisitive impulse as an opportunity to profitably exit the market also needed to show good numbers to make themselves attractive targets. In such an environment, the risk of accounting fraud would grow significantly, a fact that was reflected in the accounting fraud-related collapse of the growth-oriented telecom behemoth MCI-WorldCom (Gregory, 2003). History has shown the colossal economic damage that investor fraud, driven by accounting fraud, can cause to an econo-

my. Not only do such forms of criminality lead to the destruction of enormous value through corporate bankruptcies, they can also set off recessions that can bring economic ruin to millions.

CHAPTER THREE

US GOVERNMENT RESPONSES TO ORGANIZATIONAL CRIME

This chapter presents a historical overview of the US government's regulatory and sentencing responses made to control organizational crime. As well, this chapter identifies the characteristics of the typical organizational offender that is prosecuted by the federal court system.

Regulatory responses

Since the emergence of organizational crime as a social problem, the US government has undertaken various measures to bring this challenge under control. Various laws have been passed in this regard over the years. These laws have spawned an elaborate enforcement and regulatory framework. The following presents the main US federal regulatory agencies that have oversight over criminal behaviors (by either individual or organizational offenders) in identified operational spheres, following the stakeholder-based typology discussed earlier in the text.

Environmental protection

Up until the 1960's, the US did not have a defined environmental regulatory structure (Plater, 1994). This changed in 1969, with the federal government's promulgation of the National Environmental Policy, leading to the creation of the EPA. As the years went by and the influence of environmentalism grew so did the number of environmental laws. This led to a significant expansion of the number of federal environmental laws and executive orders administered by the agency (EPA, n.d.-b). While the EPA is the primary and best-known environmental agency, the reality is that the US federal environmental regulatory structure is highly variegated and fragmented (Fiorino, 1996). There are numerous other agencies, beyond the EPA, that are also charged with administering various federal environmental laws. These agencies include the US

Fish and Wildlife Service, National Park Service, US Forest Service and the Bureau of Land Management. All these agencies can bring civil and criminal charges against offenders.

Tax evasion

This is perhaps the least complicated area regarding regulatory oversight. There is only one agency that is responsible for enforcing US federal tax laws - the IRS. The federal income tax system was established in 1913 after the ratification of the 16th amendment of the US Constitution which gave Congress the right to impose a federal income tax. Under this amendment, the Revenue Act of 1913 was passed, imposing a normal 1% tax on the incomes of individuals, estates, trusts and corporations. This tax law was to be enforced by the then existing Bureau of Internal Revenue. In 1919 the Bureau established the Intelligence Unit, which was charged with the responsibility of investigating efforts to defraud the government of income taxes. In 1978, the unit's name was changed to IRS - Criminal Investigation (IRS-CI), 25 years after the Bureau's name was changed to the IRS. Together with the Tax Division of the DOJ, the IRS can bring cases, both civil and criminal, against parties in breach of tax law.

Employee welfare

The responsibility of enforcing federal labor and employee welfare laws primarily rests with the DOL. According to its website, the department's stated mission is "to foster, promote, and develop the welfare of the wage earners, job seekers, and retirees of the United States; improve working conditions; advance opportunities for profitable employment; and assure work-related benefits and rights" (DOL, n.d.) The department carries out its duties through several regulatory agencies. Perhaps the best known is OSHA. As indicated earlier, this agency was established in 1971 with the aim of assuring safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, educa-

tion, and compliance assistance. Apart from OSHA, the department has other agencies like the Mine Safety and Health Administration, Wage and Hour Division and Employee Benefits Security Administration that also have law enforcement and sanctioning functions within their areas of responsibility.

Regarding criminal prosecution, the DOL has the ability (though rarely engaged) to bring criminal charges against serious violators. In 2015, the possibility of such prosecutions was made even more credible through a memorandum of understanding between the Departments of Labor (DOL) and the DOJ that made serious employer violations liable to criminal prosecution by the latter (DOL & DOJ, 2015). Beyond the DOL, there is the National Labor Relations Board, an independent regulatory agency whose aim is to protect employees' right to organize and unionize. This agency though does not bring criminal actions against violators.

Consumer protection

Starting in the late 19th century, the US government has passed numerous laws and established related regulatory mechanisms against practices that violated the consumer's right to fair pricing and product safety. These include the Sherman Act, the Clayton Act, the Federal Trade Commission Act, the Robinson-Patman Act, and the Hart-Scott-Rodino Antitrust Improvements Act (Blair & DePasquale, 2014; Collins, 2013; Giocoli, 2011; Walter, 2013; Winerman, 2005). These laws cover the following areas including conspiracy to fix prices; price discrimination; conspiracy to boycott a competitor/supplier; conspiracy to allocate markets or customers; and monopolization. The enforcement of these laws is the primarily the responsibility of two federal agencies: the FTC and the DOJ, Anti-trust Division. While these agencies can overlap, they tend to complement each other. The FTC has evolved to focus on specific industries, including those where consumer spending is high. These include health care, pharmaceuticals, professional ser-

vices, food, energy, and certain high-tech industries like computer technology and Internet services. The DOJ Antitrust Division, on the other hand, has sole oversight over telecommunications, banks, railroads, and airlines (FTC, n.d.). In areas of overlap, these agencies communicate with each other before commencing investigations on a case, to avoid duplication of efforts (Mengmeng, 2015). Another point to note is that according to the memorandum of understanding between the two agencies (FTC & DOJ, 2002), the FTC handles investigations that lead to civil penalties while the DOJ Antitrust handles investigations that can lead to criminal sanction (Bush, 2016).

There is another set of laws focused on protecting consumers from predatory and discriminatory financing. These laws include the Home Ownership and Equity Protection Act that looks at predatory mortgage financing (Jones, 1996) and the Equal Credit Opportunity Act that looks at discriminatory lending (Taylor, 2018). In 2010, as a result of the 2008 economic meltdown, the Dodd-Frank Wall Street Reform and Consumer Protection Act was passed into law. One of the requirements of this law was to create a regulatory agency that consolidated consumer protection responsibilities under one roof (Kennedy et al., 2012). This led to the creation of the Consumer Financial Protection Bureau (CFPB). But due to the fact that prior to the CFPB the enforcement of consumer finance laws fell under the auspices of the FTC's Bureau of Consumer Protection, the creation of the former meant that there was going to be inevitable overlap. To avoid any conflict or inefficiencies, the two agencies signed a memorandum of understanding to avoid stepping on each other's proverbial toes (FTC, 2012).

In the product safety area, laws were passed that led to the creation of related regulatory agencies. The primary agency in this regard is the FDA, which according to its website, focuses on "ensuring the safety, efficacy, and security of human and veterinary drugs, biological prod-

ucts, and medical devices; and by ensuring the safety of our nation's food supply, cosmetics, and products that emit radiation” (FDA, n.d.). Then there is the Consumer Product Safety Commission (CPSC), which was established in 1972 to “protect the public from the unreasonable risks of injury and death from consumer products” (CPSC, 2016, p. 4). Predictably, there was some jurisdictional overlap between the FDA and the CPSC, and in 1976 they had to sign a memorandum of understanding ensuring that there was no duplication of work or unnecessary confusion as to which agency had jurisdiction over a particular issue. Another agency is the National Highway Traffic Safety Administration (NHTSA). Formed in 1970, its mission according to its website is “to save lives, prevent injuries, and reduce economic costs due to road traffic, crashes, through education, research, safety standards, and enforcement” (NHTSA, n.d.). As such it regulates automobiles, trucks, motorcycles and other on-road vehicles to ensure that such products do not pose dangers to the public.

The area of consumer protection may be the most regulated of all areas covered in this section. The coverage above is not meant to be exhaustive, as such an exercise is beyond the scope of this study. Rather, it aims at providing a summary of the main regulatory bodies that handle cases of organizational crime within this area.

Investor protection

As indicated earlier, investment fraud has long been a staple of American life (Ackerman, 2005; Kens, 2009). Despite this fact, the US had minimum federal regulation of its securities markets (Stowell, 2010). It wasn’t until the Great Crash of 1929 that the United States govern0ment produced comprehensive laws and regulations to curb fraud on Wall Street (Perino, 2012). The main piece of regulation created in this regard was the Securities Act of 1933. This led to the creation of the SEC in 1934. Over forty years later, in 1974, another significant piece

of legislation was passed (the Commodity Futures Trading Commission Act) which led to the creation of another regulatory agency in the same year, the Commodity Futures Trading Commission (CFTC) (Keaveny, 2005). Together with the DOJ, these two agencies coordinate their efforts as the primary enforcers of US federal securities laws (SEC & CFTC, 2018).

Organizational sentencing

Efforts to control organizational crime must eventually touch on punishment. This is necessary because, without sanction, regulatory actions can be rendered meaningless as offenders would have no reason or compulsion to stop their actions. In essence, this was historically the case with organizational crime. It is not that there was no punishment for such crimes but, up to the 1980's, organizational offenders were fined amounts which most critics thought to be ineffective. According to such critics, the root of this problem was ineffective organizational sentencing practices. Calls for necessary reforms were made, resulting in the creation of the FOSG. These guidelines were issued over 30 years ago, in November 1991, as Chapter Eight of the United States Sentencing Guidelines (USSG). Since then, they have seen various amendments due to various political, legal and economic factors, as will be discussed in the following section. Regardless, they are still in effect. The paragraphs below discuss sentencing provisions as they appear in the 2018 version of the guidelines, which was current at the writing of this study.

Chapter Eight, or the FOSG, outlines the punishments that US courts can impose on organizational offenders. According to the guidelines, the aim of these punishments is to ensure just punishment and adequate deterrence; and to provide organizations with the incentives to maintain internal self-policing mechanisms to prevent, detect, and report criminal conduct (USSC, 2018). Substantively, Chapter Eight is arranged in six parts (disregarding the introducto-

ry commentary), with each part dealing with a specific dimension of organizational sentencing. These are briefly discussed below.

Part A applies to "the sentencing of all organizations for felony and Class A misdemeanor offenses" (USSC, 2018, p. 510). That is, it identifies the range of organizational offenses that fall under the purview of the organizational sentencing guidelines. Additionally, it provides general instructions on how to apply identified punishments. Aside from this, Part A also defines what the term "organization" means as applied by the FOSG. Per the guidelines, this term means a "person" other than an individual, and includes corporations, partnerships, associations, joint-stock companies, unions, trusts, pension funds, unincorporated organizations, governments and sub-divisions thereof, and non-profit organizations.

Part B details how convicted offenders are to remedy the harm caused by their crimes. Specifically, this part presents the sentencing requirements and options regarding restitution, remedial orders and community service. Another significant subject discussed in Part B is what constitutes an effective compliance and ethics program. Consistent with its aim of using organizational sentencing as a means of effecting organizational reform, the USSC determined that apart from stiffening organizational fines, sentencing reforms should also aim at encouraging organizations to establish effective self-policing mechanisms, also known as effective compliance and ethics programs. According to the commission, this could be achieved in two ways: a) using the pre-existence of such programs as a mitigating factor in fine calibration; and b) requiring the creation of effective compliance and ethics programs as a primary condition of organizational probation for qualifying offenders. Part B identifies the elements that such a program must have before it can be deemed effective for the purposes of organizational sentencing.

Part C details how fines are to be calculated and applied against organizational offenders. This section provides a fine-range structure which the courts can use to determine the exact fine to be charged against a given organizational offender. This fine range has three elements. First, there is the base fine. This is the minimum fine that can be levied against a given offense. The guidelines enumerate different offense levels and their related base fines. Second, there are the culpability factors. These factors are used to determine the severity of a given offense. Culpability factors are used to determine the fine multipliers to be applied to the base fine to increase fine severity. Third, there are the mitigating factors. Given the base fines and applicable culpability factors, mitigating factors (where applicable) are used to reduce the final fine amount. An example of a mitigating factor would be the existence of an effective compliance and ethics program. Another would be voluntary cooperation with the justice system. Apart from these general factors, Part C also identifies other special factors that can impact the imposition of fines on a convicted organization (e.g., the inability to pay). It should be noted that these provisions only apply to organizational offenders that did not exist primarily for criminal purposes. For such organizations, also known as criminal purpose organizations, specific provisions require fines to be set at a level that effectively achieves total asset divestiture, thus causing the organization to cease to exist. Part C is the largest part of the FOSG.

Part D focuses on organizational probation. According to the guidelines, a convicted organizational offender can be placed on probation to ensure that it carries out the sanctions and/or reforms as ordered by the court. Thus, an organization can be put on probation to ensure that it compensates victims for the harm suffered due to its crime, pays monetary penalties ordered by the court or establishes an effective compliance and ethics program. Part D details the circum-

stances, both mandatory and recommended, under which probation is to be imposed, and the length and conditions of organizational probation.

Part E covers additional matters like special assessments, forfeitures and how to handle the costs of prosecution; and Part F covers what the courts can do where an organization is found to be in violation of probation.

Sentencing is about the imposition of punishment. With punishment often comes the question: what is its purpose? Theories of punishment are covered in a latter chapter. For current purposes, suffice to say that the Chapter Eight sections discussed above were to be mapped to the conventionally identified purposes of punishment, it would be reasonable to state that the FOSG identifies the following as the main purposes of organizational sentencing: a) restitution: this is reflected in Part B's discussion of restitution, remedial orders and community service; b) retribution/deterrence: retribution is reflected by Part C and is extensive discussion of fines and their calibration - a fulfillment of the need for equality and proportionality of punishment (Krup, 1981) - while deterrence is reflected in that fact that fines are also expected be set at a level that would deter would-be offenders; c) incapacitation: Part C includes special provisions that relate to organizational offenders that exist primarily for criminal purposes. For such organizations, the courts are required to set fines at a level that essentially cause them to cease operations and "die"; d) reform/rehabilitation: this is covered in Part B, specifically its discussion of effective compliance and ethics programs that can be ordered by the courts under the provisions of organizational probation, which is covered in Part D.

As indicated above, the FOSG have seen some change over their term of existence. These are discussed in greater detail in the section following below.

The evolution of the FOSG

Since their passage in 1991, the FOSG have undergone significant change. Some of these changes came from the normal process of clarification and refinement. Others came about as the result of specific seminal events, be they specific court cases or unusual events (political, economic or otherwise). This section looks at some of the most significant of these changes and the events that precipitated them.

The USSG were created to provide more determinate sentencing and do away with unwarranted disparities in federal sentencing (USSC, 1987b). Strictly speaking, a system of determinate sentencing has explicit punishments for given types of crime. Such systems seek to minimize if not eliminate judicial flexibility so that sentencing is not impacted by problematic discretion. As such courts are expected to follow the mandated level of punishment for a given offense, typically without exception. Understanding that such a system could be unwieldy and harsh, the USSC designed a system of guidelines that introduced some form of flexibility. So, the initial guidelines manual that came out November 1, 1987, made the following accommodations to achieve this flexibility:

1. Sliding scale of punishment: for each offense, the guidelines provided a punishment continuum, with mandatory minimum and maximum levels of punishment. For prison time, this scale was provided in the form of a Sentencing Table, in Part A of Chapter Five of the manual. For fines, this scale was provided in Part E of the same chapter.
2. Consideration of aggravating and mitigating factors in sentencing: the guidelines allowed judicial consideration of factors that could minimize or maximize punishment within a given scale. This was done to accommodate the fact that while two people could commit the same crime, justice would be better served if courts considered other relevant and pertinent factors

in determining the level of punishment to be meted out. These factors were covered in Chapters Three (Criminal History) and Four (Adjustments).

3. Departures: the guidelines gave the courts the option to depart from the mandatory calibrations of punishment if they found aggravating or mitigating circumstances that were not adequately taken into consideration by the USSC in its promulgation of guideline provisions (USSC, 1987a). Departures were covered in Part K of Chapter Five.

Apart from allowing some punitive flexibility, the 1987 manual also provided a discussion of the general principles that underpinned the guidelines (Chapter One); the general categories of offenses that federal courts typically dealt with (Chapter Two); sentencing procedures and plea agreements (Chapter Six) and violations of probation and supervised release (Chapter Seven). All in all, the manual had seven chapters and two appendices - Appendix A which was a statutory index and Appendix B which listed authorizing legislation and related sentencing provisions. In total the manual was 329 pages long. The current version of the manual is 608 pages long, has eight chapters and three appendices. Appendix C, the additional appendix, lists all the amendments to the guidelines. Clearly the guidelines have undergone some changes over the years.

This section will not analyze and discuss all these changes, as such an effort would clearly be beyond the scope of this study. Rather it will focus on changes to Chapter Eight provisions, those that relate to organizational sentencing.

Changes to sentencing provisions

Initially 36 pages long, Chapter Eight is now 44 pages long. The initial version, introduced in 1991, contained the following sections: Part A - general application principles: this section showed how the guidelines were to be applied by the courts. It also offered definitions of

pertinent terms that are used frequently in the chapter; Part B - remedying harm from criminal conduct: this section provided guidelines to be followed when applying restitution, remedial or community service orders to organizational offenders; Part C - fines: this section provided guidelines on how the courts were to determine when and how much to fine organizational offenders, including when departure from the given fine guidelines would be allowable; Part D - organizational probation: this section provided guidance on when and how to impose probation on an offending organization. The section also covered how the courts were to handle circumstances where an organizational offender violated probation terms; and Part E - special assessments, forfeitures and costs: this section covered circumstances under which courts ought to impose special assessments (in line with the Victims of Crime Act of 1984) or order the forfeiture of property; and when the courts could order the offending organization to pay the costs of prosecution.

While Chapter Eight of the current manual remains the repository of organizational sentencing guidelines, it now has six sections instead of the initial five (USSC, 2018). Part F, the new section, covers provisions for the courts to follow in cases where organizational probationers violate the terms of the court. Before this part was created, these provisions were included in Part D. Another significant change was to Part B. In the 1991 manual, this part dealt with remedying harm from criminal conduct. The current version includes an additional section - one that deals with Effective Compliance and Ethics Programs. Both these changes were made via guideline amendment number 673, which was a result of a legislative response to the effects of the collapse of Enron, an event that is discussed further below. Table 1 below provides a summarized list of the FOSG's sections as they currently stand.

Table 1

Chapter eight provisions and year introduced

Part	Provisions (year introduced)
A	General application principles; Definition of terms (1991)
B	Guidelines to be followed when applying restitution, remedial or community service orders to organizational offenders. (1991)
C	Guidelines on fine calculation, and provision on guideline departures. (1991)
D	Guidelines on the application of organizational probation. (1991)
E	Guidelines on the application of special assessments, forfeitures and costs. (1991)
F	Guidelines on handling violations of organizational probation. (2004)

Beyond amendment 673, Chapter Eight saw twenty-one[4] other amendments (USSC, 2018), most of which were technical in nature, made to clarify or update certain provisions without changing their essence. As such, they will not be discussed in this chapter as they would have no bearing on the study at hand.

Changes to judicial status

Apart from changes to their content, the guidelines also saw a radical change in their judicial status. They changed from being mandatory to being advisory in nature (USSC, 2006). This was mainly the cumulative result of four court cases: *Apprendi v. New Jersey* (2000), *Blakely v. Washington* (2004), *United States v. Booker* (2005) and *United States v. Fanfan* (2005). These cases are discussed further below. For now, suffice it to say that appeals to holdings in these cases, which went all the way to the US Supreme Court, challenged the constitu-

[4] The following are these amendments: 453, 496, 534, 546, 569, 571, 573, 617, 619, 634, 666, 673, 679, 695, 733, 744, 747, 758, 778, 791, 797 and 813. They are listed in Appendix C of the guidelines' manual.

tionality of the guidelines' mandatory status. After deliberations, the Court agreed with these challenges and removed the provisions of the Sentencing Reform Act of 1984 that made the guidelines mandatory. This effectively made the guidelines advisory in nature. In their new status, the guidelines would not be the primary determinants of sentencing. Rather, they would be among the pertinent factors the court would consider in determining punishment. A discussion of the four cases referred to earlier (as briefly summarized in Table 2 below) follows.

Table 2

Significant cases that impacted USSG mandatory status

Case name		Case details
Apprendi v. New Jersey (2000)	Facts	Defendant shot into a home recently purchased by an African-American family. Found guilty of two counts of illegal possession. Sentenced to 12-year prison term by judge (not jury). Defendant appealed.
	Issue	Guidelines called for a 10-year prison term. Judge's decision extended the term because of the component of racial abuse.
	Holding	The Supreme Court vacated the case.
	Rationale	Only a jury (not judge) could vacate guidelines, after proving guilt beyond reasonable doubt.
Blakely v. Washington (2004)	Facts	Defendant kidnapped and held his estranged spouse under false imprisonment. Pleaded guilty to second degree kidnapping with firearm. Judge imposed a 90-month prison sentence. Defendant appealed.
	Issue	Per the guidelines, the prison term should have been 53 months. Judge extended the term because of the defendant's deliberate cruelty.
	Holding	The Supreme Court vacated the case
	Rationale	Only a jury could extend punishment beyond statutory guidelines, based on facts. Otherwise, the defendant's sixth amendment rights would be violated.

Case name		Case details
United States v. Booker (2005)	Facts	Defendant was found in possession of 92.5 gram of cocaine. He was charged and found guilty of intention to distribute at least 50 grams of cocaine (which called for a 10-year prison term). Defendant also admitted to having 566 grams of crack cocaine (with a 30-year prison term). Judge imposed a 30-year prison sentence. Defendant appealed.
	Issue	Based on the facts at hand, the maximum term should have been 10 and not 30 years.
	Holding	Supreme Court vacated case
	Rationale	The extension of the prison term was in violation of the defendant's sixth amendment rights because it was by the judge. Only a jury could do so.
United States v. Fanfan (2005)	Facts	Defendant was arrested for possessing 2.5 kgs of cocaine and 281.6 grams of crack cocaine. He was found guilty of conspiring to distribute 500 grams of cocaine, which called for a 10-year prison term, per guidelines. The judge imposed this sentence.
	Issue	By preponderance of evidence, the defendant was also found to be a leader of the conspiracy, which could cause an extension of the prison term. The US government called for the extension which was refused by the judge.
	Holding	Supreme Court upheld judge's decision.
	Rationale	Only a jury could impose a sentence that could go outside of guideline provisions.

Early December 22, 1994, Charles Apprendi Jr. fired several shots into the house of an African-American family that had recently moved into his neighborhood. The reason he gave for his action was that they were black, and he did not want them in his neighborhood. The court found him guilty on two counts of illegal possession of weapons, a crime that was punishable by a prison sentence that ranged from 5 to 10 years. Additionally, the judge (not the jury) found that

the defendant was racially biased in committing his crime and used this to extend his punishment to 12 years, beyond the statutory maximum. Apprendi appealed to the Supreme Court. The Court vacated the case, stating that a sentence can only be enhanced beyond the statutory maximum if pertinent evidence was presented to the jury and was proved beyond a reasonable doubt (*Apprendi v. New Jersey*, 2000). Even though this holding removed enhancement powers from the judge and handed them over to the jury with the duty to prove matters beyond a reasonable doubt (thus reducing - on paper - the chance of frivolous sentence enhancements), it introduced uncertainty to the application of the sentencing guidelines (Lindstrom, 2002).

On October 26, 1998, Yolanda Blakely was abducted from her home in Grant County, Washington, and held in involuntary physical confinement for 4 hours by her then estranged husband Howard R. Blakely. With the help of a neighbor, Yolanda was rescued, and her husband was arrested. The State of Washington charged Blakely with first-degree kidnapping. He pleaded guilty to second-degree kidnapping involving a firearm. Based on Washington's sentencing statute, the maximum sentence for this crime was 53 months. The judge sentenced the defendant to 90 months, based on what he said was the defendant's deliberate cruelty (Yera, 2009). The defendant appealed, claiming that the extended sentence (beyond the statutory maximum) violated his 6th amendment rights. The reason given was that, as a jury trial, the jury was not given all the facts that led the judge to determine that the defendant had acted with said deliberate cruelty, a claim that was used as an aggravating factor to upwardly adjust the sentence beyond the statutory maximum. The appeal went before the Supreme Court. In *Blakely v. Washington* (2004), the Court held that in a jury trial all facts that have a bearing on a sentence must be brought to the jury's attention to avoid violating the 6th amendment. The Court stated that the 6th amendment violation was caused by failure to present aggravating circumstances to the jury. In other words,

had the aggravating facts been found by the jury, the upward adjustment of punishment beyond the maximum level would not have constituted a constitutional violation. This was clearly an application of the *Apprendi* holding. Learned observers interpreted this as a blow to Washington's determinate sentencing system (Nussbaum, 2005), which was very similar to the federal sentencing system, because the Court was effectively saying that if there were sufficiently aggravating circumstances that could be proved beyond a reasonable doubt by the jury, mandated sentencing maxima could be ignored. Even though the Supreme Court did not expressly extrapolate their decision to the federal sentencing guidelines, there was a prevailing sense that the Court's ruling would ultimately affect federal sentencing statutory maxima (Kupers, 2004).

In *United States v. Booker*, Freddie Joe Booker was arrested for having 92.5 grams of crack cocaine in his possession. The jury found him guilty of possessing with intent to distribute at least 50 grams of cocaine. This had a federal maximum sentence of 10 years. On sentencing, the judge held that since he had admitted to the police of having distributed 566 grams of crack cocaine, his offense level would be raised based on federal sentencing guidelines. This put the defendant in a sentencing range of 30 years to life. The judge gave him 30 years. The defendant appealed on the basis that the facts relating to the aggravating circumstance were never given to the jury, thus violating his 6th amendment rights. Based on the holdings in *Apprendi* and *Blakely*, the US Court of Appeals reversed the sentence. The government appealed this ruling to the Supreme Court. The Court deliberated this case together with another one, discussed below, which made similar judicial challenges and had also worked its way up to the Court.

In *United States v. Fanfan*, Duncan Fanfan was arrested after being found in possession of 2.5 kilograms of cocaine and 281.6 grams of crack cocaine. Based on these facts, the jury found him guilty of conspiring to distribute at least 500 grams of cocaine, a crime whose manda-

tory punishment was 10 years of imprisonment. At sentencing the judge found, by preponderance of evidence, that the defendant was also the leader of the conspiracy, a fact that would serve to adjust his sentence upwards beyond the 10 years. But due to the impact of the Blakely case, the judge decided to go with the ten-year sentence, the maximum allowable. The government asked the court to correct the sentence (that is, go beyond the ten-year limit), to no avail. The government then appealed to the Supreme Court (Bloom, 2005).

The Supreme Court looked at both *Booker* and *Fanfan*, and ultimately concluded that in order to avoid the 6th amendment issues that attach to mandatory maxima as raised by *Blakely*, the federal sentencing guidelines' judicial status had to be changed. Instead of being mandatory, they had to become advisory (Cakmis, 2005). From a judicial standpoint, this meant that courts were free to consider other pertinent factors, beyond the guidelines, in determining sentences. The amendment in judicial status was done by removing the section in the Sentencing Reform Act of 1984 that made the guidelines mandatory (Gertner, 2010). As to whether this amendment would undermine guideline objectives, the USSC felt that this would not be the case as the guidelines would still have presumptive applicability in the federal courts (USSC, 2006).

Economic events and the guidelines

Apart from *Booker* and *Fanfan,* there were some specific events of corporate criminality that put the criminal justice system to the test and had a significant impact on the FOSG. Perhaps the first such event was the Enron scandal. To recap, in the fall of 2001, Enron, which was a well-regarded multi-billion dollar publicly traded corporation, collapsed under what was later determined to be a complex web of financial deceit and chicanery (Thomas, 2002). To add to the salaciousness of the case, its CEO at the time, Kenneth Lay, was very well connected politically, as he was a personal friend of the then incumbent US president, George W. Bush. In fact, it was

said that the latter seriously considered Lay as a candidate for the position of Treasury Secretary before the scandal broke out (Eichewald, 2005). The combination of all these facts made Enron's collapse particularly attractive for the media. With the limelight shining brightly on the beleaguered corporation, pressure mounted for the government to do something about corporate criminality. This pressure only grew when in relatively quick order (in early 2002), MCI Worldcom - another publicly traded, multi-billion dollar company - also found itself embroiled in a financial scandal of its own. As with Enron, MCI Worldcom would also declare bankruptcy as a result of its financial fraud (Scharff, 2005). As a response to these developments, the US Congress passed the Sarbanes-Oxley Act in April 2002. As if to underscore the importance of effective response to corporate criminality, within less than a year of the passage of the act, yet another multi-billion dollar company - Tyco International - also found itself ensnared by charges of financial impropriety (McGee & Byington, 2017). Even though in Tyco's case the issue was abuse of office for self-aggrandizement by top management (and not fraudulent corporate financial reporting to mislead investors) (Friedrichs, 2009), the matter was within the domain of corporate criminality covered by the Sarbanes-Oxley Act.

In passing the Sarbanes-Oxley Act, Congress took a comprehensive approach towards the challenge at hand. The response included the enhancement of corporate regulatory mechanisms which led to the creation of the US Public Company Accounting Oversight Board (PCAOB); stressing the importance of more efficacious organizational control and oversight. This led to requiring that top management personally certify all published financial statements; criminalizing the destruction of audit records and the falsification of financial records; enhancing whistleblower protection; and enhancing criminal sanctions against white-collar crimes (USSC, 2003; Hill, 2004; Riotto, 2008).

Given the impact that the Sarbanes-Oxley Act had on organizational criminality and sentencing, the USSC worked to ensure that the guidelines manual was amended accordingly to align with the new piece of legislation. The main results of this effort were the addition of the new crimes identified above to Chapter Two; and the addition of an extra section on Effective Compliance and Ethics programs in Part B of Chapter Eight, via amendment 673 (USSC, 2018).

Just as the sting of Enron and related scandals was receding, the US economy was hit with another shock: the Financial Crisis of 2007-2008. Referred to as perhaps the worst breakdown of the US (and global) economic system since the Great Depression, this financial crisis led to widespread systemic disjointments, resulting in the collapse of equity values and the evaporation of liquidity from the markets (Helleiner, 2011). This created panic in the market, especially within the financial sector. In dealing with this challenge, different countries took different approaches. Some let the law of the market take its course, letting weak banks fold. Iceland would be an example of such. Others decided to intervene and rescue their banks, ostensibly in order to avoid a total collapse of the financial system. In the US, where this approach was taken, the reason given was to ensure that banks that were "too big to fail" were saved, in the name of the economy. Along with such interventionist policies, the US government also passed legislation to combat the causes leading to the crisis. According to the Financial Crisis Inquiry Commission (2011), the crisis was caused by financial products that were complex and bore high risk; undisclosed conflicts of interest; the failure of regulators, the credit rating agencies, and the market itself to rein in the excesses of Wall Street.

Following the crisis, several laws were passed. One was the Fraud Enforcement and Recovery Act, which enhanced criminal enforcement of fraud and created the Financial Crisis Inquiry Commission referred to earlier. Another piece of legislation that was passed was the Dodd

Frank Wall Street Reform and Consumer Protection Act. Passed in 2009, it was aimed at effecting the most extensive overhaul of the US financial industry since the reforms that followed the Great Depression (Pope & Lee, 2013). Dodd Frank led to amendments that led to the extension of the definition of fraud in Chapter Two (Offense Types) of the federal sentencing guidelines. These pieces of legislation did not have any direct impact on Chapter Eight.

While the above may not be a comprehensive coverage of all the events that had an impact on federal sentencing guidelines, it should suffice to show that over time the content and application of these guidelines did change.

Typical organizational offender, pre FOSG

To round off the discussion on governmental responses to organizational criminality, especially sentencing, is a brief discussion of the basic characteristics of the organizational offender that the courts deal with.

As part of the consultative and research effort needed to inform the formulation of the FOSG, the USSC analyzed federal sentencing data to shed light on this question. The data analyzed were from 1984 to 1987 and were drawn from various sources maintained by the Administrative Office of the US Courts. From this data, it was established that of the 220,000 offenders prosecuted over the period of interest, organizational offenders constituted less than one percent (1,659). The following were some of the pertinent facts relating to organizational crime that the data yielded (USSC, 1988):

1. Offense type: four offense types accounted for a little over half of the organizational prosecutions (56%). The most common offense type was fraud, making up 25% of the prosecutions. The second most common category was anti-trust crime (22% of the prosecutions), followed by tax violations (5% of the prosecutions) and property crimes (4% of prosecutions). Envi-

ronmental crime prosecutions, which are not included in the 56%, accounted for 4% of the total.

2. Conviction rate: of the 1,659 organizations prosecuted, 1,283 were convicted, representing a 77% conviction rate.
3. Sanction type: the predominant sanction type was a fine, which was imposed in 89% of the convictions. Organizational probation[5] was ordered in addition to fines in 11% of the convictions. In only 7% of the cases was probation the lone sanction.
4. Offender characteristics: the majority of the defendants were small and closely held corporations[6]. Only 10% (169) had sales of over $1 million and employee head count of over 50. Of the 169, 41 were publicly listed corporations.

Based on this, the typical organizational offender prior to the promulgation of the FOSG was a small closely held corporation (with sales of less than $1 million and an employee head count of less than 50) prosecuted for committing fraud, anti-trust, property or tax violations, and ordered to pay a fine as punishment. This was the "real" organizational offender that the federal courts dealt with.

Over the years, the typical offender has remained the same - a small closely held corporation - and the predominant sanction was a fine. The only difference is that now the most common offenses are environmental (accounting for 25.6% of offenses), followed by fraud (22.2%) and food and drug offenses (16.7%) (USSC, 2021). It is worth noting that environmental criminal prosecutions have gone from being almost nonexistent before the advent of the FOSG to being

[5] Organizational probation was first used in 1971, in *US v Atlantic Richfield Co*., at a time when sentencing standards were non-existent. Following this case, a handful of judges also used organizational probation as a sanction, but its use waned as subsequent successful appeals weakened its statutory foundations as a corporate sanction. The FOSG would later fortify its position as a judicial option.

[6] A closely held corporation is one that has more than 50% value of its outstanding stock owned (directly or indirectly) by five or fewer individuals and is not a personal service corporation (IRS, 2019b). Personal service corporations are entities created by professionals (e.g., lawyers, accountants and medical doctors) to provide personal services to clients.

the most prosecuted offense type. While the reasons behind this change fall outside the scope of the current study, suffice to say it is a development that shows the need to have a better understanding of these crimes and how they could be controlled.

CHAPTER FOUR

THEORIES OF ORGANIZATIONAL CRIMINAL LIABILITY AND PUNISHMENT

This chapter focuses on organizational criminal liability and punishment theories with the aim of discussing the philosophical and conceptual framework that informs organizational sentencing as reflected in the FOSG.

Corporate criminal liability

In the Western criminal law tradition, the following maxim applies: *actus non facit reum nisi mens sit rea*, that is, "there can be no crime without an evil mind" (Chesney, 1939). This maxim is generally referred to in its shortened form, *mens rea* or "guilty mind", and was incorporated into the Model Penal Code, a document that has been very influential in US criminal law (Cusick, 2017). At its base, *mens rea* assumes that with an evil mind comes moral agency, meaning that as a general rule criminal liability can only attach to morally responsible entities. In this tradition, it follows then that criminal sanction would only attach to offenders with such capacity. Typically, this moral quality is assumed to be held only by human beings. Strictly speaking, therefore, this would mean that criminal law systems that ascribe to *mens rea* would only punish human offenders. But over the course of history such systems have extended criminal sanction beyond human offenders, to include animals and other inanimate objects (Evans, 1906; Dinzelbacher, 2002). Perhaps it is not a surprise that with this background, such societies would find it reasonable to ascribe criminal liability to another non-human offender - the modern corporation.

Modern corporations provide significant benefits to society, as employers and producers of various goods and services. But as previous chapters have shown, they can have significantly deleterious effects on individuals and society. Over the years these effects became more pronounced, and society responded by instituting necessary controls. The justice system was en-

gaged in this process, and soon challenges emerged as to how this system needed to deal with the corporate offender. One of the main challenges was determining the ontological reality of the corporate entity and how the law ought to treat it, especially from the side of criminal law (Lipton, 2010). In the seminal ruling of *Santa Clara County v. Southern Pacific Railroad Co.* (1886), the Supreme Court of the United States held that corporations were persons with the same rights as natural human beings under the Fourteenth amendment (Paliewicz, 2019), thus formally ushering in the concept of corporate personhood into the American legal arena. With the predominance of the *mens rea* concept in criminal law, the question of how to ascribe criminal responsibility to non-human offenders rose again - this time, with regard to the artificial, disembodied corporate entity. This challenge has remained to this day (Mansell et al., 2018; Pollman, 2011). Detailed discussion of how this challenge has been confronted over time is beyond the scope of this study. Rather the study will focus on the primary theoretical responses that have evolved to allow the courts to establish the basis of punishment for the corporate offender. In the Anglosphere, criminal legal theory has developed two main bases upon which criminal responsibility can be ascribed to a corporate entity.

The first is the "Identification Theory." Under this theory, a corporation can be held criminally responsible if it can be proved that its top managers, acting in their role as top managers, were morally responsible for the underlying offense. Thus, where top management *mens rea* is proved, criminal responsibility is imputable to (or identified with) the corporation. The basic premise of attribution is that the conduct and state of mind of top management is the conduct and state of mind of the company (Sullivan, 1996).

The second is the "Vicarious Liability Theory", also known as *respondeat superior,* which translates to "let the master respond" (McKay, 2012). Under this theory, if an employee of

a corporation, being of sound mind and acting in his/her role as an employee, commits a crime, the corporation is held responsible. Compared to the Identification Theory, the concept of *respondeat superior* casts a wider net with regard to the number of people who can expose a corporation to criminal prosecution. This is because an employee, as the representative of the corporation, does not have to hold a position of managerial influence (Dervan, 2011). The American criminal justice system applies vicarious liability in imputing employee/manager offenses to the corporation (Greenberg & Brotman, 2014).

Punishment theories

Punishments and reasons societies impose them have been a source of inquiry for a long time. This has led to the development of various theories that seek to explain the existence of the institution of punishment. It is perhaps a mark of the essential complexity of the question that there is significant theoretical variety around this topic - punishment is not a particularly simple subject matter of inquiry. Nonetheless, given the importance this institution plays in society and its potential to inflict enormous harm on the innocent, efforts are needed to understand it and ensure that it works to enhance and not degrade a society's quality of life.

At a minimum, punishment is a social response to a given offense. But the question is what purpose does it serve? That is, what teleological considerations does punishment address? Criminal justice theory offers a number of concepts that identify such purposes (Picinali, 2017).

Deterrence

Under this concept, punishment is imposed to discourage people from committing the crime in question. Underlying deterrence theory is the assumption that the population of potential criminals is made up of rational entities capable of calculating anticipated costs and benefits of their actions (Jacobs, 2010). Thus, properly calibrated punishment would add to the "cost" of a

given act and therefore outweigh any benefit that would otherwise follow. This concept identifies two types of deterrence: specific deterrence, where punishment is imposed on a given offender to dissuade that specific offender from recidivating, and general deterrence where punishment is imposed with the aim of discouraging other members of society (that is, potential criminals) from engaging in the criminal activity in question (Stafford & Warr, 1993).

Rehabilitation

Under this concept, the purpose of punishment is to reform the offender. This is done by exposing the latter to treatments and programming that will give him/her the capacity to resist engaging in similar criminal activity in the future. As such, punishment is a corrective exercise. This theoretical perspective is based on a mechanistic assumption of human nature - that is, human beings are "fixable," thus offenders are malfunctioning machines that can be fixed or reset via rehabilitative intervention (Fergus, 2014).

Incapacitation

With incapacitation, the purpose of punishment is to eliminate the offender's capacity to engage in criminal conduct. Unlike rehabilitation which seeks to improve the offender's resistance towards the criminal impulse, incapacitation seeks to eliminate the ability of the offender from acting in a particular way, without any consideration of the offender's internal ability to resist criminal temptation (Malsch & Duker, 2012). As an example, let's take a sex offender. Given such a person, rehabilitative punishment would focus on training and programming aimed at giving the offender tools to manage the problematic sexual urges. Incapacitative punishment, on the other hand, would look at options like lengthy/indefinite confinement or chemical castration to eliminate the capacity for reoffending (Farkas & Stichman, 2002). In extreme cases, inca-

pacitation will consider capital punishment (that is, the death penalty), an option that is never on the table with rehabilitative punishment.

Restitution

Under this concept, the aim of punishment is to force offenders to compensate victims or society for troubles or losses suffered (Lollar, 2014). Restitutive punishment focuses on the economic dimension of a given criminal act, by aiming at making the victim "whole" again - in an economic sense, that is.

Retribution

With retribution, punishment is meted out because it is morally right to impose sanctions against offenders. Effectively, the concept of retribution holds that offenders deserve to be punished, as a natural moral outcome. Perhaps the strictest interpretation of this concept is *lex talionis* or the law of "an eye for an eye." Unlike the other explanations given above that may be driven by material consequentialism (that is, seeing punishment primarily as a means to achieve individual or social outcomes), retribution is deontological in the sense that punishment is understood as a response to a metaphysical or moral imperative - the need to maintain equity (MacKenzie, 1981). As such, at the core of this concept lies the quest for balance, in a moral sense. Because of this, retributive punishment cannot be less or more than the injury caused by the crime, lest it exacerbate the moral imbalance (von Hirsch, 2007).. This is the reason why retributive punishment is also referred to as "just deserts," meaning that while the offender deserves to be punishment ("deserts"), the punishment impose cannot be unjust ("just"), otherwise the retributive rationale falls apart. Because of this, retributive punishment is especially sensitive to the proportionality of punishment vis-à-vis the crime.

Moral education

Punishment as moral education is a concept that holds that the purpose of punishment is to teach people the limits of acceptable behavior, that is, what is right and wrong (Garland, 1990; Hampton, 1984). In other words, punishment is about the fortification of morals (Howard, 2017). It must be borne in mind that while a superficial reading might lead one to believe that the concept of moral education is similar to that of retribution, the truth is that they are far from each other (Shook, 2004). At a minimum, retribution is retrospective (just deserts follow a past act) and moral education is prospective in that its ultimate focus is on impacting future behaviors. This study won't dive into the weeds and discuss these differences in greater detail. Suffice it to say that the concepts of moral education and retribution are neither similar nor proximate, despite the fact they both make direct reference to moral justifications.

Punitive justifications and the penal code

Having briefly looked at alternative justifications for punishment, one may ask which one forms the basis of the United States penal code. As it turns out, penalties imposed by US criminal law are not based on one conceptual justification. Rather, they are based on a unified or integrated theoretical foundation. According to 18 USC § 3553(a)(2), sentences must be imposed for the following reasons:

1. To reflect the seriousness of the offense, to promote respect for the law, and to provide just punishment for the offense.
2. To afford adequate deterrence to criminal conduct.
3. To protect the public from further crimes of the defendant.
4. To provide the defendant with needed educational or vocational training, medical care, or other correctional treatment in the most effective manner.

In other words, US criminal law (per 18 USC § 3553(a)(2)) sees punishment as serving the following purposes: moral education and retribution; deterrence; incapacitation (through incarceration); and rehabilitation. It should be noted that the section quoted above does not make specific mention of restitution as an aim of sentencing. Another section (18 USC § 3663) allows for the imposition of restitution orders.

As was briefly discussed in the previous chapter, the FOSG reflects this integrated approach to punishment.

CHAPTER FIVE

LITERATURE REVIEW - RECIDIVISM AND ORGANIZATIONAL CRIME CONTROL

This chapter reviews literature on organizational crime, green criminology, recidivism and the effectiveness of organizational crime control policies. With organizational crime, the discussion provides a general picture of recent research efforts in this area and a sense of the topics that attract the most attention. With green criminology and recidivism, the discussion introduces these concepts and explores their development and meaning. The discussion also reviews the state of research on environmental crime by organizational offenders and research efforts that have analyzed EPA Summary data. With crime control policies, the chapter reviews the effectiveness of the US government's efforts at controlling organizational crime.

Current research on organizational crime

Despite evidence of the enormity of the cost of organizational crime to society, the topic has traditionally attracted less attention from criminological researchers as compared to street-level crime (Simpson, 2013). Nonetheless, there are research studies that have looked at the various aspects of this phenomenon, ostensibly with the aim of creating greater understanding around a topic that is significant to society.

Perhaps given the complexity that is attached to organizational crime, existing research studies cover a wide variety of subjects. For the most part, these studies are seeking to provide greater clarity regarding the essential nature of organizational crime, how it ought to be sanctioned and to a lesser degree how it can be controlled.

Regarding the nature of the crime, there are research studies that have an etiological focus. That is, they aim at understanding the forces within organizations that account for the origination and, sometimes, persistence of organizational crime. There are those that focus on the

question of whether organizational crime is driven by the individual self-interest of employees and/or managers, or by the need to meet larger, organizational-level interests. The answers differ. Some argue that individual-level interests/factors are more significant than organizational-level concerns (Alalehto, 2018; Schruijer, 2018) while others put emphasis on the latter (van Baar & Huisman, 2012; Aven, 2015; Lord et al., 2018; van Rooij & Fine, 2018). Others go beyond the individual/structure typology to implicate institutional, industrial and/or political forces as being significant drivers of organizational criminality (Morales et al., 2014; Lord et al., 2017; Valarini & Pohlmann, 2019). Besides such etiological studies, there is a growing literature around the notion of state-corporate crime. First introduced in 1990, this type of crime is defined as "illegal or socially injurious social actions that occur when one or more institutions of political governance pursue a goal in direct cooperation with one or more institutions of economic production and distribution" (Kramer et al., 2002). As with the earlier development of the term "white-collar crime," this term sought to highlight the significance of crimes that occur when corporate and government interest intersect. Studies have used this concept to explore how such criminality manifests domestically (Leon & Ken, 2017; Bisschop et al., 2018) and internationally (Evertsson, 2017; Al Weswasi, 2019). As a new area of interest, more research is likely to come and provide even greater light on the topic.

Another topic that has attracted significant research attention has been the determination of which of the traditional criminological theories best suit organizational crime. Traditionally, organizational or corporate crime, as an offshoot of white-collar crime, has primarily been located within critical criminology (Simpson, 2013). Despite this fact, researchers have produced studies that have examined the applicability of other theoretical frameworks in explicating this type of criminality. These include Hirschi's general theory of crime (Leeper Piquero et al.,

2010), strain theory (Wang & Holtfreter, 2012) and routine activities theory (Gibbs et al., 2013). The aim is to determine the theoretical framework(s) that would lead to a clearer understanding of this type of crime.

Yet another topic of interest, which has been tackled by very few studies, has been the matter of the efficacy of crime control policies aimed at organizational crime. Given the nature of the crimes and the offender in question, corporate crime control strategies tend to lean towards deterrence and compliance enhancement. As such, the studies that have looked at the effectiveness of corporate crime control strategies have mainly looked at whether or not the latter effectively deterred corporate crime. To be clear, the studies focused on general as opposed to specific deterrence. In this context, the studies held the general view that there is no evidence to clearly show that extant legal interventions achieve any meaningful general deterrence (Yeager, 2016), although there may be some evidence that a comprehensive approach - that is, a combination of monitoring, inspections and enforcement - may have some effect in deterring such crimes (Schell-Busey et al., 2016). Some have argued that this limited deterrent effect of punishments may be due to the fact that corporate offenders may be career criminals by nature (Hunter, 2021), on whom deterrence policies may have no effect. Yet others have suggested that perhaps the aim of corporate criminal sanctions should be focused on retribution and not deterrence (Robson, 2010). Either way, more work is needed in this area. Ultimately, as is shown below, the US government has an extensive regulatory structure aimed at controlling corporate crime, a fact that should naturally attract research interest aimed at determining this structure's effectiveness. The present study is a contribution in that direction.

Green criminology - evolution and current research

As discussed previously, the advent of the Industrial Revolution brought with it an increase in environmental harms. In response, the US government passed the Rivers and Harbors Act in 1899, the first piece of federal legislature against such harms. After this, no meaningful federal environmental laws were passed until the 1960's, over half a century later. This delayed response to these crimes was also reflected in the world of criminological theory and research. Perhaps due to its focus on the individual criminal and victim, criminological theory (and therefore research) scarcely looked the way of environmental crime. And whenever it was addressed, it was treated as a marginal matter. It was not until 1990, on the heels of the modern environmentalist (or green) movement that picked up momentum in the 1970s and organized itself into a significant political force by the 1980's (Walljassper, 1990), that the term "green criminology" was injected into the criminological lexicography (Lynch, 1990). The term would provide researchers a taxonomical tool under which crimes against the environment could be grouped and addressed as a separate criminological category. This development motivated expanded interest in this area, leading to the production of numerous research studies covering a wide range of topics. The studies explored the typological, theoretical and methodological aspects of this new field.

Typologically, green criminologists sought to answer the following question: what harms and phenomena comprise green criminology? The question arises due to the breadth of topics that can be (or have been) subsumed under this label. Studies in this area have looked at harms against water, air and soil - that is, harms that typically come to mind when talking about environmental crimes - and novel topics like harms against outer space (Lampkin, 2020), and also the effect of the transnational nature of green criminality (Luong, 2020; Wright, 2011). On the per-

petrators' side, studies have looked at green crimes as committed by individuals (Paukku, 2022); corporations, both as a separate group and as part of a state-corporate criminal complex (Lynch et al., 2021; Patten, 2019); and those committed by organized crime syndicates (van Uhm & Siegel, 2021). There are also those studies that have looked at the question of the criminalization and sanctioning of green offenders (Long et al., 2012), and green victimology as it relates to both human and non-human victims (Brisman & South, 2018; D. Johnson , 2017). The effect of all these efforts has been to move green criminology from its initial categorization as a subset of corporate/white-collar crime (Frank & Lynch, 1992; Wolf, 2011) - a somewhat default categorization that came about due to the predominance of egregious corporate environmental criminality that initially drove interest in the subject - into its own area of criminology that intersects other criminological specialties. As a result, the definition of green criminology needed to expand from its focus on violations of environmental law, mainly by corporate offenders, to the study of environmental harms and their victims, human or otherwise, and the structures or processes implicated in the (non) criminalization of these harms.

Several definitions have been offered in this regard. One definition describes green criminology as the study of environmental harms, environmental laws and environmental regulation (White, 2013). Another defines green criminology as "the study of green harms, crime, law and injustice; the causes of those crimes/harms; and the various species or living entities that are the victims of green crimes and harms" (Lynch & Long, 2022). The re-orientation of focus from "crimes" to "harms" reflects the deepening understanding of the subject matter, and the fact that to be of value green criminology needed to look beyond the limited legalistic definitions of environmental crime. But this does not mean that the matter is settled, as there are those who find the term "green criminology" either insufficient or problematic. Some have proposed the introduc-

tion of terms like blue criminology (García Ruiz et al., 2022) and conservation criminology (Gibbs et al., 2010) to solve identified shortcomings, while others have suggested to stop using the term "green" entirely (Halsey, 2004). For a fairly new criminological specialty, such typological questions should be expected and will remain as writers and researchers continue to deepen the stock of knowledge in the area (Nurse, 2017).

When the term "green criminology" was suggested, the originator made it clear that it did not denote a new theory. Rather it was a theoretical perspective that sought to expand criminological thought, by encouraging people to consider the "green" aspects of crime (Lynch, 1990). As a perspective, green criminology was not to be wedded to a particular theory but rather be open to treatment from different theoretical positions. Despite this position, it is worth noting that green criminology historically emerged from the Marxist, Critical theoretical perspective with significant focus on the crimes of the powerful - especially the environmental criminality of corporations and national states. Nonetheless, the green-criminology-as-a-perspective position is still generally held by researchers in the field (Ruggiero & South, 2013; South, 1998). As a result, there have been many studies that have sought to explore the connections between green criminology and traditional criminological theories (White, 2021). This broad theoretical base has given green criminologists the ability to think beyond the limits of traditional criminological theories. One approach has been to borrow theories from other disciplines, especially political science (Brisman, 2014). There are also those who have suggested that systems thinking would add value to green criminology, given the fact that most green crimes tend to implicate systems and structures and not the individual offender as is the case with traditional crimes (Tourangeau, 2022; Hill, 2015). Another interesting theoretical development has been the proposition that green criminology be moved to an entirely different discipline. One of the main reasons behind

this proposition is to ensure that green criminology continues to have a focus on harms (and not just crimes) in its scope of study. The claim is that keeping green criminology under the umbrella of traditional criminology with its crime-focused approach and its pre-occupation with street-level criminals would limit the former's potential at making significant contributions in the study of environmental harms. The solution offered is to relocate green criminology to Zemiology, which focuses on social harms rather than crimes (Brisman & South, 2018). Such efforts should be expected to continue as green criminology continues to mature as a field of study.

From a methodological standpoint, green criminology has been dominated by qualitative studies. The range of such studies is quite wide, with topics studies in including the definition of environmental harms (Tourangeau, 2015), the exploration of victim conceptions of environmental crimes (Ogundipe & Gunderson, 2020), and poacher profiling by game wardens (Eliason, 2013). Very few green criminological studies are quantitative in nature (Lynch et al., 2017). In fact, detailed searches for such works (articles in peer reviewed journals published since 2010) have yielded less than 30 studies. Topics covered by these works include studies on the spatial distribution of environmental crimes (Thomson et al., 2020), the analysis of environmental crime from a state-corporate crime perspective (Patten, 2019), the impact of permitted animal culling on poaching (Chapron & Treves, 2016), the impact of culture, tradition and public awareness programs on wildlife crime (Rizzolo et al., 2017; Didarali et al., 2022), sentencing patterns for environmental crimes at the state (and not federal) level (Cochran et al., 2018), studying environmental crime as a public health risk (Gündoğan & D'Alisa, 2017) and one that reviews the trends in wildlife crime research (McFann & Pires, 2020). This diminished research output should not be taken as an indication of researchable data, as there exists enough secondary data to support significant research effort. In the US context, such data are found mainly at the federal

level. Possible reasons behind the low level of research usage of this data are either such data are costly to access (requiring subscription fees) or they exist in forms that do not easily lend themselves to quantitative analysis (Griefe & Maume, 2020). Thus, in order to carry out quantitative studies, researchers have to expend significant time manually transforming data into formats amenable to statistical analysis and maybe even spend significant amounts of money to access the databases of interest. This could explain the limited quantitative research output in this field, and by extension the virtual inexistence of research on corporate environmental recidivism - a subject that is quantitative by nature. Another possible reason could be that perhaps researchers in the subject just have a preference for qualitative analysis. Nonetheless, of the limited number of quantitative studies that were found, none addressed topics that were of interest to this study.

In summary, as a new field of criminological specialization, green criminology is still dynamic and evolving. Researchers are still exploring typological, theoretical and methodological questions that would allow it to secure a solid footing and fulfill its aims. It still has room to grow, and in a small way, the current study contributes to this development.

Recidivism

Another concept that is central to this dissertation and needs discussion is the concept of recidivism. At first glance, recidivism may seem to be a simple concept. But given its impact on the criminal justice system, in terms of the design of judicial sanctions and other policies regarding the maintenance of public safety (Urban Institute, 2009), it becomes clear that recidivism is not only an important concept but also requires careful consideration - especially from a research standpoint.

There are various definitions of recidivism. One definition states that recidivism is “falling back or relapse into prior criminal habits, especially after punishment” (Blumstein & Larson,

1971). Another defines recidivism as “re-engaging in criminal behavior after receiving a sanction or intervention” (Elderbroom & King, 2014). The USSC defines recidivism as a person’s relapse into criminal behavior, often after the person receives sanctions or undergoes intervention for a previous crime (USSC, 2016). All these definitions are similar, perhaps because at the conceptual level recidivism is easy to understand. While true, things are not that clear-cut when it comes to its operationalization for research purposes. This is because, to start with, there are different ways the recommission of a crime can be defined for practical purposes. From a research standpoint, the definition of the recommission of crime must be measurable. Unfortunately, offenses may go undetected by law enforcement. As such, outside of reliable self-reporting, it is not possible to measure such recidivations. But even when re-offenders encounter law enforcement, the record of such events may not be properly kept, as practices differ from one state or local jurisdiction to another (J.L. Johnson, 2017). So even though recidivism is easy to define conceptually, practical considerations call for a more substantive and workable definition. The USSC provides two. The first defines recidivism as the first occurring of any one of the following: (a) re-conviction of a new offense, (b) re-arrest with no conviction disposition information available on the post-release criminal history record; or (c) a supervision revocation - probation or post-prison supervision. This is known as “primary” recidivism. The second one defines recidivism as a re-conviction event during the two-year follow-up period after release into the community. This is known as the “re-conviction only” definition (USSC, 2004). Given that these definitions assume individual offenders, they are used as definitional approaches that will inform the construction of this study’s operational definition of federal criminal environmental recidivism for organizational offenders.

Given the type of data at hand, the "re-conviction only" definitional approach seems to be the most appropriate for constructing the study's operational definition of recidivism, even though it is argued that the "primary" definition is more reliable (USSC, 2004). The reality is that the EPA Summary data do not have non-reconviction recidivism variables, a fact that makes them consistent with the "re-conviction only" definition. It must be borne in mind that research shows that different measures of recidivism can lead to different conclusions (Ostermann et al., 2015), meaning that more than likely this study's conclusions on organizational recidivism would be different were it based on the "primary" definition. This limitation should be considered when looking at the study's results.

Besides the choice of definitional approach, another matter needs consideration. This regards the duration of the follow-up period to be used for the study. Per the USSC definition, the suggested or recommended duration of the recidivism follow-up period is two years. This is also taken into consideration in the construction of the definition of recidivism. This definition is presented in chapter six. Before moving away from this topic, a short word about recidivism research regarding organizational offenders. Efforts by the author yielded four recent studies that investigated organizational or corporate recidivism. Two of them covered environmental recidivism as well. One studied corporate recidivism as part of a general study on county-level environmental crime enforcement (Lynch, 2019). The other one was a theoretical study proposing reparative justice as the more appropriate way to deal with corporate environmental criminality (White, 2017). Of the remaining studies, one examined the deterrent effect of corporate punishments. Given the fact that neither the FBI or the BJS measures corporate crime, this study used three proxies (the Financial Crimes Enforcement Network's Suspicious Activity Reports, consumer complaints made to the CFPB and whistleblower complaints to the SEC) as to measures

of corporate crime and recidivism (Lund & Sarin, 2021). The fourth one sought to use behavioral conditioning to better understand the drivers of corporate recidivism (Johnson & Zorn, 2018). The author also searched for recidivism studies for environmental crime. Apart from the two already referred above, two more were found. Both were theoretical pieces that did not analyze any recidivism data. One suggested the use of Earth jurisprudence to prevent environmental harm (Lampkin & Wyatt, 2020) and the other explored the potential of restorative justice in promoting environmental offenders' acceptance of responsibility (Al-Alosi & Hamilton, 2021). This short literature review, which essentially covered all the recent works (as found by the author) on organizational/corporate offender and criminal environmental recidivism clearly illustrates the research gap that exists in this area.

The efficacy of governmental efforts to control organizational crime

The US government's efforts to curb organizational crime have been going on for well over a century. Over this time, the United States took a leadership role not only in the development of conceptual tools necessary to understand and therefore respond effectively to organizational crime (for example, the development of the concept of white-collar crime by the American sociologist Edwin Sutherland), but also in the creation of an expansive regulatory structure empowered to monitor organizational behavior and enforce related criminal laws. Additionally, the US also introduced sentencing reforms to fortify efforts at controlling organizational crime. And despite the political vicissitudes that have seen cycles of regulation and de-regulation (Benson et al., 2019), the US organizational crime control structure remains a formidable system that still plays a leading role in such matters.

Unfortunately, research on the efficacy of this structure has been rather scant, especially compared to research efforts made to understand the nature and behavior of organizational crim-

inals (Simpson et al., 2013). Nonetheless, this chapter examines available research material to determine the effectiveness of the US government's efforts at controlling organizational crime. Special focus will be placed on studies that have looked at organizational recidivism.

Controlling organizational environmental crimes

In the sphere of environmental crime control, the primary regulatory organization is the EPA, charged with enforcing US federal laws against the contamination and pollution of the air, water and soil. Fifty years after its creation in 1970, the EPA remains a formidable force on the American environmental landscape. While it is the primary agency regarding environmental crime control, it is not the only federal agency with regulatory mandate in this domain. There is the Bureau of Land Management (part of US Department of the Interior) charged with regulating public lands and minerals and the US Forestry Service (a division of the Department of Agriculture [USDA]) charged with managing the nation's forests and grasslands. Of the three, the EPA is not only the biggest, but also the one whose scope covers the infractions of interest for this study. As such, it will be the agency of interest for this discussion.

For the first 45 years of its existence, the EPA's compliance monitoring (or auditing) was based on inspections and investigations. In 1995, a revision was made, adding a voluntary self-policing component to the model. Introduced under the "Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations" policy, it is a self-monitoring program aimed at encouraging voluntary compliance (National Archives and Records Administration, 2000). This policy provided qualifying criteria for self-policing programs, created an audit function that would be used to determine program effectiveness, and introduced incentives (penalty reductions) where violations were found and reported to the EPA. The program was revised in 2000 and remains in operation. Another revision was the introduction of the High Priority Viola-

tions program. Introduced in 1998, this program employs targeted enforcement against violators who fit certain criteria, with the aim of deterring major polluters (EPA, 1999). The policy was later revised in 2014. It should be noted that this program only applies to air pollution.

The EPA produces annual reports outlining the results of its inspection and enforcement efforts, based on data generated by its efforts. While such data is available, the author was unable to find research studies that definitively evaluate EPA's efforts at ensuring corporate/organizational compliance with environmental laws and regulations. As such, beyond anecdote, one is not yet able to state definitively how effective the EPA has been in organizational environmental crime control. The same goes for studies into organizational recidivism regarding environmental crimes.

Despite the lack of such evidence, anecdotal indications would suggest that the EPA has had notable successes. These include the elimination of DDT which proved to be harmful to humans and the environment (Mansouri et al., 2017), the reduction of pollution via vehicular emissions (Jiang et al., 2018), and reducing acid rain (Hand et al., 2012). Research that has looked at the EPA's general enforcement efforts shows that the agency has had a significant, if somewhat cost-ineffective, impact in deterring environmental pollution (Gray & Shimshack, 2011; Keiser et al., 2018; Liu & Yang, 2020). Further research is needed to determine how organizational compliance with environmental regulations contributed to these results.

Controlling organizational crimes against employees

The US government's primary agency aimed at controlling organizational crimes against employees is OSHA. As indicated previously, working conditions were rather rough at the beginning of the 20th century, as the US economy was rapidly industrializing. In response to this, the US government enacted employee welfare laws and ultimately created OSHA to enforce

them. Currently, OSHA has jurisdiction over approximately 10 million worksites (DOL, 2020b). OSHA's enforcement is based on inspections. Inspections are either programmed (scheduled, surprise visits) or unprogrammed. The latter are typically triggered by worker complaints, imminently dangerous situations and severe injuries or illnesses. To ensure the efficient use of its time and resources, OSHA introduced a weighting system to measure and monitor its inspection efforts. This was done in 2015. Called the Enforcement Weighting System (EWS), it attached weights to inspections based on time to complete and/or impact on workplace safety and health. In 2019, the system was revised by creating a more comprehensive system of measuring inspection effectiveness (Sparkman, 2019), and its name was changed from EWS to OWS (OSHA Weighting System).

No studies evaluating overall employer compliance with OSHA regulations could be located. This is partly due to the methodological challenges presented by OSHA's complex regulatory scope (Gray & Scholz, 1993). Whatever studies exist tend to focus on compliance with specific regulations, focusing on specific risks and hazards. The only evidence found that could shed some light on general compliance with OSHA regulations was the agency's inspection data. Between 2005 and 2019, the number of US worksites under OSHA regulation grew from 7 million to 10 million. Over the same period, the number of unprogrammed inspections averaged 17,300 per annum, ranging from a low of 14,681 in 2009 to high of 19,293 in 2015. These numbers are from OSHA's annual reports, found on its website. Based on these numbers, there was a steady decline in the ratio of unprogrammed inspections to the total number of American worksites. In 2005, the ratio was 1:404.39 and in 2019 it was 1:540.75. It could be reasoned that the relative reduction in unprogrammed inspections had something to do with increased compliance with OSHA regulations, while accepting the fact that other factors like lax law enforcement and polit-

ical influence could also account for these results. The downward trend could also be a result of favorable regulatory revisions that made compliance easier. In any case more research is needed to determine the actual cause of this development. No research was located on repeat violators.

Despite these deficiencies in research, the 50 years since OSHA's creation have seen marked improvements in workplace safety and health - leading to a drastic reduction in the number of employee deaths, injuries and illnesses. When the Occupational Safety and Health Act (which led to the creation of OSHA) was enacted, government numbers showed that out of a total workforce of approximately 56 million, 14,000 workplace fatalities (1 fatality per 4,000 employees), 2.5 million job-related injuries (1 injury per 22 employees) and 300,000 new job-related illnesses (1 illness per 187 employees) were reported annually (US Congress, 1971). In 2019, out of a workforce of almost 164 million (DOL, 2020a), there were 5,333 job-related fatalities, that is 1 fatality per 30,752 employees (DOL, 2020d), and almost 2.8 million non-fatal job-related injuries and illnesses, or 1 non-fatal injury/illness per 59 employees (DOL, 2020c).

It could be argued that noted improvements in workplace safety could be explained, at least in part, by general technological improvements that made workplaces safer. But even after taking this into account, some studies claim that OSHA and its workplace intervention program have been the primary drivers in making the American workplace safer (Tompa et al., 2016).

Controlling organizational crime against consumers

Traditionally, consumer protection from faulty and unsafe products is covered by civil law (law of contract, product liability law). But in some cases, criminal law is engaged. In the United States, this is done through various federal regulatory agencies that have emerged over the years with the mandate of protecting consumers from unsafe or substandard products. Starting with the establishment of the FDA in 1927, this structure includes three more agencies: Food

Safety Inspection Service (FSIS) which is part of the USDA, the NHTSA in the Department of Transportation (DOT), and the CPSC. Of the three, the FDA, which is part of the US Department of Health and Human Services (HHS), is by far the largest and the one with the widest regulatory domain. Budgetary request disparities reflect this fact: for the 2020 fiscal year the FDA had a budget of $5.9 billion (HHS, 2020), FSIS had $1.2 billion (USDA, 2019), NHTSA had $929 million (DOT, 2019b) and CSPC had $127 million (CPSC, 2019b). The consumer protection regulatory system does not end with these agencies. It also includes agencies that focus on non-physical products (the Consumer Financial Protection Bureau that focuses on financial services and products), and consumer rights (the FTC that looks at anti-trust issues). To keep the chapter brief, the author decided to focus on the FDA, the FSIS, the NHTSA and the CPSC - agencies that focus on tangible consumer products. Another reason is that, outside the CPSC, they are the largest consumer protection agencies with impressive enforcement resources, meaning that they would be the ones most capable of pursuing action against organizational offenders who tend to have formidable resources themselves.

Initially known as the Food, Drug and Insecticide Administration, the FDA has a very broad regulatory scope. It regulates human and veterinary drugs, biological products, and medical devices. It also has the responsibility in maintaining the safety of the country's food supply (human and animal), cosmetics, and products that emit radiation (FDA, 2020). As its budget suggests, this agency is one of the most significant agencies within the US government system.

Evaluating FDA's enforcement efficacy is a daunting task due to the sheer breadth of the products over which the agency has mandate. These include food, drugs, medical equipment, veterinary products, cosmetics, radiation emitting equipment, just to name a few (Note that with food, the FDA shares regulatory responsibilities with FSIS. The FDA regulates all foods except

meat and poultry which fall under FSIS's jurisdiction). Thus, such evaluations have tended to look at particular product groups.

Regarding food, efforts by FDA and FSIS focus on reducing societal exposure to food-borne pathogens that would cause illness or death; and labeling that would mislead consumers. According to the Centers for Disease Control and Prevention (CDC), each year up to 48 million Americans fall ill due to foodborne diseases, 128,000 are hospitalized and 3,000 die (Painter et al., 2013). Earlier studies put the numbers at 76 million illnesses, 325,000 hospitalizations and 5,000 deaths per annum (Mead et al., 1999). While one might be critical of the estimating meth-odologies (especially those used in determining annual illness rates), the problem of foodborne illnesses and deaths represents a significant risk that requires careful monitoring. Whether it has to do with the sensitivity or importance of this risk, multiple interventions have emerged, perhaps under the belief that a multi-prong approach would be the best risk management strategy. This could explain why in addition to the FDA, there is another regulatory agency involved in food safety regulation, the USDA. But because food safety risks directly involve illness, there is yet another agency in this space - the CDC. To ensure efficiency in such a multi-agency regulatory environment, the Foodborne Diseases Active Surveillance Network (FoodNet), a surveillance system, was created as a collaboration by the USDA, the FDA, the CDC and ten state health de-partments. Its aim is to use information generated as a base for developing food safety policies and effective illness prevention strategies in the United States (Henao et al., 2015). The system generates needed data through active surveillance; surveys of laboratories, physicians and the general population; and population-based epidemiological studies.

In such a heterogenous regulatory environment, with an active product liability system, it would be challenging to determine the role that a specific intervention has on food safety. None-

theless, there was a study into the incidence of foodborne illnesses and deaths between 1999 and 2011. It found that infection rates remained steady over this period (Morris, 2011). This was interpreted as a sign of the ineffectiveness of FDA's monitoring methodology, which was seen to be reactive rather than proactive. As a result, a new law, the Food Safety Modernization Act (FSMA), was passed in 2011 with the intention of making the FDA more proactive and effective in dealing with food safety matters (Strauss, 2011). The only research located on the FDA's operations post-FSMA focused on the new monitoring methodology and determined that there was room for improvement (HHS, 2017). No known studies evaluated FDA's enforcement efficacy post-FSMA.

Besides food, the FDA also regulates human drugs and medical devices. The FDA is the primary agency that regulates the safety and effectiveness of drugs sold in the United States. By drugs, one is referring to those that can be legally bought or sold in the American marketplace. Illegal drugs and controlled substances are under the regulatory oversight of the Drug Enforcement Agency (DEA). In simple terms, FDA drug regulation is about ensuring that there is substantive evidence that drugs sold in the United States are effective and confer upon the user benefits that outweigh risks (Gassman et al., 2017). Before a drug is sold, it goes through a pre-approval process. If it meets the approval criteria, it is allowed on the market. The FDA also has post-approval monitoring, to ensure that approved drugs are not exposing the population to risks that were unknown during the approval process. The process is essentially the same for medical devices, radiation-emitting equipment, and animal drugs (Kramer et al., 2012; FDA, 2020). It is interesting to note though that dietary supplements are outside the FDA's conventional regulatory oversight. In other words, the FDA does not carry out any pre-market inspections. Such evalu-

ations are left to manufacturers. But if there are any post-market breaches (e.g., adulteration or misbranding of a product), the FDA can act against the manufacturer or marketer (Azizi, 2010).

So, how effective has the FDA been in ensuring the safety and effectiveness of drugs and medical devices sold in the United States? While it is safe to say that the FDA has had a profound effect on how legal drugs are sold, advertised and used, no studies that definitively evaluated the agency's efficacy were located. Of course, there are success stories like the introduction of new drug trials that limited the devastating effects of thalidomide. But on the other hand, there is also a study by the Institute of Medicine (IOM) that found that the FDA did not have enough resources or enforcement authority to carry out its work (IOM, 2007). Its limited enforcement capacity at that time was shown by how it handled its post-market work on (and the eventual recall of) Vioxx, a drug that was popular but led to unacceptably high risk of causing heart attacks in patients. It was estimated that through its use, the drug caused as many as 139,000 heart attacks (Lenzer, 2004). While the recall was done, it seems that the FDA's truncated powers allowed the drug to stay in the market longer than it needed to.

One of the FDA's roles is to ensure that consumers and medical professionals have as much information as possible regarding the risks attached to regulated medical devices. In order to fulfill this role, the agency has a repository for data regarding device performance and potential safety related issues. The data is submitted by mandatory (manufacturer, importers and device user facilities) and voluntary reporters such as health professionals and consumers (Tau & Shepshelovich, 2020). This data is available to the public. But it was found that the agency developed another "backdoor" reporting system that allowed manufacturers to report such matters secretly. This system operated from 1999 to 2019, when it was phased out (Dyer, 2019). So, the FDA seems to have produced mixed results with regard to its regulation of drugs and medical

devices. But until a comprehensive evaluation study is done, this claim that can only be speculative at best.

Perhaps the most contentious product the FDA regulates is tobacco. Tobacco is a dangerous product, one with no known health benefits and that kills about 480,000 people a year in the United States (HHS & CDC, 2014). This is far greater than those who die from road accidents, workplace fatalities and foodborne diseases. And yet, this lethal product is sold legally in the US. Perhaps not surprisingly, given the enormous profits that tobacco cigarette manufacturers earn and the power their lobbying efforts have had on the American government, tobacco was never regulated by the FDA until 2009, when the Family Smoking Prevention and Tobacco Control Act was passed. This act gave the FDA the authority to regulate the manufacture, marketing, distribution and sale of tobacco products (Green, 2018). This authority allows the FDA, together with the DOJ, to bring civil and criminal prosecution against non-compliant entities. While data on the FDA's website shows that it has meted out civil fines against violators, there is no indication that the agency has pursued any criminal prosecutions to date (FDA, 2014; FDA, 2019). Further, no studies evaluating the agency's effectiveness in regulating tobacco were found. It is not lost on the author that the idea of regulating a product with no known benefits and that actively exposes the public to significant health risk is a moral contradiction. One wonders how, in this case, one would measure effectiveness. Perhaps this could be one factor that could explain the lack of research on the question.

In the automotive sector, the primary federal regulator is the NHTSA. This agency writes and enforces federal motor vehicle standards to be followed by vehicle and vehicle equipment manufacturers. Created in 1970, the NHTSA's mission is to "save lives, prevent injuries, and reduce economic costs due to road traffic crashes through education, research, safety standards,

and enforcement," per its website. Aside from auto-manufacturer regulation, the NHTSA also seeks to improve driver behaviors by providing national leadership in planning and developing improved driver education, licensing, enforcement, prosecution, judicial, and post-adjudication efforts.

Regarding manufacturers, the NHTSA compliance is mainly through certification. All manufacturers and importers of vehicles to be used on American highways are required to certify themselves with the NHTSA. The certification requires compliance with the federal motor vehicle safety standards (FMVSS) (DOT, 2019a). The agency also has a vehicle rating system known as the New Car Assessment Program (NCAP) that allows users to determine the relative safety of vehicle makes and models. Beyond certifications and ratings, the agency also has the power to demand manufacturers conduct recalls (either voluntarily or involuntarily) of vehicles, car seats, or other equipment if deemed to create an unreasonable safety risk or fail to meet minimum standards. Recalls are typically triggered by complaints. Where driver education is concerned, the agency develops training standards that states can follow in developing their driver training programs.

When it comes to evaluating its effectiveness, the reasonable thing would be to look at road safety and recall statistics to determine if NHTSA's interventions have indeed made US roads safer. The author was unable to find studies that have definitively evaluated NHTSA's effectiveness in making America's roads safer. Studies have looked at the impact of specific interventions like anti-lock braking systems (Rizzi et al, 2015; Emam & Mohamed, 2021), airbags (Todorovic et al, 2018; Umale et al, 2019), seat belts (Osberg & Di Scala, 1971; Robertson, 2001), traffic cameras (Perez et al, 1971; Kitali et al, 2021) and bicycle helmets (Thompson et al, 1989; Abderezaei et al, 2021). Also, given that almost 30% of fatal road accidents involve alco-

hol, numerous studies have also focused on the impact of controls over drunken driving on road safety (DOT, 2017). According to the NHTSA, fatalities per 100 million vehicle miles travelled have gone from 3.35 in 1975 to 1.10 in 2019 (NHTSA, 2020). Research would be needed to determine the role played by the NHTSA in bringing about these improvements.

The smallest and the youngest of the major consumer safety regulatory agencies is the CPSC. Established in 1976, it regulates product groups that are not covered by the larger and more specialized agencies discussed above. According to 15 US Code § 2051(b), the CPSC exists "to protect the public against unreasonable risks of injury associated with consumer products; to assist consumers in evaluating the comparative safety of consumer products; to develop uniform safety standards for consumer products and to minimize conflicting state and local regulations; and to promote research and investigation into the causes and prevention of product-related deaths, illnesses, and injuries" (Consumer Product Safety Act, 1972).

The CPSC's compliance follows a self-policing model that calls for manufacturers of regulated products to institute internal compliance programs that ensure product compliance with CPSC standards. Where standards are met, the manufacturer is supposed to issue a general certificate of conformity (CPSC, 2019a). The CPSC also carries out investigations where it comes across information through complaints or incidents that would indicate that a product does not comply with CPSC standards. These investigations can lead to recalls and, if they are serious enough, the offending entity can suffer a civil fine or criminal prosecution.

Again, the author was unable to find any study that evaluated the CPSC's effectiveness. One would assume though that the CPSC, with its standards, its investigative capacity and its authority to require recalls has had an impact on product safety in the United States. The extent

of this impact remains unknown until a comprehensive evaluation of the agency is done. And for recidivism studies, none were found on the various crimes discussed in this section.

Controlling crimes against investors

The investor protection regulatory structure in the United States is dominated by two agencies: the SEC and the CFTC. These are the two federal agencies charged with regulating American securities markets.

The SEC was created in 1934 following the passage of the Security Exchange Act. It was established to enforce revamped federal security laws that were enacted as a response to the Great Crash of 1929. The SEC's responsibility expresses itself in three functions: protecting investors, facilitating capital formation and maintaining fair, orderly and efficient markets (SEC, 2019).

At its core, the SEC's role is to make sure that investees do not communicate information that would mislead investors in their investment decision-making processes. Investor decision making is primarily based on financial information. This fact places great emphasis on the accounting function and the financial statements that it produces. This is especially the case for publicly traded companies. Of great importance is the need to ensure that financial reporting is based on a standard set of rules to enhance clarity, reliability and completeness. To this end, financial statements for such companies are supposed to be produced in line with standards known as GAAP. In the United States, GAAP standards are primarily produced by the FASB, under SEC oversight (Palmon et al., 2011). While it is important that financial statements be prepared following such rules, there is always a chance of incorrect reporting due to either error or fraud. To tackle this problem, the SEC requires that financial statements from publicly traded companies be audited by certified public accountants (who are self-regulating professionals), using au-

diting standards set by the American Institute of Certified Public Accountants (AICPA). The aim of these audits is to give assurance regarding GAAP compliance. Over time, as accounting frauds mounted, public faith in the audit profession started flagging. In 2002, with the passage of the Sarbanes-Oxley Act (following the spectacular demise of Enron, which uncovered weaknesses in the auditing profession's self-regulation model), the Public Company Accounting Oversight Board (PCAOB) was created. This board was created to provide greater regulatory oversight over the auditing profession as a measure to restore public confidence in the American audit profession (Palmrose, 2013).

The SEC enforces securities law through investigations, which can be triggered by a number of sources including investor tips, media reports and the agency's market surveillance activities (SEC, 2017).

Regarding effectiveness, the SEC has had a challenging task on its hands. Ostensibly created to tackle securities fraud, the United States has seen a string of especially costly frauds under the agency's tenure. The scandals involving Worldcom, Enron and Bernie Madoff are just examples of the many frauds that have occurred on SEC's watch causing billions of dollars in losses (SEC, 2009). With the Enron scandal the SEC saw perhaps its most significant overhaul. One change was the requirement that senior executives personally certify the veracity of the financial statements, making them personally liable for any fraud to be found in them (Lobo & Zhou, 2006). Another change was the creation of the PCAOB, as pointed out above, to strengthen the audit profession. The third was the institution of a whistleblower program (Hurwitz & Kovacs, 2016). Per the SEC website, over $700 million has been awarded to whistleblowers so far.

The number of frauds and the enormity of economic damage they have wreaked on society under the SEC's watch would suggest that the agency has not been especially successful in meeting its regulatory mandate. One of the agency's biggest challenges has been funding. For the longest time the SEC was one of the least funded regulatory agencies in the US government as it was historically targeted for budget cuts (Barlas, 1995; Fernholz, 2011). With the passage of the Sarbanes Oxley Act, the budget was increased substantially (Coates, 2007). This allowed the agency to bring more enforcement actions and realize greater penalties than before. Whether this means the agency is being successful is not necessarily clear. What is clear is that the SEC now has more resources at its disposal to do its work.

The other major regulatory agency that covers the public investment sphere is the CFTC. This agency was created in 1974, and regulates the derivatives[7] market (Miller, 2013). According to its mission statement, its aim is to promote the integrity, resilience, and vibrancy of the US derivatives markets through sound regulation. In 2010, the agency extended its regulatory scope to include financial institutions (i.e., banks and loan lenders). This authority came with the passage of the Dodd-Frank Act, which was the US government's response to the financial crisis of 2008, which was caused by the bursting of a housing bubble which was, in turn, caused by unregulated derivatives (Wachter, 2015). This crisis was to play a major role in causing what is now known as the great recession that lasted to 2009 (Dolar & Dale, 2020).

The CFTC's compliance model requires the registration of organizations and entities trading in derivatives. The agency also has surveillance capacities to ensure that the economic functions of the derivative markets are preserved. Beyond registration and surveillance, the CFTC places significant reliance on self-regulatory organizations (SROs) that operate within the

[7] A derivative is a contract whose value is based on the value of an underlying asset (e.g., stocks, bonds, currency), and is primarily used as a tool for financial risk management (Federal Reserve Bank of Chicago, 2013). Derivatives can be publicly traded as any other financial instruments.

derivatives marketplace. These organizations operate in strict compliance with rules created by the CFTC. The relationship is not one way, as the SROs can also make recommendations to the CFTC on how to deal with specific matters. Regarding enforcement, the agency will investigate and prosecute violations of the Commodity Exchange Act or its regulations. Where criminal violations are alleged, the commission refers matters to the DOJ.

Regarding regulatory effectiveness, one could ask whether the CFTC has indeed given the derivatives market more integrity and made them more resilient and vibrant? The derivatives fiasco that led to the great recession of 2009 would suggest that the CFTC was not up to the challenge from speculative lending and securities fraud that led to the financial collapse that threatened the very foundations of the US financial system (Financial Crisis Inquiry Commission, 2011). The passage of the Dodd-Frank Act of 2010 gave the CFTC enhanced regulatory powers, as it was charged with the responsibility of overseeing the then $300 trillion swaps market (Fischer, 2015). Nonetheless, with the dynamic nature of the financial industry, one would expect the industry to produce innovative responses to circumvent regulations. One such innovation is spoofing, which is the fraudulent market rigging technique that can lead to massive losses to unsuspecting market participants (Mark, 2020). The CFTC caught on and levied a $920 million fine (the largest in the agency's history) against JP Morgan, which had a spoofing operation for more than eight years (Schoenberg & Robinson, 2020, September 29). The sanction came from the agency's enhanced powers post-Dodd-Frank. So, while it could rightly be said that the CFTC was limited, if not ineffective, in its capacity to regulate the futures market, its enhanced powers should allow it to have a greater chance of promoting integrity, resilience and vibrancy of the US derivatives markets. But this can only be determined once evaluation studies (currently non-existent) are done on the subject.

As for recidivism studies in relation to the crimes highlighted above, the theme continues. Outside of anecdotal articles on the subject, no comprehensive study was found that looked at reoffending rates regarding these crimes.

Controlling tax evasion

There is another type of organizational crime that has a widespread effect on society - tax evasion. There is one civil duty that citizens of all modern societies typically share - the responsibility to pay taxes. States need taxes to finance their operations. To maximize revenue, states will levy taxes on various economic bases - income, sales, capital gains, property values. Virtually all modern states impose taxes on their citizens. Even those that are typically known as tax free jurisdictions have some form of taxation. An example is the United Arab Emirates which had no formal tax system for the longest time due to enormous revenues it received from oil. It too decided to introduce a Value Added Tax (VAT) system - that is, tax on the consumption or use of goods and services - as a way to diversify its revenue sources (Saderuddin & Barghathi, 2018).

Non-compliance with tax law can take two main forms. Criminal non-compliance with tax law is known as tax evasion. Tax evasion can be defined as the evasion of the assessment or payment of tax (IRS, 2009). This is different from tax avoidance, which as previously discussed is the minimization of one’s tax liability through the exploitation of tax loopholes. Tax avoidance is legal while tax evasion is illegal (Marjit et al., 2017). The agency that is tasked with fighting US federal tax evasion is the IRS.

As briefly discussed in an earlier chapter, the IRS traces its origins to the Commissioner of Internal Revenue which was created to fund the Civil War effort in 1862. While various duties and levies had previously been collected by the federal government, the creation of the commis-

sion marked the first-time income taxes were imposed on the American population. This was supposed to be a temporary measure which was to expire after the war. It did expire ten years later in 1872, with the law originating the commission repealed in 1874 (Thorndike, 2001). In 1894, Congress passed a flat tax rate that was later judged unconstitutional (Grossfeld & Bryce, 1983). To enhance the measure's legal standing, the US Supreme Court issued the 16th amendment to the US Constitution authorizing Congress to impose taxes on income. This amendment also led to the creation of the Bureau of Internal Revenue. In 1953, the bureau was renamed the IRS (IRS, n.d.).

The IRS's mission is to "provide America's taxpayers top-quality service by helping them understand and meet their tax responsibilities and enforce the law with integrity and fairness to all" (IRS, 2020a). One of its functions is to make sure that non-compliant entities pay their share of taxes. Specifically, the IRS goes after non-compliant parties in order to close the tax gap. The tax gap is "is the amount of true tax liability that is not paid voluntarily and timely" (IRS, 2019a). In line with this, the agency has the authority to take civil and criminal action against non-compliant parties - individuals, trusts and corporations.

Criminal investigations are carried out by a special division which was formed in 1919 and is known by a rather unimaginative name - IRS Criminal Investigation (IRS-CI). This is the criminal enforcement arm of the agency. It investigates an impressive range of activities that include general tax fraud (caused by deliberate actions intended to cause to underpay taxes), abusive tax schemes, refund fraud, employment tax fraud, identity theft schemes, money laundering, and financial institution fraud and much more (IRS, 2020b). IRS investigations are triggered by various sources which include audits, whistleblowers or citizen complaints. Of all the law enforcement agencies covered in this chapter, the IRS is the largest. Its enacted budget for 2020

was $12.4 billion dollars (USDT, 2020), more than the EPA and FDA expenditure combined. As such, it can be a formidable foe to face for non-compliant entities, especially small ones. Despite this fact, the rate of noncompliance has remained unchanged over the past 20 years (around 83%) and individuals still comprise the biggest source of the tax gap (IRS, 2019a), a fact that brings into question the agency's efficacy in dealing with tax crimes. Apart from its own data on compliance rates, the author did not come across any study that evaluated the IRS's effectiveness in controlling tax fraud.

Challenges against regulatory effectiveness

The American government invests heavily in regulatory structures aimed at crime control. One would assume that with such investment comes an expectation of effectiveness vis-à-vis the achievement of stated objectives. Unfortunately, real-life results tend to come up short of the mark. With enforcement effectiveness, a major concern is the administrative and procedural efficiency of related agencies.

The issue of administrative efficiency of the modern US government has a long history, especially given the size and breath of its regulatory structure. The US government has perhaps the biggest and best funded regulatory structure on the planet. With America's framework of federal government, this structure falls mainly under the executive branch of government, with a few agencies (that essentially provide administrative support) to be found in the judicial arm of government while others are independent. In aggregation, this structure is referred to as the "federal executive establishment" (Moe, 1980). As of 2017 (the latest available numbers), this establishment consisted of 279 agencies employing 2.68 million employees - compared to about 70,000 for both the judicial and legislative branches of government (Selin & Lewis, 2018). Concerns regarding the efficient operation of such a massive machinery led to the promulgation of

the Administrative Procedures Act in 1946 (Rubin, 2003). This was followed by the establishment of two temporary commissions that looked into procedural reforms. Ultimately a permanent agency, the Administrative Conference of the United States (ACUS), was created in 1964, with the mandate of studying administrative processes and recommending improvements when appropriate, acting as a clearinghouse for agencies and publishing information and statistics on administrative procedure (Breger, 1991). Curiously, the agency was defunded in 1995, notwithstanding the bipartisan support it enjoyed - apparently with no definitive reason (Jensen, 2015). Before its defunding, the ACUS had made approximately two hundred recommendations, the majority of which were implemented (National Archives and Records Administration, 1995). The agency was reauthorized and resumed operations in 2004. Such efforts towards procedural reforms focus on ensuring the effective use of resources, and that proper flows of information within the organizational structure are maintained. Lack of procedural efficiency can lead to unnecessary waste that can hamper agency efficacy in fulfilling its given mandate.

Procedural efficiency aside, regulatory effectiveness can also be impacted by unwarranted selective enforcement. Factors like racial bias (Griffin, Sloan & Eldred, 2014) or the undue influence of powerful interests (for example, regulatory capture) can negatively influence enforcement efforts (Dal Bo, 2006; Subcommittee on Financial Institutions and Consumer Protection, 2014). Further yet, regulatory effectiveness can also be impacted by design and methodological issues, and resource deficiency. Nonetheless, despite these challenges, regulatory agencies are here and they are necessary, if imperfect, tools for government intervention and law enforcement. But, as the discussion above has shown, more work is required to evaluate their effectiveness.

Summary

This chapter introduced and discussed green criminology and recidivism. It also provided a brief review of research literature on the effectiveness of the federal government's efforts at organizational crime control. Evidence shows that while the US government has expended a lot of effort and resources in its attempts at controlling organizational crime, very little research has gone into evaluating the effectiveness of these efforts. As was mentioned in the introductory chapter, it is the aim of this dissertation to contribute towards filling this research gap.

CHAPTER SIX

DATA AND METHODS

This study analyzes EPA criminal prosecution data to examine the offending and recidivism of organizational offenders convicted by US federal courts for violating environmental criminal law. This chapter discusses the study's exploratory research questions, how it operationalizes recidivism, the population of interest, data to be analyzed, variables of interest, the research design that was followed and the data analysis method used.

Research questions

The primary topic of interest is the rate of recidivism among organizational offenders convicted of violating US federal environmental laws. This is an exploratory study whose main intentions are to provide a clearer understanding of areas that have not attracted significant research effort and provide a foundation for further investigation (Singh, 2007). The study's main question is: what are the observed recidivism rates among organizational offenders? Beyond that, the following are the other questions of interest: what were the most and the least common environmental code violations? What was the most common sanction or combination of sanctions? What were the trends in organizational violations and sanctions over the period covered by the study?

Recidivism operationalized

This study is based on a population of organizations convicted of federal environmental crimes. The data was obtained from the EPA Summary of Criminal Prosecutions database available on the agency's website. Based on this data, this study's operational definition of recidivism uses the "re-conviction only" definitional approach (as discussed in chapter five). As such, the study explores the rate of criminal federal environmental re-conviction among organizational

offenders that were convicted in US federal courts for committing federal environmental crimes between 1994 and 2013, over a given recidivism window (Nickerson, 2022; Zgoba & Salerno, 2017). For this study, this recidivism window, or follow-up period, will start from the date of sentencing for the precedent or initial conviction. As noted in chapter five, the USSC's recommended or suggested follow-up period for individual offenders is two years after being released back into the community. For organizational offenders, federal courts are only able to apply four types of punishments which are usually applied in various combinations. These are: financial penalties; community service; organizational probation; or the revocation of the corporate charter (and thereby effectively killing the organization), a punitive option available in cases where the organizational offender is deemed to have been created for the purposes of crime. With these sanctions, the question would be where would the recidivism or observation window end? Given the different types of sanctions that can be imposed on organizational offenders, and the need to provide the offenders ample time to recidivate, this study based its observation period on the need to give the organizational offender who would be given the longest possible probation term under the law (5 years) enough time to recidivate. Based on the USSC's suggestion or recommendation, there should be a two-year post-release/supervision tracking period. Taking all this in account, the observation period for this study was set at 7 years after initial conviction. Note also that the re-conviction needs to be for environmental crimes and the prosecution must be in the federal courts, in line with the realities of the data set to be examined.

So, for this study, organizational recidivism refers to the re-conviction of an organizational federal criminal offender for violations of criminal federal environmental law. The offender's previous conviction must have occurred between 1994 to 2013. The study uses a 7-year recidivism window, as discussed above. It should be noted that the EPA database did not have a

recidivism variable already coded. It had to be created, again as discussed below, based on available data.

Population of interest: EPA criminal prosecution data

The data studied here were collected and maintained by the EPA and are publicly accessible via its website. These data are available in two formats, as presented on the following pages on the website: the EPA Summary of Criminal Prosecutions (https://cfpub.epa.gov/compliance/criminal_prosecution/index.cfm) and the Enforcement and Compliance History Online (ECHO) (https://echo.epa.gov/).

The EPA Summary of Criminal Prosecutions is a collection of summarized federal court judgements in environmental criminal cases. These cases were prosecuted from 1983 to 2020. In 1987 the EPA started publishing the case summaries in a manual report format. This format continued until 1992, when the last of such reports was published. The agency started publishing the data in electronic format, publicly accessible via the above-mentioned web page. The data summarizes official case judgment information maintained by each US federal district court's Clerk of the Court. In some cases, official case data is supplemented by related EPA press releases. As the EPA says, "the summary is based on the best available information" (EPA, 1991). For each case, the database presents the following information: the US government's fiscal year in which the case was disposed; each defendant's name and docket number; the name of the prosecuting US federal court; and a summary of the case's facts and status. Within the facts and status section are pieces of data relevant to this study: descriptions of the violations in question, names of the criminal statutes that were breached and sanctions ordered by the court.

While the Summary page only collects and presents information related to criminal prosecutions and nothing else, the ECHO page is different in that it presents EPA enforcement and

compliance data pulled in from the agency's other databases. According to ECHO's main page, this tool can be used to search for details of EPA-regulated facilities, investigate pollution sources, examine and create enforcement-related maps, analyze trends in compliance and enforcement data and search for EPA enforcement cases. Additionally, ECHO allows users to download various types of datasets. The EPA launched ECHO in November 2002 and since then it has proved to be one of the agency's most important and popular resources.

Despite the benefits of ECHO, the EPA Summary of Criminal Prosecutions was selected for this study because it contained defendant names, distinguished between organizational and individual offenders, and provided clear details regarding violated statutes and the types of punishment meted out by the courts. Very few studies have examined the EPA Summary database. The reason could be because there are other EPA databases, like ECHO, that are more user friendly. Regardless, only three recent studies, by the same authors, were found. They were generally similar in focus - all were inquiries into different aspects of the prosecution of environmental crime at the federal level (Ozymy & Jarrell, 2016; Ozymy & Jarrell, 2021; Ozymy & Ozymy, 2021). The EPA Summary database is a rarely used resource.

Data Collection

This study examines a collection of 736 organizational convictions by US federal courts between 1994 and 2013 for violating federal criminal environmental statutes as are found in the EPA's Summary of Criminal Prosecutions. Of these, 11 had incomplete data and so only 725 were used for this study. These convictions involved 788 offenders, because some of the convictions multiple organizational co-defendants. It should also be noted that, in total, the Summary database includes 38 years of federal environmental criminal cases (from 1983 to 2020). As is

discussed later in the chapter on data analysis, convictions had to meet some inclusion criteria in order to be part of the study population.

As indicated earlier, this study examines organizational recidivism within the context of the existing organizational crime control system. This system includes the FOSG, which came into effect in 1991. As such, for the sake of consistency, only post-FOSG convictions were considered. Further, to allow for system normalization, cases from the first three years of the FOSG's implementation were also excluded from the population. As such the study only considered convictions from 1994.

For the cases between 1994 and 2020, there was another criterion that had to be met. This is the seven-year recidivism window as discussed in chapter five. This criterion eliminated cases that were convicted after 2013, hence the focus on cases from 1994 to 2013. These were the organizations that were tracked for re-offenses seven years after sentencing.

Variables of interest

The main variable of interest is *Organizational Recidivism*. This variable measures re-offending by an organization within the study population. As stated above, re-offending must have occurred within the seven-year post-sentencing recidivism window (that is, seven years after the Initial Conviction Date) and must have led to a re-conviction in the federal courts. Additionally, the reconviction must be for violating environmental criminal law. This variable is dichotomous in nature. It should also be noted that this variable was not coded in the database. It had to be created for the purposes of this study.

With criminal violations, a variable called *Violations* was created based on information available in the Summary database. This variable measures the number of statutory violations for which the organizational offender was convicted. Based on the data, the number of such viola-

tions ranges from 1 to 5 (the maximum number of violations found for a conviction). Thus, violations per conviction are coded from 1 to 5.

Variables for court sanctions were also analyzed. These are *Total Financial Penalties*, *Community Service Hours*, and *Probation Term*. *Total Financial Penalties* measures the total value of all the financial penalties imposed on a given organizational offender. US federal courts can impose various combinations of such penalties. These include criminal fines, community service fines, remedial order amounts, clean-up costs, environmental program funding costs, investigation costs, public service announcement costs, environmental protection equipment costs, special assessment fees, court costs and forfeiture amounts. While such penalties are numerous, in the final analysis they are all financial burdens imposed as punishments upon organizational offenders convicted of violating federal environmental criminal statutes. They were combined to one total figure. *Community Service Hours* measures the total number of hours that an organizational offender is ordered to engage in community service activities. *Probationary Term* captures the length of time, in months, a convicted organizational offender is ordered to be under probationary supervision.

CHAPTER SEVEN

DATA ANALYSIS

This chapter presents the results of the data analysis done to answer the research questions identified in the previous chapter. It starts by presenting descriptive parameters of the study population. These look at general characteristics in terms of the cases, defendants, violations, and sanctions within the study population. It then presents parameters on recidivists, regarding both their initial and subsequent convictions.

Population characteristics

The following are the general characteristics of this study's population of interest: the federal environmental criminal prosecutions between 1994 and 2013 as obtained from the EPA Summary database.

Convictions

The Summary database shows that between 1994 and 2013 there were 736 prosecutions by US federal courts for environmental criminal violations that involved at least one organizational defendant. Of these, 725 ended up in criminal convictions. Of the remaining 11 prosecutions, the Summary contained no conviction data. For 5 of these prosecutions, charges against organizational defendants were dismissed. For the other 6, the database was silent regarding charges and sanctions imposed on organizational defendants. The summary did not indicate if this was due to the dismissal of charges or acquittal. So, because these prosecutions did indicate organization offender convictions, this study treated them as incomplete cases and excluded them from analysis. Hence the study's use of the remaining 725 convictions for its analysis. These convictions were in federal courts in all states and US territories except Wisconsin. The number of convictions per state or territory ranged from 0 (Wisconsin) to 66 (California).

As Table 3 shows, 8 states averaged at least one conviction per year (that is, they each had more

Table 3

Convictions per state or territory (summary)

	Convictions per state							Total
	0-10	11-20	21-30	31-40	41-50	51-60	61-70	
States and territories	29	16	1	2	4	0	1	53

than 20 convictions) between 1994 and 2013. These states had a total of 347 convictions, accounting for 48% of the total. On the other end of the spectrum, 29 US states and territories had less than 10 convictions over the period under review. Convictions by state are shown in Table 4.

Table 4

Convictions per US state or territory (detailed)

States and territories	Convictions	
	Number	%
California	66	9.10%
New York	50	6.90%
Ohio	46	6.34%
Louisiana	43	5.93%
Texas	42	5.79%
Missouri	39	5.38%
Florida	36	4.97%
Pennsylvania	25	3.45%
Oregon	20	2.76%
Virginia	18	2.48%
Colorado	16	2.21%
Illinois	16	2.21%
New Jersey	16	2.21%
Michigan	16	2.21%
Kentucky	15	2.07%
Indiana	15	2.07%
Connecticut	15	2.07%
Washington	15	2.07%
Tennessee	14	1.93%

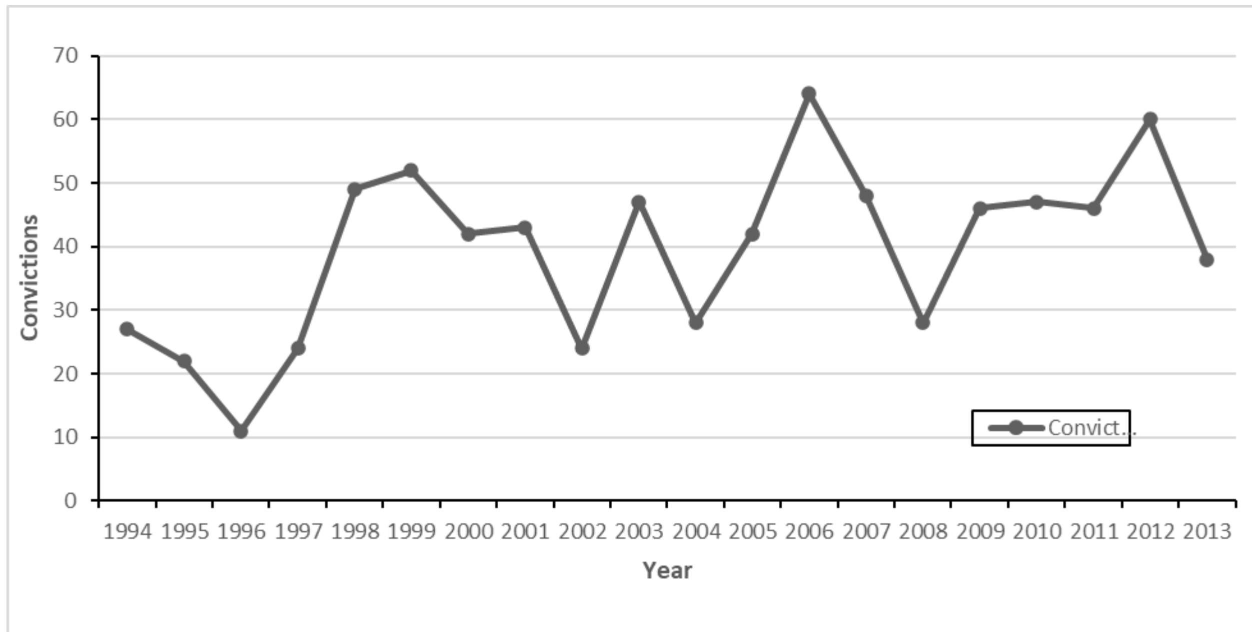
States and territories	Convictions	
	Number	%
Alaska	14	1.93%
Maryland	14	1.93%
Minnesota	14	1.93%
Alabama	11	1.52%
Utah	11	1.52%
West Virginia	10	1.38%
Iowa	9	1.24%
North Carolina	9	1.24%
Idaho	8	1.10%
Montana	8	1.10%
Nebraska	7	0.97%
New Hampshire	7	0.97%
Kansas	6	0.83%
Massachusetts	6	0.83%
Mississippi	6	0.83%
Puerto Rico	6	0.83%
South Carolina	6	0.83%
District of Columbia	5	0.69%
Georgia	4	0.55%
Hawaii	4	0.55%
North Dakota	4	0.55%
Rhode Island	4	0.55%
South Dakota	4	0.55%
Arizona	3	0.41%
Delaware	3	0.41%
Nevada	3	0.41%
Oklahoma	3	0.41%
Vermont	3	0.41%
Wyoming	3	0.41%
Arkansas	2	0.28%
Maine	2	0.28%
New Mexico	2	0.28%
Virgin Islands	1	0.14%
Wisconsin	0	0.00%
Total	725	100%

In terms of trends, convictions per year vacillated over time. Over the period covered by the study, convictions per year ranged from a low of 11 (1996) to a high of 64 (2006), as Figure

1 below shows. Generally, the conviction numbers trended upwards until 2006. From then, the trend has been somewhat downward, except for 2012 which had 60 convictions.

Figure 1

Convictions per year



Defendant organizations

The 725 convictions noted above had a total of 788 organizational defendants, as some cases had multiple offenders. Of the 788 defendants, all but 13 of the offenders (2%) were business organizations. Of these, 11 were municipal entities, one was a yachting club, and the other was a museum and arts foundation. From available data, all but two of the organizations were solvent at the time of sentencing. The two were businesses that went bankrupt and therefore could not be sanctioned. Other descriptive data regarding the defendants (e.g., number of employees, net worth) were not presented in the database. In terms of geographic distribution and temporal trends, the number of defendants per state of possession naturally went hand in hand with the convictions per state.

Statutory violations

Table 5 below presents the distribution of the number of statutory violations per organizational conviction. There were 976 statutory violations among the 788 convicted defendants. This is because some of the offenders had multiple violations. As the table shows, the median number of statutory violations was 1, and the mean was 1.24.

Table 5

Statutory violations per conviction

Stat. violations	Defendants	%
1	623	79%
2	145	19%
3	19	2%
4	0	0%
5	1	0%
Total	788	100%

As for citations, the following were the numbers for each federal environmental statute. The Clean Water Act (CWA) saw the greatest number of violations, with 353 citations (36.17%), followed by the Clean Air Act (CAA) with 97 (9.94%), the Resource Conservation and Recovery Act (RCRA) with 88 (9.02%), the Act to Prevent Pollution from Ships (APPS) with 49 (5.02%), the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) with 19 (1.95%), and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Refuse Act, both with 13 (1.33%) of the cited violations. Included in the violations are offenses that breached statutes that were not environmental in nature. For example, there were citations for violating Title 18, which is a statute related to fraud and the making of false statements. This should not be a surprise as it should be expected that violators of environmental statutes would

be likely to provide false information to regulators to cover up their unlawful practices. In total, there were 344 citations (35.25% of the total) for violations of extra-environmental statutes.

The most common violation among convictions with single statutory violations was that of the CWA. As noted above, there were 353 such violations. As for combined violations, the most common was the combined violations of the CWA and Title 18. There were 42 defendants with this combination. The least common environmental statutory violations were those of the CERCLA. For multiple violations, the least common was a combination of five statutory violations, appearing in only one conviction.

Court sanctions

Court sanctions fell into three general categories: financial penalties, community service hours and organizational probation.

Financial penalties. Financial penalties came in various forms. These included criminal fines, community service fines, restitution order amounts, remedial order amounts, clean-up costs, environmental program funding costs, investigation costs, public service announcement costs, environmental protection equipment costs, special assessment fees, court costs and forfeiture amounts. Since these sanctions were the same in nature (financial fines), they were all added together for each conviction. This was also done for ease of analysis. Of the 788 convicted organizations, 739 (92.49%) were charged with financial penalties. Total financial penalties amounted to $1,132,263,756.41 which breaks down as shown in Table 6 below.

Criminal fines, as calculated in line with Part C of the USSG, made up the biggest portion of the total by far (72%). This should be expected as one of the aims of the organizational sentencing reforms that yielded Chapter Eight of the Guidelines was to strengthen the fine regime

Table 6

Total amounts of financial penalties charged to federal environmental organizational offenders convicted between 1994 and 2013

Penalty	Defendants	Total Amount	Total %	Mean
Criminal fine	695	811,637,649.00	72%	1,167,823.96
Environmental protection equipment costs	8	135,395,000.00	12%	16,924,375.00
Restitution order amount	199	94,699,509.94	8%	475,876.93
Community service fine	69	42,027,900.00	4%	609,100.00
Environmental program funding costs	35	24,204,320.83	2%	691,552.02
Clean-up costs	7	14,957,770.11	1%	2,136,824.30
Remedial order amount	7	6,560,891.67	1%	937,270.24
Forfeitures	4	2,479,648.70	0%	619,912.18
Special assessment fees	217	206,359.00	0%	950.96
Public service announcement costs	1	50,000.00	0%	50,000.00
Investigation costs	4	43,237.16	0%	10,809.29
Court costs	2	1,470.00	0%	735.00
Total		1,132,263,756.41	100%	

Note. Criminal fines were ordered against 700 defendants. The Summary did not provide any fine details for 5 defendants, leaving the 695 included in Table 6.

(Cullen, et. Al., 2015). The second highest total was for the cost of court ordered construction or purchase of environmental protection equipment. After that came restitution order amounts, community service fines, costs of court ordered funding of environmental programs and clean-up costs. These six penalties made up 99% of the total amount. Regarding mean amounts, $1,167,823.96 is a fair representation of the typical criminal fine imposed by the courts on convicted organizations. In other words, the mean amount was not skewed by outliers. For environmental protection equipment and clean-up costs, the means are significantly impacted by large outliers. With the former, 2 of the 8 fine orders account for $134,000,000. Ignoring these outliers, the mean drops to $232,500. With cleanup costs, there was one outlier at $12,000,000. When adjusted for this, the mean drops to $492,961.69. For criminal fines, the highest fine was $50

million. Without this in the equation, the mean hardly changes ($1,097,460.59). In other words, adjusted for outliers, the highest mean also was with criminal fines.

In terms of judicial usage, criminal fines were also the most common. The second most common financial penalty was the Special Assessment Fee, having been imposed against 217 defendants. According to the sentencing guidelines, a special assessment fee is required by statute for each count of conviction. The statute that provides for such assessments is 18 U.S.C §3013. These fees are imposed on convicted offenders to fund the Crime Victims Fund[8]. The third most popular was the Restitution Order Amount, having been imposed against 199 defendants.

Community service hours. Community service orders were in the form of either time spent on specified projects or community service fines. One assumes that the actual community service work would be carried out by an employee or officer of the organizational offender in question. The fines have been included in the previous section. This section focuses on hours spent on community service projects. Data shows that community service orders were given to 77 defendants. Eight of these (that is, 10.39%) called for spending time on community service projects, ranging from 100 to 750 hours. Total community service hours ordered were 2,570. The mean number of hours was 321.25, the mode 400 and the median 310.

Organizational probation. Probation was the second most common sanction after the Criminal Fine, having been imposed against 513 (64.21%) of the 788 convicted defendants in the study population. Probationary terms (that is, the length of probationary supervision in terms of months) ranged from 3 to 108 months. The mean probationary term was 32 months.

[8]It is unclear why the courts only applied the fee to 217, and not the total population of 788 convicted offenders.

It should be noted that according to the sentencing guidelines, organizational probation cannot be for more than 5 years (i.e., 60 months). But as indicated above there were defendants that were ordered to more than 60 months of probation. In fact, of the 513 organizational probationers, four had probationary terms of more than 60 months. Two had 72 months, one had 84 and another 108. No reason was given behind these guideline departures. Two of these probation orders occurred after 2006, when the guidelines' judicial status changed from mandatory to advisory (USSC, 2006). These likely represent departures in those cases. For the two orders that occurred before 2006 there is no clear explanation.

Recidivists

Analysis of the data showed that of the 788 organizations convicted between 1994 and 2013, only 11 had subsequent recidivist convictions for environmental crimes representing a recidivism rate of 1.4%. Below are descriptive parameters on the recidivists' statutory violations and sanctions for both their initial and subsequent convictions.

Statutory violations

Recidivist organizations had the following statutory violation profile for their initial convictions: 7 (64%) had only one violation in their initial convictions and 3 (27%) had two violations and 1 (9%) had three (Table 7). Regarding statutory violations, the recidivist convictions consisted of a total of 16 initial statutory violations. Of these, 2 were CWA violations, 5 were Title 18 violations, and 3 were APPS violations. Further, there were 2 violations of the Refuse Act, and 1 violation for each of the following statutes: CERCLA, RCRA, CAA and the Migratory Bird Treaty Act (MBTA). Based on this, the typical initial conviction of the typical organizational criminal environmental recidivist involved violations of both the APPS and Title 18.

For their subsequent convictions, the recidivists' subsequent cases had the following violation profile (see Table 7): 5 (45%) had a single statutory violation, and 5 (45%) had 2, and 1 had 3. Regarding violations, there were a total of 18 violations among the subsequent convictions. Most of them (7) were Title 18 violations. These were followed by 4 violations of the CWA, 3 violations of the APPS, 1 violation each of the CAA, the Refuse Act the MBTA and state environmental statutes. Thus, the most typical criminal recidivation involved violations of the CWA and Title 18.

Table 7

Recidivists' statutory violations

Recidivist (ID)	Violations for initial convictions			Violations for subsequent convictions		
	#	Environmental statutes	Non-environmental statutes	#	Environmental statutes	Non-environmental statutes
1	1	CWA		2	CAA	Title 18
2	1		Title 18	1	APPS	
3	2	CAA	Title 18	2	CWA	Title 18
4	1	CERCLA		1	CWA	
5	1		Title 18	3	CWA	Title 18;
6	2	APPS	Title 18	2	APPS	Title 18
7	1	APPS		2	APPS	Title 18
8	1	APPS		1		Title 18
9	3	CWA	Title 18: MBTA	2	CWA	Title 18
10	2	Refuse Act;		1	State	
11	1	Refuse Act		1	Refuse Act	

Court sanctions

Recidivists had the following sanction profile for initial convictions (Table 8): financial penalties for initial convictions ranged from $82,000 to $15,500,000, with a mean of $2,914,586. None of them was ordered to do community service. Regarding organizational probation, 8 (73%) were ordered to go on probation whose terms ranged from 0 to 60 months, with 38 months as the average. Of these 8, 6 (75%) reoffended while on probationary supervision, with the other 2 re-offending after their initial probation term. Of the 6, 4 had new probationary terms imposed,

while 2 had extensions to existing terms. For the 4 offenders, it is unclear how the overlap of terms was dealt with.

For subsequent convictions, the sanction profile, as reflected in Table 8, was as follows: financial penalties ranged from $0 to $20,000,125, with a mean of $5,239,439. As with initial convictions, none of the offenders was ordered to do community service. Of the 11, 9 (82%) were ordered to go on probation, with terms ranging from 24 to 60. The average term was 34 months.

Table 8

Recidivists' sanctions

Recidivist (ID)	Sanctions for initial convictions		Sanctions in subsequent convictions	
	Financial penalties ($)	Organizational probation (months)	Financial penalties ($)	Organizational probation (months)
1	8,000,000	36	20,000,000	60
2	125,400	60	1,501,200	60
3	82,000	60	0	24
4	15,500,000	60	20,000,125	36
5	100,000	0	10,000,000	36
6	500,000	0	375,000	0
7	750,400	48	2,250,000	60
8	1,001,600	36	0	24
9	100,000	0	3,000,000	48
10	5,500,925	60	7,500	24
11	400,125	60	500,000	0

So, the general profile of the recidivist organizational offender as defined in this study is as follows: an organizational offender that was previously charged for both violating the APPS and/or Title 18 and was handed a sentence that included financial penalties amounting to

$2,914,586 and an order to go on probation term for a term of 38 months. And for subsequent convictions, the typical charge was for violations of the CWA and/or Title 18, with sanctions that included a combination of financial penalties of $5,239,439 and an organizational probation term of 34 months. These results suggest that whenever the courts were presented with the

opportunity to punish a recidivist organization, there was a significant increase in fine severity while - perhaps interestingly - probation terms were slightly lower as compared to initial sanctions.

Recidivists versus non-recidivists

The results show that the population of interest had a very small number of recidivist organizations - 11 out of 788 - a result that gives the *prima facie* impression that organizational recidivism within the domain of federal environmental crime is a rare phenomenon, for whatever reason (that is, either effective punitive deterrence or lax enforcement). The central aim of recidivism studies is to determine whether there are significant differences in the characteristics of recidivist and non-recidivist offenders that could be useful in development of appropriate risk assessment tools that can lead to more effective crime control efforts and better ways to rehabilitate offenders (Monahan & Skeem, 2016). To this end, some additional comparative population parameters are presented in Table 9.

Table 9

Recidivists versus non-recidivists

Characteristics	Non-recidivists	Recidivists	
		Initial conviction	Subsequent convictions
Most common violations	CWA and Title 18	APPS and Title 18	CWA and Title 18
Sanctions:			
1. Financial penalties ($)	1,167,823	2,914,586	5,239,438
2. Community service (hrs)	321	0	0
3. Organizational probation (months)	32	38	34

The data above show that, in terms of statutory violation, recidivists differ from non-recidivists regarding their initial convictions. Non-recidivists typically violate the CWA and Title

18 while, for their initial convictions, recidivists typically violate the APPS and Title 18. But for their subsequent convictions, recidivists typically violate the same statutes as the non-recidivists - CWA and Title 18. This result, and the rest of the findings, are discussed in the next chapter. With sanctions, there are some significant variations between these two groups.

Regarding total financial penalties, non-recidivists pay an average of $1,167,823. For recidivists, the fines are $2,914,586 for initial convictions and $5,239,438 for subsequent convictions. Regarding community services, non-recidivists were ordered to an average of 321 hours of community services, whereas recidivists were not ordered to do any community service. As for organizational probation, non-recidivists were ordered to probation whose terms averaged 32 months. Recidivists were ordered to probation with a term of 38 months for the initial conviction and 34 months for subsequent convictions.

Recidivist risk profile

On this recidivist/non-recidivist comparison, one could ask if the recidivists were high-risk offenders to start with? Ideally, such risk assessment should be as part of the pre-sentencing process. This is typically done for individual offenders as there are a number of risk assessment tools (to be discussed in greater detail in a latter chapter) that are used for this purpose. Such tools are yet not available for organization offenders. Until such tools are developed and are generally accepted by the criminal justice system, one would hesitate to provide a definite answer regarding the recidivists' inherent riskiness. The matter of developing risk assessment tools for organizational offenders is discussed in greater detail in chapter eight. For now, one can say that despite the absence of such tools, one can identify additional characteristics that such organizations share, without necessarily claiming them as risk indicators - as shown below.

Industry

Of the 11 recidivists, 6 (54.5%) were in the shipping/maritime industry, 2 (18.2%) in the petroleum industry, and one (9.1%) in each of the following industries: food processing, liquid waste management and commercial vehicle cleaning. The recidivists' industrial profile was easy to determine as there were only 11 entities to deal with. The same could not be said about the 777 non-recidivists. A simple search through the Summary database was done to see if an elemental comparison could be made against the recidivists' industrial profile above. Based on the rough analysis of the 777 non-recidivists, 50 (6.4%) were in the shipping/maritime industry, 32 (4.1%) were in the oil/petroleum industry, 8 (1%) were in food processing, 3 (<1%) were in waste management, and none in commercial vehicle cleaning. The population of non-recidivists represented a much greater industrial variety than what was found among the recidivists. More about this could be said only if the case notes included the convicted organizations' North American Industrial Classification System (NAICS) numbers which give a clear indication of the offenders' industrial classification. The absence of such data makes any industrial analysis in this regard highly speculative at best.

Size

Unfortunately, the database did not provide any information regarding the organizations' size. The closest proxy measure that was available and could be used for this purpose was the number of US states/territories, over time, in which the offender was convicted. The assumption here is that the number of such locations correlates positively with size. So, of the 11 organizations, 6 were convicted in more than one jurisdiction state/territory. Further, 3 of the organizations (1 that was convicted in the same state/territory and 2 that were convicted in multiple such locations) were headquartered outside the US. No comparative data were provided for the latter.

Understandably, this reduces the significance of the data provided. But while this is true, this fact serves to underscore the limitations of the Summary database as discussed in the following chapter. But suffice it to say that for non-recidivists, conviction data as provided by the Summary is unlikely to give an indication of an organization's size in terms of geographic spread. The reason is, with one case/conviction, only one jurisdiction (the one to which the prosecuting court belongs) is involved. With recidivists it is easier to determine an organization's multijurisdictional presence if subsequent convictions are carried out in different federal courts.

Financial condition

The database did not have any financial details of the convicted organizations, so there is no definite way of determining the existence of shared financial characteristics among the recidivists. Nonetheless, it could be reasonably concluded that the recidivists were financially robust as despite the high levels of the financial penalties charged compared to non-recidivists, there was no indication that any of them went bankrupt or suffered financial hardship as a result. Further, a cursory review of the internet indicates that all the recidivists, except one, are still operating in the present. For non-recidivists, a search of the database showed that 4 convicted organizations went out of business either through dissolution or bankruptcy.

CHAPTER EIGHT

DISCUSSION

This chapter discusses the results of the data analysis presented in chapter seven. It presents a summary of findings, while pointing out the study's limitations. It also reiterates the importance of recidivism research before discussing the study's implications for policy makers and future researchers. Finally, it offers a conclusion.

Summary of findings

According to the study population, there were 736 environmental criminal prosecutions by federal courts between 1994 and 2013 that included at least one organizational offender. These cases were prosecuted in federal courts in all states and US territories, except Wisconsin. There was no environmental criminal conviction of an organizational offender in the state of Wisconsin for the 20-year period covered by the study population. Regarding conviction trends of the study period, the highest number of convictions in a year was 64, in 2006, and the lowest 11, in 1996.

As indicated earlier, the database had incomplete data for 11 of the 736 prosecutions. The remaining 725 prosecutions involved 788 organizational defendants, all of whom (except 13) were business organizations. Of the business defendants all but two were solvent at the time of sentencing. Regarding violations, the typical charge carried one statutory violation, with violations of the CWA being the most prevalent. As for sanctions, the typical punishments were financial penalties, the most significant of which was the criminal fine. The average amount of financial penalties per defendant was $1,167,824. Beyond financial penalties, the typical organizational defendant was also ordered to go on probation, with the average term being 34 months and required to spend an average of 321 hours on community service.

For the 11 recidivists, the following was true according to the data: for their initial convictions, the typical charge was for the violation of APPS and/or Title 18, and the typical punishment was a combination of $2,914,586 in financial penalties and a probation term of 38 months. For subsequent convictions, the typical charge was for the violation of the CWA and Title 18, and the typical punishment was a combination of $5,239,439 in financial penalties and 34 months on probation.

Surprising results

Based on the study population, only 11 convicted organizations recidivated, translating into a 1.4% recidivism rate. These results raise two concerns. First, this recidivism rate is much lower than expected, as compared to individual offenders. Studies have found that for individual offenders, recidivism rates can be as much as 40% in the first year, with the rate only increasing over longer follow-up periods (Alper & Durose, 2018). While it is reasonable to expect a measure of difference between individual and organizational recidivism, the difference exposed by this study seems unlikely - raising questions regarding the face validity of observed results (Holden, 2010). Can these results be taken as a valid representation of future rates of organizational recidivism? Another possible question that could be raised regards construct validity (Westen & Rosenthal, 2003). Is there a better definition of organizational recidivism than the one used in this study, one that would presumably yield more valid results? These are just two validity-related questions that the study's results raise, questions that can only be answered by having more research in this area. Validity is discussed further below with regard to the study's limitations. Another concern that these results raise is how the regulatory agencies (in this case the EPA) and the criminal justice system detect and respond to re-offenders. That is, if 1.4% as a recidivism rate is suspect, how did the rest of the re-offenders elude conviction? Is it that the re-

offenders became better at manipulating regulatory monitoring, or is it because when detected such entities typically use diversionary options that keep them out of the courts? Again, these questions raise the need for more research, as discussed further below.

The second concern has to do with the efficacy of violation detection. In this regard, the EPA's violation detection approach involves using both inspections and violation reports. Violations reported in or detected by inspectors are handed over to EPA investigators. The agency has typically had about 300 to 400 professionals, nationwide, tasked with the responsibility of investigating violations and taking offenders to court (EPA, n.d.-a). According to the ECHO tool, there are 800,000 facilities that fall under EPA regulation (that is, facilities that are required to comply with federal environmental laws regulated by the EPA). While there were no EPA-wide non-compliance rates found, there are a few documents that provided non-compliance rates in specific areas. For facilities that were given EPA permits under the National Pollutant Discharge Elimination System, 20.3% were in significant non-compliance annually (EPA, 2018). For community water systems (that is, public water systems that serve the same people all year round and are regulated under the SDWA), 34% violated at least one water standard per year (EPA, 2021). Assuming that general noncompliance rates across all regulatory domains were within this range (say 25%), it would mean a total of 200,000 facilities would be out of compliance annually. The question is, how many of these violations would be detected (via inspection or reporting), and with only 300-400 investigative professionals at hand, how many of the detected cases would go through the court system and be prosecuted accordingly? Such levels of non-compliance would seem to be an enormous task for the EPA as it is currently resourced unless, of course, further research proves otherwise. It could very well be that such resource restraints are one reason behind the reduced organizational recidivism rates noted by this study.

Limitations

Despite its utility as a usable base for this study, the Summary database has its limitations. First, the information in the database was transcribed and summarized from other documents. That is, a secondary data source, the Summary itself drew from other secondary data sources. This raises questions such as whether all case judgement reports were reviewed and properly transcribed, whether cases were allocated to the correct year (that is, if there were any cut off issues) and whether errors were committed in data entry. Such errors can have an impact on data validity and completeness. Data is valid if it faithfully represents the underlying truth (Stausberg et al., 2018), whereas data is complete if it includes all pertinent cases and variables that should be included. For secondary data, both can be affected by erroneous data entry, and the risk escalates if a secondary database is created from other primary databases. Ideally, such questions would be resolved through data quality audits. From available information, such audits were done for ECHO data (EPA, 2009; EPA, 2010). No evidence was found to suggest that the same was done for the Summary database.

The second limitation relates to a point already raised earlier - the EPAs seemingly inadequate capacity to detect non-compliance. As already discussed, the agency has a low number of investigative and legal professions, which may be a result of the high rates of staff attrition rates it has suffered in recent years (EPA, 2021). One consequence of these resource limitations could be a preference for alternative case disposition methods, like deferred prosecution agreements (DPAs) or non-prosecution agreements (NPAs), to clear any case backlogs. In fact, according to some these agreements have become the standard method of settling federal corporate criminal investigations (Block & Feinberg, 2010). Since by their nature these agreements have an ex-ante emphasis on compliance and not an ex-post focus on punishment (Kaal & Lacine, 2015), their

pervasiveness could mean the exclusion of offense and re-offense data from the prosecution database, thus affecting its representative quality.

The third limitation to consider would be the interest of powerful stakeholders and their influence on the data collection process. In this case, the stakeholder group that could limit the data's research utility would be agency management. Given that management's pertinent needs would not necessarily be geared towards research, it is reasonable to expect the possibility that data collection efforts could be primarily aimed at meeting such needs and not the needs of the researcher. Unfortunately, these are risks whose mitigation was outside the author's control. One hopes that the EPA took the necessary steps to minimize them. Beyond these inherent limitations, there was another data-related risk that was borne by this study. This was the risk of data compromise due to the study's need to transform the Summary data into a usable format. The transformation included creating variables like Organizational Recidivism, Violations and Total Financial Penalties that were not included in the EPA database. While every effort was made to ensure that the transformation was free of error, it is not possible to assure that the risk was eliminated entirely.

Recidivism, sentencing and criminal justice

Before discussing the implications of the study's results, it is important to reiterate the need for organizational recidivism research. Recidivism research is critical to the criminal justice system because it allows the development of more effective crime control mechanisms. Through a deeper understanding of recidivism, the criminal justice system can develop risk assessment and predictive tools that, theoretically at least, could lead to the design of crime control programs that would reduce the likelihood of reoffending (National Institute of Justice, 2008). For the individual offender, recidivism research contributed to the development of several Risk Needs As-

sessment (RNA) tools, based on the Risk Needs Responsivity (RNR) framework, aimed at enabling the justice system to develop effective programming interventions for offenders. Since its introduction, the RNR framework has secured a dominant position as the model of choice in the development of offender rehabilitation interventions (Andrews et al., 1990; Polaschek, 2012) and has been used to create various risk assessment tools used for correctional purposes (Latessa, 2011). Although practice has shown that such tools still leave much to be desired (Desmarais et al., 2016; Dressel & Farid, 2018), they have shown enough promise to make them worthy of continued use despite their shortcomings. Additionally, there is hope among supporters that these tools could be improved. One way, it is argued, would be through improvements in the standardization of methodologies (Taxman & Smith, 2021) and another would be by applying latest technological breakthroughs, like big data and machine learning (Ozkan, 2017).

For the organizational offender, the study did not find similar risk assessment tools. Further, the database used for this study did not indicate whether the courts used anything similar, especially during the presentence investigation phase. More than likely, there are no tools for organizational offenders that are as comprehensive as the RNA tools for individual offenders. This is a significant shortcoming because the FOSG, per §8D1.1, provide the courts the option of imposing probation on organizational offenders. Given the value that such tools have shown with individual offenders, it would stand to reason that a similar risk-based approach to recidivism control ought to be applied to organizational offenders as well. Of course, one would expect related tools to be significantly different from those applied to individual offenders. And if the tools currently used for individual offenders are to be modified for organizational offenders, care would have to be taken for two reasons.

First, the offender in question is an organization, not a human being. RNA tools are largely about designing psychological interventions (National Center for State Courts, 2014). As such, if similar tools are to be designed for the organizational offender, this approach would be problematic, due to the offender's nature. And if the programming were targeted towards management and employees, their efficacy would be impacted by both staff turnover and program implementation. Another factor to consider in this regard would be supervisory effectiveness. With an individual offender, supervision is of one person who can only be in one place at a time. With organizational offenders, probationary supervision would oversee an organization that can have numerous employees and maintain operational presence simultaneously in different locations. While this reality does not mean that RNA tools are impracticable for organizational offenders, it does point to the fact that such tools would need to be based on organizational realities and not just simply adopted from those used for individual offenders.

Second, there is the prevalence of deferred and non-prosecution agreements (DPAs and NPAs) in sanctioning organizational offenders. These alternative case disposition methods appear to be applied at a significantly higher rate to organizational than individual offenders (Daniels, 2017). Under current approaches to recidivism studies, such agreements could elude measurement as they would not register as contacts with the criminal justice system, as are rearrests, reconvictions and reincarcerations. This means that in dealing with organizational recidivism, appropriate measurements would be required to ensure that re-offenses sanctioned via DPAs or NPAs are captured as events of recidivation, otherwise any risk assessment tool developed for organizational offenders would be flawed.

These reasons only serve to highlight the problematic paucity of research work on organizational recidivism. Given the harm that organizational crimes can cause, it would make sense

to develop an effective risk-based framework that would lead to the development of interventions that would impact recidivism in organizational offenders in the way that RNA tools have for individuals, and research on organizational recidivism would be a great help in such efforts. Of course, the point could be made that with little-to-no recidivism detected by this study, it would be pointless to produce such tools. In response, one would say that more research on organizational recidivism is needed before settling on such a conclusion.

But, before one can even talk about developing risk-assessment tools for organizational offenders, one fundamental question must be asked - given the fact that organizational crimes are in fact human actions that are attributed to the organization (via either identification or vicarious liability), what should be the response to the risk of "corpus-hopping", that is the prospect of human criminal reoffenders hiding their recidivism simply by moving from one organization to another? As the situation stands, if such recidivations are attributed to different organizations they would not count as recidivism. So how should such recidivations by the human actors hiding behind the corporate veil[9] be dealt with? For example, should a CEO's implication in a previous employer's organizational crime be attached to his/her current employer? That is, if the CEO's decisions were to lead to the latter's criminal conviction via vicarious liability, would that count as organizational recidivism? Again, such questions can only be answered after careful study and research.

Implications

Despite these issues and limitations, this study raises several points that could prove useful for both policy makers and researchers.

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[9] The term "corporate veil" refers to the legal concept that separates the personhood of shareholders from that of the corporation whose shares they own. This concept extends from the legal fiction that recognizes corporate personhood.

Policy makers

For policy makers, there are at least two points that this study raises. First is the need to improve the quality of data on organizational offending. As stated earlier, the USSC is mandated to collect organizational sentencing data for research purposes. Unfortunately, the data as it is currently constructed presents challenges from a research standpoint. For the current study, three issues were found to be problematic. One was the fact the USSC data did not include the variables needed to do recidivism research. While the data included a variable on previous criminality, it was just coded in simple binary terms (Yes/No), there was no mention of the statutory violations or punishment that went with it. The second issue has to do with the lack of pertinent offender characteristics that would be very helpful for efforts geared towards developing an organizational offender recidivism risk assessment framework. As the previous chapter showed, without data that identifies characteristics like industrial classification, offender financial status, legal organizational form (that is, is the organization a partnership or a corporation?), profit orientation (is it a for-profit or not-for-profit organization?), geographic spread (is it a local, region or global entity?) and employee head-count, carrying out a useful organizational recidivism risk assessment becomes a significant challenge. The third issue was that the USSC data did not include information on the application of alternative settlement arrangements, especially NPAs which seem to be favored by corporate offenders. The inclusion of such details would provide a much clearer picture of organizational criminality and recidivism. Thus, policy makers should consider developing a comprehensive research data collection framework to ensure that data collected is complete and appropriately coded for use by potential researchers. As envisaged by the author, this framework would include the design of a database to warehouse pertinent data from the various agencies involved in the prosecution of organizational offenders. On top of that, the frame-

work would also include the development of data quality control procedures that would ensure the quality of retained data. An approximate model of what the author envisages would be the Corporate Prosecution Registry, developed through a collaborative effort between Duke University and the University of Virginia School of Law. This registry houses data on federal organizational crime prosecutions and NPAs and DPAs since 2001. This could serve as a model of the framework referred to here. The drawback with this registry is that the data is not complete, nor is it coded appropriately for research purposes, much like the EPA Summary database. Also the data goes back to only 2001. So, these would be the shortcomings that the suggested government data registry would have to overcome. But if the idea of a single data repository would not work for whatever reason, existing databases could be expanded to capture additional data as identified above, with the additional requirement that all databases should have only one unique identifier for a given offender. This could be a cheaper and less time-consuming solution for data collecting agencies that would give researchers the ability to cross-walk among the databases and carry out research that would be more comprehensive than is possible under current conditions.

The second point has to do with the need for increased capacity to detect re-offenders. The recidivism rate highlighted by this study seems unrealistic. Even granting the difference in the type of offender involved, the rates shown are much lower than one would have expected. This leads one to question the efficacy of the government's competences in detecting organizational environmental re-offending and bringing the culprits to account. Current USSC data shows that statistically, environmental crimes are the most prosecuted type of organizational crime. While this may indicate increased focus on detecting and prosecuting environmental offenders (limited EPA resources notwithstanding), one would expect that such efforts would lead to exposing greater numbers of re-offenders. Admittedly the reality may be more complicated than

that (a matter that would need more research), but this expectation stands within the bounds of reason. As it is, the EPA has about 300 - 400 people carrying out investigative work. With close to a million EPA regulated sights to deal with, this number of investigators seems to be very low indeed. Policy makers should give consideration towards increasing the number of investigators to get the job done. Granted, the author does not have knowledge regarding what would constitute the optimal caseload per investigator. Some of the ways one would suggest on how to go about it would be by interviewing experienced investigators, reviewing the quality of completed case files for signs compromises related to case overload, and determining if there are any case backlogs. Ultimately, only further research would shed the necessary light on the problem.

Following the financial and accounting scandals of the early to mid-2000's involving the likes of Enron and WorldCom, the US government passed several statutes to improve controls against corporate crime. One solution that was considered was the use of whistleblowing as a corporate crime control strategy. This idea culminated in the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. This statute was aimed at providing whistleblower protection to enhance law enforcement efforts by the SEC and CFTC in dealing with corporate financial crimes. Research shows that whistleblowing has demonstrated to be a particularly effective means for exposing economic criminal activity (Bussman, 2007). Policy makers, with the help of research (as discussed below), would be best advised to consider implementing a similar strategy with environmental crime to enhance the EPA's capacity to detect violations, as some have already argued (Warren, 2015).

Researchers

From a research standpoint, this study exposes numerous possible topics that could be pursued by future researchers, some of which are discussed below.

Study replication. First, researchers could replicate this study with similar prosecution data from other federal regulatory agencies (like OSHA or the IRS, just to name two). Of course, if the USSC added a few extra variables that coded the data elements that were identified above, it would not be necessary to analyze agency-specific databases. But given the fact that the database suggestion made above may not happen any time soon, and if it did, it may not have retroactive implementation, the most practical option for future researchers would be to do what this study did - go to the agencies for their criminal prosecutorial data, and hope that they will have the pertinent information for the purposes of organizational recidivism research. These studies would go a long way to deal with the validity issues raised earlier. They would also add to the understanding of the subject of organizational criminal recidivism.

Environmental and green crimes. Focusing on environmental crimes, future researchers would still be faced with the typological challenges relating to environmental crimes and green criminology. Research shows that significant variations regarding what these two terms mean still exist. Beyond the question of definitions, another matter to ponder would be determining the appropriate category for environmental crime. By their nature, these crimes can fall under different classes of crime: organizational crime, organized crime or state crime. In some cases, they could implicate all three categories, especially when talking about illegal transnational environmental crimes. An example would be where a corporation uses resources provided by organized criminals operating in a resource-rich Third World country whose state apparatus is captured by corrupt political elites. There are many Third World countries that deal with this sort of challenge. The question is to which category, for research and law enforcement purposes, would these crimes belong? What effect would that categorization have on efforts to understand and control the crimes in question? Research would be needed to explicate these questions. As a pos-

sibility, researchers may find it fruitful to explore zemiology and the possibility of moving environmental violations from the realm of "crimes" into that of "harms" (Green et al, 2013). Would this lead to better responses to environmental violations? Maybe it would. This is because many regulatory mechanisms (like OSHA, EPA, and NHTSA to name a few) did not emerge from efforts of criminologists - at least as a starting point. People outside the discipline, especially writers (some of whom were cited in earlier chapters), have made significant contributions towards crime control. This is not to discount the value of contributions by criminologists. Rather, it is a recognition that - criminology may not be the right discipline for the theoretical development of the issues currently dealt with under green criminology. As it is, criminology already has a rather cluttered theoretical environment. One wonders if adding green criminology to this mix could hinder its development. Research would be helpful in determining the direction to take in this regard.

Organizational recidivism. Discussion on recidivism and policy suggestions given earlier also provide some potential research topics. The first one is the need for the development of risk assessment tools for organizational offenders. One would expect this to be a multi-disciplinary effort, involving other disciplines like economics, political science and managerial and/or organizational sciences. Such tools would be very useful in developing the necessary programs to limit both initial and subsequent organizational offending. Again, the answers to such matters can only be unveiled by research.

The second topic worthy of research would be the design of efficacious whistleblower protection models for environmental crimes. As indicated, currently there is a well-developed whistleblower protection system for financial crimes. One characteristic that distinguishes this system is its incentive program. Under the Dodd-Frank law, whistleblowers get to keep between

10% to 30% of moneys recovered by government from their employers' criminal activities (Westbrook, 2018). On the face of it, such an incentive program would not be appropriate for environmental crime, as with such crimes whistleblower action does not typically yield similar economic recoveries that could be used to pay out related financial awards. This means that if a whistleblower protection system was to be designed for the latter type of crime, research would be needed to understand all the pertinent factors at play with environmental crime so that an optimal model could be created. One benefit of having such a system would be assisting in the construct validity issues exposed by this study. This is because such a system could help uncover violations that would have traditionally gone undetected. By expanding the world of re-offending captured by "re-conviction only" recidivism data, one could argue that whistleblowing could improve construct validity by bringing such data closer to the "primary" definition of recidivism. Of course, an appropriate incentive scheme would have to be created to motivate people into making the needed revelations. Research would be needed in order to determine how such a scheme would work. Another scheme that could be considered to complement such efforts would be the self-reporting survey. This could conceivably assist in providing the general picture of environmental organizational re-offending. Related challenges like low response rates and deception would have to be addressed if such efforts were to yield meaningful data.

The third topic that researchers could look at is the question of dealing with "corpus-hopping" recidivations. As noted above, this can confound efforts at understanding and ultimately dealing with organizational recidivism. Clearly, dealing with this challenge would involve finding the best way to move the corporate or organizational personhood to the side to recognize and deal with any hidden recidivism (Macey & Mitts, 2014). Perhaps a possible solution in this direction would be imposing restrictions on senior managers implicated in organizational envi-

ronmental crimes. That is, if an organization is attributed crimes that came from a manager's behavior, the latter could be barred from assuming a managerial role at any organization that operates EPA regulated facilities. Of course, any such solutions would need careful consideration to avoid destroying the efficacies and efficiencies offered by the organizational form.

Organizational crime. Extending the possibility of criminological theoretical research, researchers could also look into the adequacy of orthodox, individual-level criminological theories to explain and predict organizational crime. Most especially, more work could be done on the etiological significance of organization-level factors on organizational crime. While this study found a few studies in this regard (Baar & Huisman, 2012; Aven, 2015; Lord et al., 2018; van Rooij & Fine, 2018), more work in this area would be required to identify those organizational-level factors that more effectively account for organizational crime. Such knowledge would not only be useful in developing theories more geared towards explaining and predicting this type of criminality, it would also be useful in the development of more effective organizational crime control policies.

Community service. It is interesting to note that for the study population, community service was ordered for non-recidivists but none for recidivists. This observed outcome raises a number of questions regarding punishment and organizational crime control. The first question has to do with effective sanction design for the offender at hand. Community service as currently used by the criminal justice system is largely focused on juvenile offenders. For organizational offenders, research work would be required to determine if in fact community service would be an effective sanction. Another matter that would require resolution is the implementation of such a sanction. Specifically, who would get to shoulder the responsibility to fulfill the sanction's service requirements? Would it be a member of senior management or a low-ranking employee?

These are some of the questions that would need answers to provide the relevant context in exploring the noted variance in community service orders between recidivists and non-recidivists.

Conclusion

This study explored a seldom researched area, and it yielded useful but predictably limited information regarding organizational recidivism. It shed light on a subject that is due for more research activity and provides possible direction for future researchers interested in the matter. With all its limitations, the study yielded significant insights.

APPENDIX

LIST OF ABBREVIATIONS

APPS	Act to Prevent Pollution from Ships
CAA	Clean Air Act
CDC	Centers for Disease Control and Prevention
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFPB	Consumer Financial Protection Bureau
CFTC	Commodity Futures Trading Commission
CPSC	Consumer Product Safety Commission
CWA	Clean Water Act
DEA	Drug Enforcement Agency
DOJ	Department of Justice
DOL	Department of Labor
DOT	Department of Transport
ECHO	Enforcement and Compliance History Online
EPA	Environmental Protection Agency
FASB	Financial Accounting Standards Board
FBI	Federal Bureau of Investigation
FDA	Food and Drug Administration
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
FOSG	Federal Organizational Sentencing Guidelines
FTC	Federal Trade Commission
GAAP	Generally Accepted Accounting Principles
HHS	United States Department of Health and Human Services
IASB	International Accounting Standards Board
IRS	Internal Revenue Service
NHTSA	National Highway Traffic Safety Administration
OSHA	Occupational Safety and Health Administration
SEC	Securities and Exchange Commission
SPE	Special Purpose Entity
USDA	United States Department of Agriculture
USSC	United States Sentencing Commission

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