DISEMPOWERING THE “ROBIN HOOD” FRAUDSTER: EMPATHETIC PATHWAYS WEAKEN REGULATORS AND ENABLE FRAUDULENT BEHAVIOR – A FRAMEWORK FOR REDESIGNING CONTROLS

by

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Submitted in partial fulfillment of the requirements
For the degree of Doctor of Philosophy

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February 25, 2015

*We also certify that written approval has been obtained for any proprietary material contained therein.
Dedication

I dedicate this dissertation to my wife - Joy, and our children - Abigail and Isabella. Without your unending support, I surely would have failed in this endeavor.

Thousands of words follow, yet not one is comparable to the love I have for you and inspiration I receive from you.
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Acknowledgments

My journey to academia began nearly eleven years ago in a classroom at Marquette University. In my first class of the MBA, two accountants (Michael Akers and Don Giacomino) ignited a passion in me that I had not felt before. At that moment, I knew I wanted to be a professor. For some strange reason (perhaps it was pity), they took an interest in my development and I did my best to respond in kind. They helped me obtain my first academic position, taught me to teach, and launched my research career. Both have been a most welcome constant in my life. I arrived at Case because of their suggestions, and I leave Case proud beyond words to know that I will share the same ground with them at Marquette. Don and Mike: you have made a difference in more ways than you will ever know. I only hope to honor the lifelong investment you have made in me by being a great friend personally, and elevating Marquette to even higher heights professionally.

I still remember the day I met Tim Fogarty. It was a chilly January day and I visited to see if I had interest in the prospect of losing my life for four years. Gary Previts was nice enough to connect us. I had tried to read up on Tim, but it seemed every time I thought I knew what he was into, a new article came out in a completely different area. I had not then, do not now, nor expect I will ever, know someone with such a variety of interests and so skilled in publishing in all of them. From the moment I met him, with his reading piles scattered across his desk, friendly demeanor, and straightforward attitude, I knew I found the mentor for me. Not knowing that I was not supposed to ask, I asked him to be my chair that weekend. He chuckled a bit, likely at the naivety I expressed, but seemed amenable.
From that day forward, Tim’s leadership, guidance, and support only grew stronger. He inspired me to go beyond the classroom, and was always there when I needed him. I remain amazed at his accessibility in the face of everything in which he is involved. I could not have had a better friend, mentor, and role model in this program. Although all the writing in this document is my own, the ideas, discussions, and inspirations for the work and findings would not be possible without Tim. I only hope I can honor the great name he already has by publishing, befriending, and inspiring others. It would be my great honor to have him as a friend and research partner (although still lopsided heavily in his favor) as I move to Marquette.

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I am grateful beyond words for Jagdip Singh. This dissertation would not exist without his mentorship and guidance. I am forever grateful to have been his student and will endeavor to be a colleague worthy of his respect. Jagdip: you made a transformative difference in my life. The basis for who I am and will become as a quantitative scholar began with you. I will continue to thirst for knowledge for the rest of my life due to many of the discussions we shared. I only hope I am lucky enough to travel with you to India one day.
Kalle: thank you for all of your quiet guidance and support. Without you, I would surely be lacking in my understanding of the multiple methods of research. You taught me how mixing the methods can improve the value of each beyond what any singular path could hope to achieve. You are an excellent mentor and advisor. Thank you for the guidance. Your feedback at key moments has been invaluable. Sue and Marilyn: thank you. I relied on you for more than I should in later hours than I should, yet you both deliver repeatedly. Your support provided the stone on which this dissertation rests. Finally, thank you to the faculty and staff at Case, my cohort, and those who came before us. The respect and admiration I have for you is beyond words. You have witnessed the birth of my children, provided shoulders to cry on when my dad was in trouble, and been the quiet strength that allowed me to succeed. I am honored to know each of you.

Any errors contained herein are my own and exist despite the excellent mentorship I received from all associated with me.
Prologue

In my prior career, I served as a managing member of a professional trading firm, which continues to this day, in its 17th year of existence. During this time, I came across traders, regulators, and professional investors of nearly all types. Many were solidly ethical people. Yet, the industry appeared to have a higher acceptance and implementation of fraud than that any other industry in which I knew peers. Outside the obvious (money), I wondered what, if anything made this community special. It became clear to me that if I discerned how and why fraud works I would have knowledge useful to scholars and practitioners alike to improve theory and design controls that alleviate the problem. Based on the interviews I had with 31 regulators and professional investors, a long line of research emerged. Many situations emerged from the qualitative interview process. I chose to study what initially appears to be a counter-intuitive situation: sympathetic circumstance leading to fraudulent behavior for financial professionals, but also empowering it in the community charged with overseeing them. I chose this because it appeared to demonstrate the greatest opportunity for me to grow as a scholar while adding value to research and practice. As a result, with the help of those mentioned above, my research journey begins here.
Abstract

by

JOSEPH WALL

Fraud thrives in the financial marketplace despite the best efforts of the accounting community. Literature suggests both models and solutions to address the problem, yet a paucity of knowledge remains regarding how sympathy influences fraud. Although many of the largest frauds come from the professional investing community, little research exists on the pathways to fraud within it. I respond to calls for action from auditing and accounting literature, COSO, and practitioners in examining a powerful path to fraud inside the professional trading community, aggravated unintentionally by those who regulate them.

I discover an environment where fraud is so pervasive, fraud can become the norm. While interviewing 31 professional investors and regulators, a passionate group of “ethical” fraudsters emerges. These fraudsters rationalize fraud as an ethical act, useful for protecting members of the public, given sympathetic circumstances. Following this line of reasoning, and aligned with literature from accounting, economics, and psychology, I operationalize an experiment. This experiment studies how the threat of
detection, monetary rewards, and organizational culture interact to drive fraud when a sympathetic client exists. The data suggest the generalized existence of such “Robin Hood” fraudsters, given the opportunity to commit fraud to help their clients. Additionally, the data confirms the combinatory impact of the Fraud Triangle. Multiple factors need be present for fraud to emerge. Finally, while those in small firms act fraudulently due to the combination of money and a low chance of detection, those in large firms act due to money and a performance driven culture.

In the qualitative study, traders expressed the belief that even when caught, the amount they will have to repay is relatively low. Additionally, regulators expressed the opinion that the amount requiring repayment will be high. Combining the results of the experiment with these assertions, I design an additional experiment to understand the actions of regulatory auditors and arbitrators who examine the activity of traders and recommend punishment. I also study boards of directors in charge of high-level compliance for a firm. In the experiment, I measure the decisions of regulatory auditors, arbitrators, and boards of directors in situations that change the levels of sympathetic situation, monetary rewards for the trader, and past criminal behavior. Shockingly, the traders were correct about the fine not matching the crime. Further, regulatory auditors and arbitrators consistently recommended fines of less than 40% of the damages done—in most situations less than 20%. Of the 348 respondents, only one attempted to fine the fraudster more than the known damage, even though they received instructions that the rules allow them to do so. Additionally, those who sit on a board of directors tend to see this a bit differently: not influenced by the factors I study, but still suggesting monetary fines of less than 33% of the damages. In addition, arbitrators fined more when the
perpetrator showed signs of a possible history of delinquency and personally profited. Regulatory auditors fined more when the perpetrator acted without a sympathetic client present.

Together these findings suggest that not only is fraud thriving within the professional investing community, sympathy, a characteristic normally thought of as “good”, can actually enable fraudulent action. Further, the community charged with policing that action might unintentionally empower the fraud act by deciding on low fines. These decisions are further constrained by guidelines that set penalty ranges in set dollar amounts rather than percentages. The combination of trader action and regulatory penalization is deadly and can result in a self-reinforcing loop where fraud driven by sympathy thrives.

These findings contribute to a more accurate theory of fraud and fraudster subtypes. Current theory reveals three primary simultaneous factors necessary to enable fraud, commonly known as the Fraud Triangle: pressure, opportunity, and rationalization. Additionally, two subtypes of fraudsters operate within the paradigm: the classic fraudster and the fraud predator. My findings confirm the efficacy of the Fraud Triangle and simultaneous factors being necessary to enable fraud. However, the data suggest that pressure, as a general construct, may be too broad to capture the nuances of the fraudsters operating inside systems. In particular, by focusing the attention on two subtypes of fraudsters, other types of fraudsters operating under motivations that are more specific may be more difficult to detect. Additionally, there is increased precision in understanding judgment in auditing by understanding how one reaches a punishment decision that may offset deterrence intentions. Finally, through the process of integration,
I submit that the timing of rationalization may be key. Literature implies classic fraudsters rationalize the fraud act after the decision to commit fraud and that fraud predators do not rationalize. However, my combined findings suggest that the decisions made by those who rationalize prior to the decision –the audience I study- may help explain gaps in literature regarding fraudster types.

Finally, this work helps managers in professional financial organizations more precisely codify codes of conduct. It gives enhanced guidance to internal controls designers and examiners. It also allows examiners to approach the audit of differing job types with increased specificity. This work would also be helpful to boards of directors and the compliance and arbitration community. It increases the understanding of how to better structure guidelines for punishment decisions. It explores the effects of sympathy, criminality, and the way employees are paid. The unintended outcomes influence current and potential fraudsters, as well as compliance officers within the organization.

**Key words:** Fraud; ethical decision making; deterrence; punishment; moral sentiment; judgment, empathy; auditing; forensic accounting; compliance; regulatory examination.
CHAPTER ONE: RESEARCH PROBLEM AND MOTIVATION

Introduction: What is the Problem?

Fraud destroys lives, communities, and even countries in the case of the recent LIBOR scandal (Kapner, 2013). It comes as little surprise that accounting practitioners and scholars have devoted enormous effort and expenditure in attempting to reduce the quantity and size of fraud in the marketplace. Yet, for a variety of reasons, fraud continues to grow in terms of scale and scope (Andretti, 2014). A recent spotlight on fraud exists in both the academic (the Journal of Forensic and Investigative Accounting, 2013 – volume 5, issue 2; Interdisciplinary Perspectives on Fraud: Accounting, Organizations and Society, 2013) and practitioner (Guthrie, et al, 2014; Tugend, 2014) communities. Yet, there little research integrates findings across disciplines. Additionally, there is a paucity of knowledge regarding fraud in the professional investing community, where much fraud is enabled (Partnoy, 2010). The financial statement auditing community has identified major factors enabling fraud to occur (Cressey, 1953; AICPA, 1997). However, studies from other disciplines (Young & Prybutok, 2007) suggest some of these factors may actually enable unethical behavior if there is a conflict between individual morals and declared societal values. Primary literature focuses on the efforts of classic fraudsters or fraud predators, who seek flaws to exploit. Recent literature suggests that the primary tool financial statement auditors use to analyze the problem, the Fraud Triangle, provides a useful tool from which to begin the analysis. However, the triangle may require extension, since its use implies constant “cat and mouse” adaptation necessary for the system to function correctly (Morales, 2014).
**Why Does This Matter?**

The damage fraud does is estimated to be in the trillions (ACFE, 2014; Pinedo, 2013). Yet, the primary non-governmental regulator of exchange member firms and markets, the Financial Industry Regulatory Authority (FINRA), imposes net fines in the millions (Black, 2013). Thus, FINRA, working in conjunction with the primary governmental regulator of financial markets in the United States, the SEC, may be sending unintentional signals. In addition, if current regulations unintentionally send signals that empower fraud, researchers and practitioners need to know. Several gaps continue to plague fraud literature outside of financial (mis)statement fraud. Literature covers motivation under the lens of negative (pressured) motivations, and moral sentiment is largely unexamined. This paper will examine the type of factors useful for academic and auditing professions to extend existing models, educate practitioners, and allow deterrence system designers unique insights into the professional investing community they service. I respond to a call for action (Brody, et al, 2012) to examine context and multiple perspectives by studying a broad group of professionals within my sample and establishing context within the instrument. Therefore, an exploration of factors that enable and empower specific types of fraud may aid scholars seeking to increase their knowledge. In addition, this exploration helps management in improving the detection and deterrence mechanisms used by better understanding the context and perspectives of multiple domains.

**Bridging Academia and Practice**

The Fraud Triangle (Cressey, 1953) suggests pressure, opportunity, and rationalization must all be present to occur. The Fraud Triangle heavily influences
financial statement auditor practice with SAS 53 (AICPA, 1988), 82 (AICPA, 1993), 99 (AICPA, 1997), 113 (AICPA, 2006), and 122 (AICPA, 2011) guiding the audit community. Additionally, professional organizations, such as the American Institute of CPAs (AICPA), the CFA Institute, and the Financial Regulatory Authority (FINRA), in combination with state boards, tend to require ethics and/or compliance training regularly: most states require two or four hours of ethics training annually. Further, while the NYSE will shift back to self-regulation by the end of 2015 (Mont, 2014), FINRA will focus on ethical behavior standards and controls in 2015 (FINRA, 2015a). Thus, this research is particularly timely and adds rigor in an area of current focus. The continued exchange of information between practitioners and scholars increases knowledge that can extend or generate theory while simultaneously improving the focus and application of such knowledge.
CHAPTER TWO: LITERATURE REVIEW AND GAPS

Given the strong importance fraud acts and punishment decisions have in influencing behavior, fraud theory and punishment theory underpin the work in this paper. Fraud theory combines with the type of ethical culture present in the workplace, the motivations to commit fraud, and the moral cognitive ability of the individual to enable the fraud act. Punishment theory combines with the desire to deter, while using judgment and moral sentiment to reduce (or unintentionally empower) the fraud act. Together, these theories provide the rational for action and help explain part of why the fraud problem continues. As fraud and deterrence often have different meanings across disciplines, this section first provides an operational definition for each. The paper addresses the review of the literature and associated gaps.

Fraud Defined

Financial statement auditors define fraud (AICPA, 2002) as “an intentional act that results in a material misstatement of the financial statements.” The ACFE further refines the definition (AICPA, 2010) based on occupational fraud as “the use of one’s occupation for personal enrichment through deliberate misuse or misapplication of the employing organization’s resources or assets.” Both derive their specific definitions from Black’s Law (Black, 2014), which defines fraud as “A knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment.” Criminal code and audit practice provides a solid base to build the definition. However, I rely on literature to expand the working definition used in this paper because this paper uses a unit of analysis focused on the individual, individuals damaged by fraud often do not produce financial statements. Additionally, the individuals we study may act without
for reasons other than personal enrichment. To expand the definition, Posner (2007) introduces the idea of robbery or theft under false pretenses. Podgor (1998) spends five pages attempting to define fraud, leaving the issue unresolved but focused on the deception aspect related to fraud. Weisburd and Waring (2001) delineate several types of fraud and notice the repeat offense tendency of several fraudsters, inducing sustainable harm. Finally, Coenen (2008) suggests fraud occurs for a direct or indirect benefit. Combining the above, I define fraud as an intentional deception or misrepresentation made to achieve a direct or indirect benefit at the harm of another.

**Deterrence Defined**

Classic work by Becker (1974) describes deterrence as the probability of detection. Gibbs (1975) expands this notion, suggesting that celerity, severity, and probability better delineate deterrence. However, Trompeter, et al (2012) acknowledges that the perception of deterrence matters more than actual rates of deterrence in preventing crime. Finally, Anderson (2003) suggests that deterrence is about the effectiveness of punishment in inducing compliance. Combining the above, I define deterrence as the effectiveness of the combination of perceived speed, severity, and probability of punishment in inducing compliance.

**Theoretical Frameworks of Interest: What is Known**

An overview of prominent literature follows in Table 1 below. I expand on the table to provide a brief overview of much of the theory presented in chapters that follow and that underpin the proposed theoretical framework underlying this dissertation. An explanation of gaps in literature follows, concluding with the research questions this
dissertation addresses, the methods designed to achieve answers to these questions, and a summary of key findings from the studies based on this design.

**TABLE 1: Selected Sources**

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<th>Key Theories and Topics</th>
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<td>Fraud Theory</td>
<td>Albrecht et al, 1984</td>
<td>Judgment</td>
<td>Bhattacharjee and Moreno, 2002</td>
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<td>Fraud: an intentional deception or mis-representation made to achieve a direct or indirect benefit.</td>
<td>Albrecht et al, 2011</td>
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**Fraud Theory**

The Fraud Triangle (Cressey, 1950, 1953) remains popular, suggesting pressure, opportunity, and rationalization as necessary to be simultaneously present for fraud to occur. Subsequent work theorized integrity (Albrecht, Howe, & Romney, 1984), ego (Coleman, 1987), capability (Wolfe & Hermanson, 2004), and experience (Ramamoorti, et al, 2009), leading towards a meta-model attempting to integrate these theories from the accounting domain (Dorminey et al, 2012). To explore opportunity, Cressey (1953) suggests that people notice vulnerabilities and weigh the risk of detection against the potential reward. Yet, it is the perception of detection and deterrence, rather than the actual rates that often drive behavior (Trompeter, et al, 2012). Vices and work-related financial pressures tend to dominate the motivating actions related to fraud (Albrecht, Albrecht, Albrecht, & Zimbelman, 2011). However, recent literature suggests fraud-related pressure may exist substantially beyond financial reasons (Eskenazi, et al, 2013),
and emotions may play a large part (Haidt, 2001). When people do commit fraud, in order to live with their actions, they tend to create a story that makes the fraud act “acceptable” (Freud, Bonaparte, and Flieb, 1954). Thus, practice (AICPA, 1997) and theory (Dorminey, et al, 2012) in accounting literature tend to use the Fraud triangle as a starting point for analysis.

The majority of studies tend to focus on fraud occurring within financial statements, assuming opportunity due to the fraud act having occurred, and rationalization occurring after the fact. Two types of fraudsters receive the focus of attention in these studies. First is the classic fraudster: typically studied, driven by pressure, often falling into an opportunity, and rationalizing the act afterwards beginning a slippery slope of continued action. Second is the fraud predator (Dorminey, et al, 2012): driven by opportunity and suggested to be lacking rationalization. Because pressure is the driver of the type of fraudster encountered in most studies, literature (Kranacher, 2010) looks at monetary rewards, ideology, coercion, and ego as extensions of pressure. However, many other forms of motivation are lacking. Without research from psychology, a gap in understanding remains.

**Motivation Theory**

For a long time, Psychology has suggested motivation is key in understanding behavior at work (Vroom, 1964). Ryan, et al (2000) further subdivide the factors that drive behavior as extrinsic: coming from external rewards imposed, or intrinsic: coming from the task performed. Monetary rewards (Izuma, 2008) and problems (Tella, et al, 2007) have long histories associated with fraud. Literature on personal values investigates the conflicts that can arise when these values may or may not align with law (Pope &
Bajt, 1988). A person’s ideals tend to motivate behavior (Dember, 1974; Von Krogh, et al, 2012), perhaps even more powerfully than money. Even enjoyment, something not usually associated with pressure, strongly influences behavior (Gavala, et al, 2006). Cognitive dissonance and motivated reasoning (Kunda, 1990; Festinger, 1957) help explain how these factors transfer from influence to action. However, psychology suggests that much of what motivates people to act may not even involve conscious thought. Instead, with emotions empowering instinct, a great deal of what causes people to act may be due to the situation at the time and their instinctual response to it (Haidt, 2001). Thus, in addition to investigating specific factors influencing fraud or judgment decisions, exploring the effect of emotions is important.

Organizational Culture

If motivation influences decision-making and action, similarly, the ethical tone of the organization, known as the tone at the top (Shafer, et al, 2002), strongly influences how people perceive the opportunities. The culture provides the opportunity to commit fraud, the risk of doing so, and the perceived punishment. Given that coercion and pressure combine to produce a strong incentive to behave badly in organizations (Kranacher, et al, 2010), it comes as little surprise that as fraud becomes more sophisticated and access to technology increases, teams of fraudsters may work together under coercion. This coercion often comes from those above them, potentially causing fraud to become systemic throughout an organization. Organizations focused on stock price management rather than traditional internal financial management are particularly susceptible, leading to an increase in moral hazard related fraud in the marketplace (Albrecht, et al, 2004). Financial statement auditors suggest that as the tone at the top
weakens, auditors need (AICPA, 2002) to increase skepticism. Yet, research suggests that as the tone at the top weakens within an organization, illegal action increases while regulator skepticism - key to maintaining a healthy control environment - can actually decrease in the form of reduced compliance based scrutiny. This process reduces the chance of detection and deterrence (Gabbioneta, Greenwood, & Mazzola, 2013). Research suggests the negative influence to be strong in the professional regulatory community, compromising their judgment. Thus, it is important to know how those regulated decide to behave in a situation containing systemic fraud.

**Punishment Theory**

Punishment theory encompasses five motivations to punish. Deterrence, rehabilitation, incapacitation, retribution, and restoration (Banks, 2012) are the most commonly listed motivations. This dissertation will focus on deterrence explicitly and retribution implicitly as focal points anchoring the punishment decision. People who make punishment recommendations often focus on deterrence, attempting to set a penalty high enough to discourage current and potential criminals from committing future crimes (Gibbs, 1975). Further, even though deterrence is primary in the minds of those making punishment judgments, retribution drives their behavior (Carlsmith, 2006). People who profit unjustly from an act trigger an emotional response that demands a return to justice and fairness (Jallow, 2005). Within the field of financial statement auditing, reputational damage (Desai, Hogan, & Wilkins, 2006), sanctions, and fines (Reinstein, Moehrle, & Reynolds-Moehrle, 2006) are most often used as examples of penalties, with a clear focus on monetary fines as a measurable outcome. Repeat offenders garner special attention and they receive higher penalties for their actions than are first time offenders (FINRA,
2013). Indeed, even the perception of past criminality is enough to change how punishment recommendations. The real history changes the decision, but only when people expend the energy to learn about it (Holzer, Raphael, & Stoll, 2006). Additionally, arbitrators and accountants tend to follow instructions and stay within recommended guidelines (Flanagan & Clarke, 2007). Thus, in the presence of sanctions guidelines (FINRA, 2013) giving suggested ranges of penalties, theory suggests those penalties may serve loosely as boundaries for decisions. In practice, the SEC appears to have trouble detecting crimes (Macey, 2010). If detected, high profile crimes receive penalties that are higher than ever (MacDonald, 2012). While literature regarding the overall punishment of the individual is clear, evidence about punishment decisions involving individuals with migratory circumstances is weak. Thus, deterrence theory warrants further investigation.

**Deterrence Theory**

Deterrence theory further concentrates the attention of punishment in three main areas: certainty, severity, and speed of punishment (Gibbs, 1975). Literature (Knapp and Knapp, 2001) and practice (AICPA, 1998, 2011) express the desire to increase the attention to uncovering fraud. By enhancing detection, the probability associated with the certainty of getting caught increases. If this probability is high, marginal costs associated with the fraud increase (Nussim & Tabbach, 2009), reducing the incidence rate of fraud. However, perception of certainty matters more than the actual probability (Anwar & Loughran, 2011). Additionally, without punishment, people no longer associate marginal costs with fraud and crime rises (Skatova & Ferguson, 2013). The actual punishment severity is less relevant than if those enforcing the rules believe the behavior was wrong (Chen, Kelly, & Salterio, 2012). Therefore, it is important to understand how judgment
influences decisions, and ultimately how the moral cognitive process influences the final punishment recommendation.

**Judgment Theory**

When financial statement auditors encounter a situation requiring judgment, those under pressure from clients or the environment often increase conservatism, becoming less tolerant in their analysis of books and records (Hatfield, Jackson, & Vandervelde, 2011). Similarly, arbitrators react harshly to those who committed a crime during the course of their actions, and impose stronger penalties than when the question of criminality is less certain (Emons, 2007). Judgments in both communities require professional discretion in reaching a decision. Research suggests empathy, compassion, and fairness are necessary to use discretion effectively in reaching a decision (Dong, 2014). However, the ability level of the decider, the amount of knowledge and education they hold regarding the situation, the organizational environment, and the primary motivations are primary in influencing their decisions (Libby & Luft, 1993). As a result, it is not surprising that literature suggests mood (Cianci & Bierstaker, 2009) and emotions (Bhattacharjee & Moreno, 2013) influence the decisions of many types of auditors. Surprisingly, in a setting requiring adjudication, empathy influences auditors more than laypersons (Reffett, Brewster, & Ballou, 2012). Thus, the impact of moral cognition and sentiments on judgment matters and is the final theory I explore.

**Moral Cognition and Sentiments**

Accounting studies exhibit a tendency to examine financial (mis)statement fraud, but recent studies (Ugrin, et al, 2014) have begun to expand the analysis, especially in the area of motivation. Psychology suggests models of cognition that involve multiple levels
of analysis in decision making combined with instinct, ethics, circumstance, and morality amongst other considerations (Nunnally, 2010). These models suggest a complexity beyond the focused models of fraud produced by studying accounting, law, criminality, or psychology alone. Synthesizing existing knowledge, unethical actions and decisions occur despite strong morals (Haidt, 2007). This is due, in part, to the application of cognition after the action. Further, tying values research from motivation theory mentioned earlier, cognitive dissonance (Festinger, 1957) helps explain inner conflict people feel when their actions do not match what they deem proper. Combining this knowledge in the hacking community, people sometimes see the ethical decision as one that society may have deemed immoral (Young, et al, 2007). Further, personal morality, combined with economic incentives, powerfully influences rationalization (Poddar, 2012). Financial statement auditors, in particular, may also rationalize doing nothing (Fogarty, et al, 1991). Thus, people will be motivated to cross ethical boundaries by their values, using the cognitive process to reach the decision to help (or hurt) others (Gino & Pierce, 2010). However, theory suggests (Barsky, 2011) that reality is rarely so black and white. Thus, when moral disengagement occurs, people often do not act as predicted by simpler models (Haidt, 2007) and may engage in unethical conduct (Detert, et al, 2008). As emotions impact judgment, and ultimately decision making, when mitigatory circumstances are present, moral sentiment engages (Smith, 1759). Empathy can influence the cognition process (Nelissen & Zeelenberg, 2009) and, further, influences sentencing (Archer et al, 1979). As a result, empathy likely influences financial professionals when choosing to enact fraud, and mitigatory circumstances likely influences regulatory auditors and arbitrators in their decisions to penalize fraudsters.
Gaps in Literature: What Remains Unknown

Several gaps in scholarly and practitioner knowledge exist. Addressing these gaps increases knowledge, meaningfully extends understandings of existing research, offers practicable solutions to alleviate problems, and reduces wasted time due to current errors or lack of current information.

Scholarly Gaps

<table>
<thead>
<tr>
<th>Type of Knowledge</th>
<th>Gap</th>
<th>Source of Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarly</td>
<td>Fraud Triangle needs extension; Meta-Model of fraud needs extension</td>
<td>Fraud Triangle (Cressey, 1953; Morales, 2014); Meta-Model (Dorminey, 2012)</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Auditor judgment lacking punishment decisions</td>
<td>Auditor Judgment (Ng and Han, 2003); Empathy -&gt; Judgment (Reffett, et al, 2012)</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Paucity of mixed methods analysis</td>
<td>Davilla and Foster, 2007; Grafton, 2011; Graham, 2005: most prominent example</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Sample - Little research in professional trading, market compliance population</td>
<td>Scant literature available: Haigh and List, 2005; Abbink and Rockenbach, 2006</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Rationalization - implied timing</td>
<td>Fraud Triangle (Cressey, 1953); Meta-Model (Dorminey, 2012)</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Fraud Predator - lack of information</td>
<td>Fraud Predator (Dorminey, 2012)</td>
</tr>
</tbody>
</table>

This dissertation attempts to address seven gaps in literature. Table 2, above, presents an overview of these gaps. First, as noted by Morales (2014), the Fraud Triangle may be starting to become too generalizable. This can create a lack of specific usefulness in detecting different types of fraud and requires extension. The current meta-model (Dorminey, 2012) implicitly acknowledges the need for extension as well, settling on a model applicable to fraudsters that continues to recognize pressure as well as other motivators. Second, literature suggests that empathy influences financial statement auditor judgment (Reffet, et al, 2012). However, there little research exists about how circumstances influence this judgment on punishment decisions beyond those judgments.
specific to a negotiation between the client and the financial statement auditor (Ng & Han, 2003). Third, there is a substantial lack of mixed methods analysis in accounting literature. Grafton notes the great strides other social sciences have made due to triangulation and integration, yet limited accounting research has incorporated the technique (2011). Graham (2005) provides an outstanding example by using qualitative methods, but triangulating these methods with a data from empirical literature. More often, research features work like Davilla and Foster (2007) which, while strong work, briefly mentions the qualitative work that was a part of the study. Fourth, little research empirically examines the decision making of the professional trading community. That which does (Abbink & Rockenbach, 2006; Haigh & List, 2005) tends to focus on validating an empirical study focused on investing. Additionally, these studies use relatively small populations that are highly concentrated in one particular type of investing despite the broad questions asked of them. Fifth, fraud studied from the point of view of the perpetrator is typical. Little to no research exists in accounting regarding those who make punishment decisions. Sixth, although rationalization is in the Fraud Triangle, there is a lack of examination of whether the timing of such rationalization matters. Last, although Fraud Predators are theorized to exist (Dorminey, 2012), little to no inquiry exists to validate the theory proposed of how they operate. Addressing the seven gaps mentioned above should prove useful to scholars in multiple disciplines in confirming, denying, and/or extending existing theories while deepening the types of participants studied in literature.

Lastly, fraud in the professional investing community may seem unfamiliar at first glance. The direct path from fraudster to victim is often unclear. In the investing
community, the advent of online trading causes an element of anonymity. The fraudster does not know the person(s) victimized. In many schemes, thousands of people are victimized by fractions of a cent apiece. Thus, identification and exact restitution are more problematic than in studies containing many types of financial statement fraud. However, the underlying mechanics remain similar and the outcome is the same. The embedded lack of transparency adds a layer of complexity.

**Practitioner Gaps**

<table>
<thead>
<tr>
<th>Type of Knowledge</th>
<th>Gap</th>
<th>Source of Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practitioner</td>
<td>Positive intrinsic motivation -&gt; fraud</td>
<td>AICPA, 2002</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Deterrence is not working</td>
<td>MacDonald, 2012</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Detection is not working</td>
<td>Patterson, 2013</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Sanctions guidance</td>
<td>CBOE, 2015; CME, 2009; FINRA, 2015b; NYSE 2010</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Controls not enforced as Boards intend</td>
<td>Internal Controls</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Systemic Fraud</td>
<td>Financial Marketplace</td>
</tr>
</tbody>
</table>

Similarly, this dissertation will attempt to address in whole or in part, six gaps in practice. Table 3, above, presents an overview of these gaps. Two additional gaps emerge from the qualitative inquiry in Chapter Five, and the conclusion of this dissertation addresses these gaps. The first gap is partially addressed in SAS No. 99 (AICPA, 2002) - pointing to theft occurring that causes financial statements to not be presented fairly due to financial pressure or poor tone at the top. However, fraud occurring without such pressure, or involving “positive” emotions remains unexplored. The second and third gaps suggest that law and arbitration literature constantly points out that deterrence
(MacDonald, 2012) and detection (Patterson, 2013) do not function as expected for enforcement arms of the marketplace. The fourth gap exists due to current guidance on sanctions (CBOE, 2015; CME, 2009; FINRA, 2015b; NYSE 2010) establishing set dollar amounts of penalty ranges in association with specific actions. While previous guidance was non-existent, there is a paucity of information available as to whether the current method is working effectively. The fifth gap exists between how boards of directors reach decisions and how those who are responsible for actually implementing these decisions choose to act. Last, there is a lack of information on how fraud behaves in an environment where the fraud is so pervasive that the norm is to participate in fraud. Chapter Five explores this gap will be explored further.
CHAPTER THREE: FRAMING THEORY, GOALS, AND QUESTIONS

Framing the Theories

Current theory (Dorminey, 2012) separately analyzes influences on the fraudster(s) and financial statement auditors. The Fraud Triangle provides a framework to describe the decision behavior of the fraudster, relying on the perceived probability of detection and deterrence by the fraudster. Federal Sentencing Guidelines help describe the approach of auditors. The Federal Guidelines, applicable across industries, require that compliance departments identify specific areas of potential fraud (also addressed by COSO Fraud Principle 8) and use audits combined with risk evaluation to assist in reducing fraud in the areas identified (also addressed in PCAOB Auditing Standard 5). Figure 1 below outlines an overview of the meta-model process.

FIGURE 1: Current Meta-Model of Fraud

However, as noted above, while useful in approaching “normal” financial misstatement, several gaps exist in this approach examining the decision-making behaviors of individual perpetrators and of those who enforce penalties. Therefore, this research agenda studies the intersection of theories –fraud and punishment- as well
samples, fraudsters and regulators. This combination produces a deeper and multi-faceted understanding of the enablement and empowerment of fraud than either approach can produce alone. To address the above gaps in both literature and practice, I analyze key theories and topics: fraud theory approached with the lens of motivation and organizational culture, and punishment theory applied with the lens of deterrence and judgment, with empathetic response underlying both applications. In so doing, I propose that the actions of the fraudster are either penalized or not, with both non-penalization and penalization influencing the perception of future fraudsters (Figure 2, below). Thus, I propose a framework not intended to replace the meta-model shown, but to explore the gaps identified in literature that focuses on sympathy as both a potential enabler of the fraud action, and sympathetic circumstances as potentially empowering the continuation of such fraud. Additionally, I examine the behavior of potential fraudsters in the professional investing community with a widespread sample across multiple job types. By also examining those charged with the enforcement of compliance, this dissertation identifies key constructs to combine across previously isolated populations and disciplines. I use a grounded theory approach based in qualitative methods to identify these constructs. Using the fraud triangle as a starting point, motivation and organizational ethical culture represent pressure, the chance to act represents opportunity, and the decision to act assumes rationalization. I conduct a series of experiments to test the validity of the qualitative findings. Empirical tests confirming existing fraud theory ensure the population behaves as expected, increasing external validity. This combination of qualitative and experimental methods allows for an exploration of factors that
empower fraud, followed by a quantitative design built to explore and test the gaps known and discovered in each part of the process.

**FIGURE 2: Proposed Theoretical Framework**

**Goals**

My broad goals are threefold. First is to identify factors from literature and from those that emerge in the qualitative study (Study I) that enable or empower fraud. Second is to extend existing theory across disciplines concerning fraud and punishment judgment using an integrated framework of both based on experimental data and evidence. Finally, third is to increase the efficacy of the detection and deterrence mechanisms utilized in the current marketplace. By increasing the understanding of the phenomena above, researchers and practitioners alike will have specific and actionable paths to implement in their professions. Ultimately, I hope this research will inspire others to join in studying the rich dataset available in the professional investing community and uncover additional
types of fraudsters. I also hope that others will consider utilizing mixed methods to triangulate unique types of fraud and fraudsters not well represented in literature.

**Research Questions: What Needs to be Known**

An outline follows of the questions asked in each study, sequentially informed, with each study grounded in findings from those preceding it.

**Study I**

How and to what extent do pressure, opportunity, rationalization, capability, integrity, and other emergent factors interact within the professional trading community? This study focuses on confirming existing factors within fraud theory while exploring whether factors emerge that drive fraud either as extensions of, or beyond current knowledge.

**Study II**

Does a sympathetic circumstance influence the decision to commit fraud? How do organizational culture, monetary rewards, and the threat of detection influence the decision making of the community of professional investors? Is it possible that in a strong, healthy organization, fraud will still transpire through an ethical rationalization? Does firm size or job type change how regulators who suspect fraud might wish to approach a situation? This study focuses on traditional and non-traditional factors that lead to decisions to commit fraud.

**Study III**

How do sympathy for the perpetrator, monetary rewards the perpetrator received, and a perceived history of wrongdoing by the perpetrator impact decisions when weighed under the lens of prosecutorial discretion and judgment? Is it possible that in a strong,
healthy regulatory organization, fraud will still increase through a sympathetic rationalization? Does regulatory position matter? This study integrates the findings from the first two studies and reverses the roles by sampling from regulatory examiners and arbitrators charged with punishing the fraudsters and comparing their reactions against those who sit on boards of directors.

The nature of these questions calls for qualitative investigation to discover emergent influencers and highlight key factors that enact theory. To confirm and expand on these findings, empirical tests of human reactions to specific influences, in the form of experiments is required. Thus, the use of mixed methods will help to pinpoint and understand the phenomena. All of the above aids in forming a more complete understanding of the enablement and empowerment of fraud.
CHAPTER FOUR: RESEARCH DESIGN AND OVERVIEW OF KEY FINDINGS

Research Design: Mixed Methods

In order to build a deeper and multifaceted understanding of how fraud works and is empowered, this dissertation is designed with an exploratory sequential mixed methods research design (Creswell, 2013). This is in alignment with literature that suggests using a qualitative approach to confirm existing research. This allows a breadth of understanding and potentially uncovers new knowledge to explore. Combining this approach with quantitative data that empirically validates or denies the qualitative findings produces a deeper understanding than can using either approach alone (Creswell & Clark, 2007; Johnson, et al, 2007). Because the results of each study inform the one that follows, the process is iterative (Tashakkori & Teddlie, 2010). This allows for triangulation, complementarity, expansion, and integration as the studies progress (Bryman, 2006). Triangulation occurs throughout the dissertation process as constant comparison between data, results, and literature resulted in convergence of findings and precision in defining the phenomena. Data collection only possible through qualitative methods informs the study through the process of complementarity. By investigating the lived experiences of professional traders and regulators, unique insights inform and allow for expansion. This informs the quantitative experimental study (which then causes further reflection and emergence from the qualitative investigation). By keeping the situations similar, the experimental design allows for comparisons of how fraudsters act and how those in compliance punish. Addressing gaps in research and practice that emerge as a part of the qualitative inquiry, while suggesting new avenues defining what knowledge when integrating both methods allows for expansion. Finally, by bringing the
results together, new thoughts emerge regarding how fraud enablement and empowerment. Figure 3, below presents an overview of this design process.

**FIGURE 3: Research Process**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Procedure</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative Data Collection</td>
<td>Interviews with professional investors</td>
<td>Text Data N=31</td>
</tr>
<tr>
<td>Qualitative Data Analysis</td>
<td>Understand which are the key factors to fraud enactment</td>
<td>Inventory of leaders experiences</td>
</tr>
<tr>
<td>Results &amp; Interpretation</td>
<td>Learn if detection and deterrence work</td>
<td>Assessment of model completeness</td>
</tr>
<tr>
<td></td>
<td>Evaluate model completeness</td>
<td>Discussion &amp; Implications</td>
</tr>
<tr>
<td></td>
<td>Interpretation of data from phase 1</td>
<td>Insights for Further Research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 2 &amp; 3</th>
<th>Procedure</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experiment Development</td>
<td>Develop experiment based on Qualitative research and existing constructs focused on key factors</td>
<td>Internet-based experiment</td>
</tr>
<tr>
<td>Quantitative Data Collection</td>
<td>Experiment on a minimum of 2 types of firms or job types</td>
<td>Numeric Data</td>
</tr>
<tr>
<td>Quantitative Data Analysis</td>
<td>Test Hypotheses and Model</td>
<td>Descriptive Statistics</td>
</tr>
<tr>
<td>Results &amp; Interpretation</td>
<td>Interpretation of data from two phases analyzed sequentially</td>
<td>Discussion &amp; Implications</td>
</tr>
</tbody>
</table>

**Specific Research Design**

**Study I: Qualitative Investigation of Fraud in the Marketplace**

As mentioned previously, this dissertation uses a mixed methods approach. This approach begins with a qualitative exploration of the factors that influence fraud in the professional investing community. Sampling from 31 professional investors and regulators suggests confirmation of pressure (to a degree), opportunity, and rationalization as important from the Fraud Triangle. Additionally, the emergence of
sympathetic circumstance as a potential enabler of fraud is interesting. Further, finding that fraud is systemic in this environment helps to triangulate how fraud is empowered. When participation is both acceptable and assumed, the likelihood of fraud familiarity amongst any given sampling of the population rises. Additionally, the ability for more complex forms of fraud to emerge increases, given the additional fraud implementation experience present, compared to organizations where fraud is nearly non-existent. Thus, the professional investing community provides a strong sample for experimentation. Lastly, since detection and deterrence mechanisms are not working as designed, it becomes important to understand how controls might be improved.

**Study II: Quantitative Expansion of the Qualitative Study Focused On Rationalization Pathways Underlying Sympathy in the Professional Investing Community**

Study II uses a combination of known and emergent factors from the qualitative study: organizational ethical culture, monetary rewards, and the threat of detection, framed within a sympathetic circumstance. This study empirically investigates the decisions of 303 potential fraudsters in an experiment. The study confirms a sympathetic circumstance as an enabler of fraud. It further suggests that even in organizations with a strong tone at the top, principled reward structures, and strong financial statement audit functions, fraud exists in ways that may not be expected. Additionally, weak detection capabilities in compliance only matter if another factor (money, ethics) is present. Lastly, firm size matters and the way fraud is detected and deterred may need to be expanded based on firm size and/or job type.
Study III: Quantitative Expansion of the Previous Qualitative and Quantitative Study Focused On Mitigatory Circumstances Impacting the Regulatory Community and Empowering the Fraud Act

Finally, Study I and Study II find that sympathy enables fraud, monetary rewards matter, and there are mixed conclusions regulators and potential fraudsters have regarding retribution. Building on this, Study III uses sympathetic circumstance, monetary rewards for the fraudster, and suggested criminality to query 348 auditors and arbitrators from the regulatory community. These participants are combined with members of boards of directors in an experiment to learn how the factors empower fraud. Integration of thought across the three studies leads to the conclusion that sympathetic circumstances not only enable fraud, but may unintentionally empower fraud as well. Further, setting guidelines for punishment with set dollar amounts harms the perception of retribution. Additionally, given the difference in the decisions of board members and those charged with compliance, it is possible the desires of those in charge of the company are not being followed. Lastly, understanding when rationalization occurs may help delineate different types of fraudsters and approach the design of controls for each more precisely. A table, detailing the locations of emergent and confirmatory factors follows in Table 4, below. Immediately thereafter, a process map details the designs spelled out above in Figure 4.
### TABLE 4: Exploration of Qualitative Findings

<table>
<thead>
<tr>
<th>Study I: Qualitative Study - Systemic Fraud: Theory Confirmed</th>
<th>Emergent Factors from Study I</th>
<th>Factor Exploration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fraud</strong></td>
<td>Systemic Fraud (Organizational Culture)</td>
<td>Study II</td>
</tr>
<tr>
<td></td>
<td>Monetary Rewards</td>
<td>Study II and Study III</td>
</tr>
<tr>
<td></td>
<td>Familiarity with client</td>
<td>Study II and Study III</td>
</tr>
<tr>
<td></td>
<td>Rationalization (implicit)</td>
<td>Study II</td>
</tr>
<tr>
<td></td>
<td>Opportunity</td>
<td>Study II</td>
</tr>
<tr>
<td></td>
<td>Capability (implicit)</td>
<td>Study II</td>
</tr>
<tr>
<td><strong>Punishment</strong></td>
<td>Detection</td>
<td>Study II</td>
</tr>
<tr>
<td></td>
<td>Deterrence and Retribution</td>
<td>Study III</td>
</tr>
<tr>
<td></td>
<td>Experience</td>
<td>Study III</td>
</tr>
<tr>
<td></td>
<td>Familiarity with criminality</td>
<td>Study III</td>
</tr>
<tr>
<td><strong>Moral Sentiment</strong></td>
<td>Empathy and Sympathy</td>
<td>Study II and Study III</td>
</tr>
<tr>
<td></td>
<td>Cognition (implicit)</td>
<td>Study II and Study III</td>
</tr>
</tbody>
</table>
FIGURE 4: Sequential Mixed Methods Design

Sequential Mixed Methods Approach (Teddlie and Tashakkori, 2009; p. 154)

**PHASE 1: QUALITATIVE**
- **Research Question:** What factors influence fraud in the professional investing community?
- **Methods:** Semi-structured interviews to develop grounded theory (Corbin & Strauss, 2008)
- **Analysis:** Coding analysis (open, theoretical, selective)
  - Validity and Reliability: (Scales)
    1) Thematic analysis
    2) Interrater reliability
- **Inferences:**
  1) Fraud is systemic in the professional investing community
  2) Empathy is a powerful agent for fraud
  3) Detection and deterrence are not working correctly.
  4) Practitioners and scholars can help.

**PHASE 2: QUANTITATIVE**
- **Research Question:** How do organizational culture, monetary rewards, and the threat of detection influence the decision to commit fraud?
- **Methods:** 2x2x2 Experiment and SEM modeling
- **Analysis:** ANCOVA
  - Validity and Reliability: (Scales)
    1) Content and Face
    2) Internal and External
    3) Construct and Statistical
    4) Convergent and Discriminant
- **Inferences:**
  1) Robbin Hood fraudsters exist such that they are willing to act independent of traditional factors/pressures.
  2) Detection is only significant when interacting with other factors.
  3a) Those who make decisions and those at small firms are significantly influenced by a lack of detection combined with monetary rewards.
  3b) Those who act as support and those at large firms are influenced by a lack of detection and poor tone at the top.

**PHASE 3: META INFERENCE**
- **Research Question:** How do sympathetic circumstances, monetary rewards for the fraudster, and the perception of criminality influence the decision to punish?
- **Methods:** 2x2x2 Experiment and SEM modeling
- **Analysis:** ANCOVA
  - Validity and Reliability: (Scales)
    1) Content and Face
    2) Internal and External
    3) Construct and Statistical
    4) Convergent and Discriminant
- **Inferences:**
  Overarching inferences across studies:
  1) Sympathy can enable and empower fraud
  2) Set dollar figure guidelines for sanctions is may be hurting deterrence
  3) Those charged with executing compliance may not be following the wishes of the Board
  4) Rationalization timing may help separate the mindset of different fraudsters.
Structure of Remaining Chapters

The rest of the dissertation proceeds as follows. Chapter five covers the qualitative investigation performed in Study I. Study I explores the applicability of existing fraud models to the professional investing community and uncovers emergent factors that influence fraud as well as gaps which need exploring across both fraudsters and regulators. Chapter Six presents the experimental research from Study II that examines how organizational ethical culture, monetary rewards, and the threat of detection, under the lens of sympathy, influences the decision to commit fraud. Chapter Seven explores the experimental research from Study III that investigates how sympathetic circumstance, monetary rewards for the fraudster, and suggested criminality influences the decision to punish. Chapters Five, Six, and Seven are written as stand-alone research papers suitable for publication, and as such, partial repetition is unavoidable. Chapter Eight integrates the findings from the three studies and discusses their implications. The dissertation closes with chapter nine, with conclusions, future research ideas for scholars, and feasible solutions for practitioners.
CHAPTER FIVE: SYSTEMIC FRAUD IN THE MARKETPLACE AND THE EMERGENCE OF EMPATHY AS A POWERFUL ENABLER

Introduction

Fraud is a powerful tool for profit. The finance industry, with over half of the world’s GDP, or $38 trillion USD available to trade each year (BIS, 2011), leverages the power of fraud through professional investors. This process destroys companies, lives, and countries. This fraud, in turn, destroys confidence in financial systems, devastates families whose savings are lost, and hurts the ability of governments to remain solvent. This professional investing fraud thrives in the free market system and, given the level of devastation, calls the value of capitalism into question.

Models of fraud have evolved to increase the efficacy of detection and deterrence with some success. The two major theories that underpin these models are the Fraud Triangle (Cressey, 1950, 1953), and Agency Theory (Ross, 1973) with Moral Hazard (Holmström, 1979). Recent publications have built on these theories to consider motivation types (Kranacher, Riley, & Wells, 2010), develop meta-models (Dorminey, Fleming, Kranacher, & Riley Jr., 2012), and expand the factors in the triangle for the fraud perpetrator (Kassem & Higson, 2012). However, there is a paucity of knowledge that captures longitudinal data regarding the lived experiences of the professional investing community and the fraud they perpetrate, both individually and as a part of the collective.

The Fraud Triangle (Cressey, 1950, 1953) remains applied today, utilizing pressure, opportunity, and rationalization as the key factors necessary for fraud to occur. Subsequent work theorized integrity (Albrecht, Howe, & Romney, 1984), ego (Coleman,
1987), capability (Wolfe & Hermanson, 2004), and experience (Ramamoorti, Morrison, & Koletar, 2009), leading towards a cohesive model blending them together (Dorminey et al, 2012). These studies are valuable; however, they have tended to focus on financial (mis)statement fraud, and not fraud as committed in the professional investing community. The literature is silent on how and to what extent these models are applicable to the professional investing community. Although there is increasing interest from both practitioners and scholars about fraud and increasing resource availability for deterrence, evidence of a cohesive theory or method applicable in this community is lacking. I wonder if the current fraud models adequately explain its incidence or if other factors or paradigms might emerge. If so, this will improve the understanding of the nature of fraud and allow organizations to better gauge the propensity of fraud to evolve in their current system.

To fill this gap, I conduct semi-structured interviews with 31 respondents from individuals employed on and off trading exchange floors, across a variety of industries including enforcement. 12 respondents with a known published history of fraud are included to ensure responses from those who have committed fraud and authentically address how fraud models work in the professional investing community. By locating the factors that influence the actions of fraud perpetrators, I may improve the understanding, detection, and deterrence of fraud within like organizations and systems. Grounded in the lived experiences of those with nearly 750 years of combined experience in the field, the data comes from known fraudsters and professional investors.

Remarkably, the data suggest fraud may operate differently in a structure where fraud is systemic. In particular, commonly accepted factors such as pressure and integrity
behaved differently than the literature suggested, or were nonexistent in situations where they should have existed. This research confirms many of the previous findings addressing opportunity and capability, in part or in whole as key components of fraud in the professional investing community.

The outcome of this study is relevant for scholars seeking to improve their knowledge and models of fraud. It also helps practitioners in search of solutions that may help change current systems or design more sustainable ones. Additionally, this knowledge may help develop the codification of regulations, and allow organizations to expand and advance their detection and deterrence capabilities.

**Literature Review**

This study focuses on whether existing fraud models are applicable to the professional investing community. Thus, I immerse the inquiry in fraud theory. This section begins with a discussion of the concept of fraud, framing a definition and context. Next, I summarize the three factors of the Fraud Triangle. Thereafter, I introduce an expanded discussion of fraud theory and contemporary fraud models. Next, I outline a brief discussion of the role of practitioners. This section concludes with insight from agency theory and moral hazard within a professional investing perspective.

**Fraud**

Black’s Law (Black, 2014) defines fraud as “A knowing misrepresentation of the truth or concealment of a material fact to induce another to act to his or her detriment.” Law reviews note the breadth in interpretation and application of fraud given its long history. One of the earliest recorded organized frauds occurred at the East India Trading Company in the 1600s (Gelderblom & Jonker, 2004; Kaye, 1853). The potential for fraud
and abuse increases when people manage money other than their own (Smith, 1776). This creates a separate category of white-collar, criminal acts of corporations and individuals acting in a corporate capacity, crime (Sutherland, 1939).

I define fraud outside the scope of the U.S. criminal code in alignment with literature. Fraud in this study is defined as an intentional deception or misrepresentation made to achieve a direct or indirect benefit (Coenen, 2008; Podgor, 1998; Posner, 2007; Weisburd & Waring, 2001).

**Fraud Theory – The Fraud Triangle**

The Fraud Triangle suggests pressure, opportunity, and rationalization factors must all be present in order for the act of fraud to be achievable (Cressey, 1950). To build this idea Cressey (1950) subdivided categories: (1) independent businessmen who controlled their own funds, (2) long term violators working at generally dishonest companies who felt cheated, and (3) absconders who he generally regarded as loners that would steal money and run. From this work, the factors for the triangle emerged (Cressey, 1953) as discussed below.

**Perceived Pressure**

Pressure comes in many forms. Conflict between professionals and those in authority is almost inevitable (Kornhauser, 1962). Financial, vice, and work-related pressures dominate the factors influencing pressure related to fraud (Albrecht, Albrecht, Albrecht, & Zimbelman, 2011). In fact, a strong negative correlation exists between financial pressures and organizational performance (Nickell & Nicolitsas, 1999). Additionally, increased turnover and lower job satisfaction result when individuals are pressured (Shafer, 2002). Others have studied peer pressure and bullying phenomenon to
determine whether such systems reward bad behavior (Hutchinson, Vickers, Wilkes, & Jackson, 2009). In many cases, perceived pressures tie to a portion of the principal agent problem discussed further below.

**Perceived Opportunity**

Vulnerable environments and scenarios open to interpretation offer prospective fraudsters the ability to weigh the potential reward of action versus the penalty associated with detection. Criminals note these opportunity structures when they arise (Cressey, 1953). As people often rotate between legitimate and partially or wholly illegitimate enterprises, certain populations are predisposed to have access to one or the other, shifting the probability of how they will act (Cloward & Ohlin, 1960).

**Rationalization**

Ernest Jones receives credit for creating the term “rationalization” as applied to psychoanalysis (Jones, 1908). The subconscious drivers for rationalization may appear irrational to the individual experiencing them (Fenichel, 1999). Behaviors out of line with the norm of one’s judgment system are justified and explained in a manner that appears rational in order to be bearable (Freud, Bonaparte, & Flieb, 1954). Similarly, cognitive dissonance (Festinger, 1957) suggests that action precipitates the struggle of the individual to tie the act performed to their internal belief of what should be proper action. This process bridges the gap between what the mind can and cannot understand (Bateman & Holmes, 1995). In practice, literature suggests rationalization is an important part of the strategic reasoning process (Wilks & Zimbelman, 2004).

While regulators have responded to the increase in the size of the fraud committed across industries, marketplaces may actually provide better and more efficient
mechanisms to control it over time (Ribstein, 2002). More recently, studies suggest the
frequency of fraud varies inversely with the force and severity with which rules are
enforced (Ramamoorti, 2008; Shover, 1998).

**Fraud Theory – Expanded**

Albrecht created a fraud scale motivated by ten factors. 1) Living beyond one’s
means. 2) An overwhelming desire for personal gain. 3) High levels of personal debt. 4)
Close association with the customers. 5) Perception that pay is out of scale relative to the
work. 6) A wheeler-dealer attitude. 7) A strong desire to beat the system. 8) Excessive
gambling. 9) Family or peer pressure. Last, is 10) a lack of recognition for job
performance (Albrecht et al, 1984). Ultimately, the scale replaced the Fraud Triangle
with sliding scale measurements of situational pressures, perceived opportunities, and
personal integrity.

Subsequent models contributed additional factors. The fraud diamond includes
competency (Wolfe & Hermanson, 2004). The M.I.C.E. model utilizes money, ideology,
coercion, and ego/entitlement (Kranacher et al, 2010). The most recent textbooks focus
on pressure, opportunity, and rationalization, subdividing each element for further
predator from what she calls the accidental fraudster, contrasting individuals who seek
firms where they can commit fraud versus those who succumb to pressures. The idea of
the predator and accidental fraudster builds from previous work that suggests much fraud
may be due to predisposition to act prior to pressure and opportunity (Baucus, 1994).
Lastly, Ramamoorti considers the probability of action in the context of the individual
and a collusive environment (Ramamoorti et al, 2009). Combining the major models
produces a meta-model weighing the probability of action against detection and
deterrence (Dorminey et al, 2012).

**Practitioners**

In accounting practice, the Statement on Auditing Standards (SAS) No. 53
(AICPA, 1988) was crafted as guidelines for the responsibility of financial statement
auditors to detect “irregularities” (Albrecht & Willingham, 1993). SAS No. 82 (AICPA,
1997) represented the first time the AICPA used the word “fraud” in its statements
(Farrell & Franco, 1999), and in part, clarified the role and responsibility of financial
codifies the Fraud Triangle and focuses on material misstatements from financial
reporting and/or misappropriation of assets. Prior to its implementation, studies suggested
that the presence of an audit committee did not significantly influence the incidence rate
of fraud in organizations (Beasley, 1996). Subsequent studies appear to demonstrate its
application to be useful when applied by practitioners (Marczewski & Akers, 2005;
Specht & Sandlin, 2011). Both the academic and practitioner community recognize the
great danger fraud presents, with the classical approach of utilizing the Fraud Triangle as
the most prevalent in both fields.

**Agency Theory**

Key tenants underlie the principal-agent problem. Managers of other people’s
money will not guard it the same way as they would their own (Smith, 1776). There is an
area of indifference between supervisors and workers in which the workers make
decisions (Barnard, 1938). Additionally, those who own a corporation do not act directly
to control it (Berle & Means, 1932, 1991).
The principal-agent relationship is defined as one in which the principal or principals employs an agent to perform a service on their behalf that grants the agent authority to exercise judgment and/or decision making (Jensen & Meckling, 1976; Ross, 1973). Agency theory proposes that problems arise when the desires of the principal and the agent are in conflict and the principal cannot practicably verify the actions of the agent (Eisenhardt, 1989; Fama, 1980; Ross, 1973). Management and risk bearing attributes may be separate instruments when building an agency model (Fama, 1980). Such models (Jensen, 1986) influence optimal modes of compensation and corporate organization. This allows measurement of agency costs involving structuring for stakeholders.

In professional investing, this problem can arise with two different classes of principals and agents. In the first case, customers (the principals) rely on agents to discover and attain the best prices for their orders, manage their investments, give advice regarding specific financial assets, and/or hedge against future losses along with many other duties. In the second case, principals (the boss or director to whom the agent reports) are constantly relying on agents whose goals are generally in line with that of the principal. Albrecht looked at separating agency from stewardship as applied to Wall Street (Albrecht, Albrecht, & Albrecht, 2004). However, inherent organizational agency weaknesses can cause equities to become overvalued, exacerbating the agency problem. This results in the manipulation of financial reports (Jensen, 2005). An exploration of moral hazard provides greater insight regarding its applicability to the professional investing community.
Moral Hazard

Moral hazard refers to a situation where one side of a contract does not bear full responsibility for the consequences of their actions. This hazard situation becomes possible when one party in an agreement has an incentive to take actions that may harm the other party. The situation is common in insurance, labor contracting, and decision-making delegation issues, among others (Holmström, 1979; Varian & Repcheck, 1990). Moral hazard can arise because of the information asymmetry established from the principal-agent problem. The agent has greater knowledge of his or her action than does the principal. Thus, if their interests are misaligned, the agent acts in a manner that benefits the agent, but may not be optimal for the principal.

The concept of moral hazard has existed for many years, but Arrow introduced the concept to modern economics (1963) when he examined its role in medical insurance. Further work established the lack of equal information between parties and developed measures of risk aversion (Arrow, 1971; Pratt, 1964). Insurance against some uncertain events may be suboptimal (Pauly, 1968). For example, insurance itself reduces the policyholder’s incentive to prevent losses to the insurer, and because information asymmetry exists between the insurer and the policyholder, a strong case of potential moral hazard exists (Holmström, 1979). The risk of moral hazard between parties decreases once a project is successfully competed between them (Boot & Thakor, 1994).

In terms of professional investing, moral hazard costs may exist on both sides of a trade, making it difficult to structure incentives to eliminate the moral hazard problem, making monitoring necessary (Miller & Whitford, 2007). The role of moral hazard in the modern banking industry is underweighted and the risks individuals take on behalf of
others are disproportionately large (Dowd, 2009). Recent studies suggest that the role of moral hazard may be large in the portfolio management community, with current contracts at least partially to blame for a lack of effort expenditure by managers (Stoughton, 2012).

Given the interaction of agency theory with moral hazard applied in a non-ergodic financial environment, I wonder if this alters how fraud models are applicable to the professional investing community. In particular, how and to what extent do pressure, opportunity, rationalization, capability, integrity, and other factors interact within the professional trading community? Using qualitative research, I probe the data to test the extent of the efficacy and applicability of these models, and discover if there are other factors or environments that change how the models behave. Evoking rich data from lived experiences is optimal in addressing my question and the gaps in literature.

**Research Methods**

**Design**

In this study, I am attempting to learn how and to what extent fraud models are applicable to the professional investing community. Given the gap in literature regarding the lived experiences of this community, I view qualitative research as ideal to address this gap. By holistically learning about which concerns are most salient with great depth of thought behind those concerns, the knowledge becomes grounded and applicable to currently existing fraud models. Using a grounded theory approach (Corbin & Strauss, 2008), field data was collected and analyzed in order to develop inductive theory. Constant comparison (Glaser, 1965) combined with theoretical sampling was key to identify patterns and themes. Constant comparison refers to the simultaneous collection
of data and its analysis performed meticulously to elicit distinct similarities and differences from the data. Using constant comparison with theoretical sampling (Corbin & Strauss, 2008) allows respondent selection, continuing forward until reaching saturation.

Sample

Selecting thirty-one professional investors and regulators as participants focuses the study on fraud in the professional investing community. Nineteen come from a network of individuals personally known to me. To ensure fraud will be present in the sample to study and to present a contrast group that may react differently to factors within the fraud models, I contact over 300 known fraudsters. These fraudsters are professionals convicted of or charged with rules violations by FINRA, or another regulatory body in the area of fraudulent behavior. I reach agreements with twelve of them to participate in the study. Literature suggests that the average fraudster is between 45 and 55 years old and has between 10 to 15 years of experience (Ramamoorti et al, 2009). To ensure the population meets or exceeded these thresholds, the final group selected has an average age of 49.3 years an average experience level of 24 years. There are 29 males and 2 females chosen. The entire sample holds Bachelor’s degrees. Two have double majors and there is a broad base from which to sample.

The major exchanges are located in the Midwest and Northeast United States, and that Chicago, in particular, holds the largest futures and options exchanges. This geographic concentration is further concentrated due to the need to gather participants who trade on the floor of the exchanges (primarily located in Chicago). As a result, over 2/3 of the sample comes from within 60 miles of Chicago or New York City. There are 8
people who have primary positions on exchange floors, and 23 people with primary positions off exchange floors. Due to people holding multiple jobs in their career, more than 31 positions are represented. This provides a broad base within each category to ensure robust and rich data. Please see Table 5 for aggregate and detailed data regarding the sample.

TABLE 5: Sample

<table>
<thead>
<tr>
<th>FINRA Fraudster</th>
<th>Non-FINRA</th>
<th>Male</th>
<th>Female</th>
<th>Average Age</th>
<th>Years of Experience</th>
<th>Average Age 1st Fraud Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>19</td>
<td>29</td>
<td>2</td>
<td>49.4</td>
<td>24.0</td>
<td>30.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bachelor's Degree</th>
<th>Master's Degree</th>
<th>Population in MW</th>
<th>Population in NE</th>
<th>Population Elsewhere</th>
<th>Positions Held</th>
<th>Off Floor</th>
<th>On Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>11</td>
<td>21</td>
<td>6</td>
<td>4</td>
<td>25</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

1: 12 people charged with fraudulent actions by FINRA. Fraudsters selected to ensure fraud present in sample.
2: 19 people personally known to the authors with clean records which may or may not have witnessed or participated in fraud
3: Average age: 49.3 years. Age rounded to nearest 5 years to protect anonymity. Chosen for alignment with literature.
4: Average years of experience: 24.0. Chosen for alignment with literature.
5: Average age of first fraud perpetrated or witnessed was 30.4 years.
6: 33 total (pop. 31, 2 double majors): 8 Business, 5 Liberal Arts, 4 Finance, 3 Accounting, 2 Computer Science, 2 Education, 2 Journalism, 2 Physics, 1 Economics, 1 Engineering, 1 Mathematics 1 Marketing, 1 Veterinary Science
7: 12 total (pop. 12): 5 MBA, 2 Finance, 2 Accounting, 1 Computer Science, 1 Financial Engineering, 1 Law
8: Inside the United States: 21 Midwest, 6 Northeast, 2 South, 1 West. 1 Outside the U.S. Midwest weighted due to on floor traders inclusion.
9: 25 had positions off exchange floors, 23 of which were primary. In this sample, there are 9 owners, 7 brokers, 6 traders, 4 model builders, 4 systems designers, 4 wealth managers, 2 accountants, 2 analysts, 2 CEOs, 2 investment bankers, 2 portfolio managers, 2 programmers, and 1 regulator. Several had multiple positions throughout their career.
10: 10 had positions on exchange floors, 8 of which were primary. In this sample, there are 3 runners, 2 floor brokers, and 8 floor traders. Several had multiple positions throughout their career.

Data Collection

I use semi-structured interviews for data collection because this process most closely parallels grounded theory. In accordance with the explorative process of grounded theory, there are four main questions asked from which deeper probing and examination develop. The first question is, “Think of a story that involves one of the best things that has happened as a result of being in the industry. Please tell me about it. How did that make you feel? Why?” As a second part of the first question, I ask participants, “Please
think about a story about something that made you lose sleep at night and tell me about it. How did that make you feel? Why?” After deeper examination, participants define fraud from their point of view, “How would you define crossing the line in professional trading? That is to say, could you please help me understand the type of investing you might be asked to do that would be completely above board? How about investing that you might be asked to do that you think are completely wrong? How about investing that you might see as somewhere in between?” To elicit information about specific incidences of fraud, participants are asked, “Please take some time and think about a time where a firm or someone did something you would think of as not above board. What did they do?” Lastly, participants address how they might solve problems with “If you had a magic genie and could change anything in the market that makes you uncomfortable, what would you change and how would it work after you fixed it?” The interview protocol left the questions open on purpose in order to generate rich data from the lived experiences of the respondents.

All interviews take place at a location chosen by the respondent that deemed neutral and non-influential of the data. Each interview lasts approximately one hour, resulting in 637 pages of transcribed text, 4,690 pieces of dialog, and 1,518 codable moments. All but two interviews are face-to-face, recorded with two tape recording instruments, and transcribed. Two interviews occur via telephone. Respondents receive instructions about the process and give verbal and/or written consent to the interview process, understanding that they can end the interview at any time of their choosing.

The interview opens with background information questions, proceeding to open ended questions designed to evoke rich data. Respondents describe their motivations for
being in the industry, things they have seen in the markets that made them uncomfortable, and what they might do to fix things they currently see as wrong. These questions guide the discussion and allow for stories and associated emotions to emerge and develop. Probing targets deep reflection on specific instances, rather than general recollections. The fraud group reflects on their fraud instance in order to guarantee meaningful data related to fraud. The probes are useful in expanding the points within the narratives and generating deep discussions. Many respondents mention they entered the study hesitantly, but were pleased with the quality of the discussion and the opportunity to reflect on their experiences in new way. Overall, respondents are concerned with the amount of fraud in industry, think regulators are not addressing problems correctly due to poor regulations and a lack of experience, and are hopeful for a better future.

**Analytical Approach**

Three initial interviews refine the protocol. Utilizing the framework of open coding (Glaser & Strauss, 1967), emergent themes develop. These themes include fraud type (fraud against the customer, fraud against the system), intrinsic motivations (love of law, empathy, and power), extrinsic motivations (financial, non-financial), desire to win, regulatory environment problems, opportunity, and rationalization, amongst others. The themes become the basis for an initial codebook. Verification follows that the emerging data aligns with the question about existing fraud models applicable to the professional investing community. Probes inserted to attract richer and more meaningful data follow a review of the protocol. Once as much data as possible comes from the test group, the test interviews are discarded and an intelligent identification of the potential sample population ensues (Corbin & Strauss, 2008).
To ensure fraud is present, the sample combines a group of known fraudsters with a group representative of the industry. The representative group has clean records and may or may not have committed fraud. Initially, four fraudsters and six with clean records are located who are willing to participate in the study.

Interviewing these ten respondents and transcribing the data begins the process, moving into open coding after creating each transcript. Progressing to selective and theoretical coding (Charmaz, 2014), consistency begins to emerge. 118 codes consolidate into subcategories and a codebook develops, defining the broad categories and subcategories within (Patton, 2001). Three people are located willing to apply the codebook to three interviews each—such that they analyze nine total interviews. If 75% or more of the codes match with my applied codes, the codebook is sufficient to use for the rest of the data collection. In two of the three instances greater than 75% success results (approximately 80%). In the third instance, a few codes require clarification. A revision of the codebook ensures clarity. After revision, the third instance achieves greater than 75% success as well. The first two assistants answer questions about whether these clarifications change their answers. In both instances, the clarifications improve their matching slightly and it is determined that inter-rater reliability is achieved.

The interviews continue using theoretical sampling, in which participants are identified based on the probability that their inclusion will help confirm and build theory. This uses the experiences from the initial ten interviews as a guide (Charmaz, 2014). Next, I transcribe, analyze, and code the interviews until reaching saturation. 24 categories and 45 themes emerge. Integrating these categories (Corbin & Strauss, 2008) yields eight key themes that form the basis for the findings that follow. A portion of the
discussion focuses on discarded codes that may be useful for future research. Figure 5 below maps this process.
FIGURE 5: Analytical Approach

START

Test interviews, transcribed data (n=3, 2 off floor, 1 on floor)

Interview #1 → Interview #2 → Interview #3

Emergent themes developed

Open coding (Glaser & Strauss, 1967)

Verify emerging data with RQ

Insert probes to attract richer and more meaningful data

Review protocol, insert probes

Discard test interviews

Theoretical sampling (Corbin & Strauss, 2008)

Refine codebook

3 People independently apply codebook to 3 different interviews (9 total interviews)

Inter-rater reliability > 75%?

Yes

Develop Codebook (Patton, 2001)

Theoretical / Selective Coding (Charmaz, 2006)

Data (n=31)

Initial interviews, transcribed data (n=10)

Open Coding

Theoretical sampling

Saturation

Integrate Categories (Corbin & Strauss, 2008)

Discarded codes: future research

Refinement yields 8 key themes

END

31 Interviews, 637 pages, 4690 pieces of dialog, 1518 codeable moments, 118 codes

24 Categories, 45 Themes

Based on test interviews identify who should be sampled and why
Findings

Finding #1: Fraud is widespread in the professional investing community.

26 of the 31 respondents either participated in or witnessed some form of fraud. As seen in Figure 6, the prevalence is widespread, with a notable lack of fraud for the Floor Broker and Wealth Manager respondents. Additionally, of those who participated in fraud, all believe that everyone was participating in it at some level. None of the non-fraudsters shares this belief. Detection and deterrence perception emerges as another key separator between the groups. Thus, as a starting point, I define systemic fraud as fraud that perceived to be spread throughout a structure so pervasively that any or all forms of controls are negatively impacted—even to the point of potentially enabling more fraud. Perception and hyper-competitiveness may be key drivers of such a system. The discussion section explores this idea further. Additionally, Respondents answer how they might fix the system and their answers are surprising and innovative.
1.1 In a structure with perceived systemic fraud, motivation better describes pressure.

In at least a basic form, components of the Fraud Triangle are present, as evidenced in Table 6, below. Of note, however, is that pressure as traditionally defined, is not always present when fraud occurred [24N10], [30F15]. This suggests that factors related to different types of motivation may better describe this portion of the Fraud Triangle.
### TABLE 6: Evidence of Factor Confirmation

<table>
<thead>
<tr>
<th>Confirmed</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opportunity</strong></td>
<td>&quot;Those guys were already making a lot of money. They realized that they could look like they were entrepreneurial, and they had an opportunity.... they wouldn’t be weighed down by the all communist rules, and they could hire who they wanted and fire who they wanted. They could trade these better organizations. When, in fact, all they were is they were very adept at fraud, and probably their ethics, coming from where they were, were somewhat questionable to start with. I’m not talking about 1 in 10 being bad. I’m talking about 9 out of 10 being bad, fraudulent, corrupt management.&quot; [24N20]</td>
</tr>
</tbody>
</table>

| Pressure explicit or implicit | "I was moving on to the next firm and reporting things was not something you did back in the day. If you got known as someone who turned someone in, and word would certainly have got back at a small firm like that, you were blackballed in the local finance area. I had heard stories of other traders who had tried to turn in firms for wrongdoing to various regulatory agencies, and each story ended with the person being unable to find work in the sector. And so while I wasn’t comfortable with the nature of our firm and where we were headed, I chose to do nothing simply because I wanted to continue working in the industry." [9F9] |

| Pressure supplanted | "Mr. L, you’re not paid to be an analyst. Yeah, but that’s what I do. No, you don’t. You’re a salesman. You sell what we tell you, or you’re gone." [11N14] |

| Rationalization | "Yeah, I think if you chose not to do it, it was no big deal. I think I never got threatened that I could either keep this job or leave if I didn’t want to push this stuff. That wasn’t ever an option. I kinda had quality accounts and I think that the firm has burned a lot of bridges, but I don’t think I burned too many at all. I don’t think I’ve burned any. I think that I wasn’t really pressured so much because I didn’t really get the pompoms out and necessarily write a ticket if there was gonna be a bad trade. If I thought there was any risk in at all, I didn’t really go out on it." [24N10] |

| "I never felt pressured or anything. I mean it was commonplace. Everybody is doing it at some level. I admit I was surprised at first, but it didn't take long to get the hang of what was going on. Don't ask any questions and make a lot of money. I was thankful for my friend bringing me in." [30F15] |

| "But at the time, I looked at things and I said you know I don't have that much money relative to the firm. If I'm only buying a 100 shares of something, I'm not going to really move the markets or affect the marketplace, but I can make a little extra for myself and quite frankly, I was risking my own money. I could lose if I was wrong, and I was betting on myself, and I thought what better way to do this than to do this sort of thing. And so I did that, and things were going really well, and I was pretty proud of the systems that I was implementing and designing. " [10F7] |

### 1.2 In a structure with perceived systemic fraud, perception drives fraud growth.

Literature suggests that detection and deterrence balances fraud action (Dorminey et al, 2012). The data suggest that the perception of detection [16N32] and deterrence [5F7] combined with the belief that everyone is participating on some level [10F7] and
the perceived trustworthiness of the respondent [1N1], drive perceived systemic fraud. Trust—usually a trait associated with ethical action—may actually enhance fraud. For example, as respondents continued to commit fraud, some began to contact or signal each other when an opportunity arose based on their familiarity with each other, increasing the scale and scope of the fraud. While all of these influences are subsets of opportunity, the perception of opportunity, rather than the actual opportunity drives behavior.

Additionally, as opportunity is so widely defined that it could include anything, knowing the types of opportunities most prevalent in our sample might help controls designers to more precisely target opportunities based on perceptions in the professional trading community.

It is important to note that the majority of fraud encountered in this study is non-collusive in its nature, if applied to the entire system. That is to say that although the combined efforts of regulators and respondents increase fraud, often it is despite the desires of those regulators and the top management. This fractures personal and organizational integrity, as suggested in Table 7:
TABLE 7: Evidence of Perception

<table>
<thead>
<tr>
<th>Perception</th>
<th>Evidence</th>
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<tbody>
<tr>
<td>Perception of deterrence</td>
<td>&quot;...if they’re only going to fine people a fraction of what they what they made, it’s pretty hard to stop behavior, right? I mean, if I design a strategy and I make $10 million off the strategy this year, and my fine, which would make great headlines, is $1 million, that’s not going to stop me. Or the big record, right? The big, big fine: $100 million fines. More often than not, the firms are making billions. And so, it’s really hard to quantify things. I guess that’s the next thing I do is they never, ever, ever, to my knowledge, seem to come in and figure out what division has made how much money.&quot; [5F7]</td>
</tr>
<tr>
<td>Perception of detection</td>
<td>&quot;They usually haven’t been out of college for very long. They’ve got a college background. They might be trained in accounting. They might not be. A lot of times they are, as their background material. They may be working on their CPA or completed their CPA. I’m honestly not quite sure where they are in the process. They’re pretty young folks. I’m hoping and assuming they may have just completed it. They’re usually working off of a sheet that was given to them, or an automated process that reads very much the same. So every time, for instance, we get an audit. We might get a notice that they’re coming in a day or two, which is always an interesting thing to do the first time, right? If you’re trying to catch someone, why give them notice of two days that you’re coming?&quot; [16N32]</td>
</tr>
<tr>
<td>Perception of everyone participating</td>
<td>&quot;I mean, everyone does it. I wasn’t the only person doing it. Like I said, everybody at the firm – we had several talks amongst my colleagues when I first started. Everybody’s doing the same thing. I talked to my friends that went to other firms and everyone was feeling the same pressure. The code words might change and the way in which things were done might be slightly different, but the behavior is the same.&quot; [10F7]</td>
</tr>
<tr>
<td>Perception of trust</td>
<td>&quot;...the case that I just gave you – is market manipulation. There’s just no other way to put it. I saw things like that, and I think that was part of the reason I didn't even end up working on the floor as well. What is funny 'cause there were two generations that were – there was a father and a son that were doing this. It's like the father had taught the son how to do this.&quot; [1N1]</td>
</tr>
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</table>

**Finding #2: Empathy is a powerful enabler of fraud (through the rationalization process).**

Many of the participants note the rationalization of no one getting hurt. This is of course relative to the unit of analysis recognized. While neither the fraud participant nor the client are hurt, the investing public, never having access to an order or suffering to a nearly invisible extent individually (but large sums collectively), is hurt. A care or concern for others [31M1] often motivate the action, implying that strong levels of a sympathetic circumstance enable fraud more easily. Due to the systemic nature of the fraud in the environment, many individuals are even seen to be noble [32N2], despite
prosecution and jail time. Thus, empathetic response, a behavior normally associated with moral behavior, and largely ignored by controls in this environment, may actually provide a powerful rationalization incentive to commit fraud (Table 8).

**TABLE 8: Evidence of Empathy Enabling Fraud**

<table>
<thead>
<tr>
<th>Perception</th>
<th>Evidence</th>
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<tbody>
<tr>
<td>Evidence of empathy</td>
<td>“You were trading millions of dollars with every trade, and to eat a couple thousand dollars for a broker, it was fairly easy for you to say, ‘Look. I'm not harming anybody. I'm actually helping people. And therefore, I don't see what's wrong with this because the only person that I'm harming is my own pocketbook.’ So you were never harming a customer. You did no harm. It was an easy thing to say that this is just the way the business is. We take care of each other. We make sure everybody's okay” [31M1]</td>
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<td></td>
<td>“I liked the fact that by playing this game, for lack of a better term, I could help grandmothers out. I mean we had a position where we were the only ones trading the thing. In doing that, I was actually able to help lots and lots of people get more of their retirement money back or make markets more efficient or allow capital firms to flourish, but as luck would have it, it turned out to be a fine and the main partner that was trading at the time got banned for a while. It was very frustrating.” [32N2]</td>
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<td></td>
<td>“We can virtually trade ahead of our customer, or certainly allow our friends to do so. I'm uncomfortable completely screwing people, but at the end of the day, if I'm just helping a customer get their order done and I happen to profit from it, I don't feel uncomfortable about that.” [33N3]</td>
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**Finding #3:** In a system with perceived systemic fraud, regulatory detection and deterrence need reexamined.

**3.1: Regulators need help.**

**TABLE 9: Evidence that Regulators Need Help**

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<th>Regulators need help</th>
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<td></td>
<td>“They're hiring some good people, but the people are 23, 24, 25 years old. If they get someone that's 30 or 35, typically, they are an accountant or lawyer, which are good things to have, but they're usually missing that whole trading component, that whole piece that could put it together. God forbid even a mathematician on the team might help them a little bit if they had an applied math guy that would understand the trade. They seem to always be missing that whole trading element.” [22N48]</td>
</tr>
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<td></td>
<td>&quot;These regulators aren't trained. They don't come from the marketplace, so, yeah, I guess I'd say you have to hire people who have worked in the industry and it's going to be expensive, which means our government is never going to do that.... And then you have to give them some leeway to apply broader-based rules. Meaning, if you're going to spend all of their time on the minute detail and they get lost in the minutiae, they're never going to catch the bigger stuff. And if they don't have the power to look at what's the spirit of the rule, versus the letter of the law – and a lot of what we do is we realize they can't catch us with the letter of the law, if that's how you look at catching someone – then you're never going to have any serious damage.&quot; [7F11]</td>
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Respondent after respondent remark about regulators. While a few are complementary, the overwhelming viewpoint is that regulators are ill equipped to handle the detection of fraud. Whether due to a lack of experience [22N48], training, or poor audit manuals [7F11], nearly everyone agrees the regulator process can be improved (Table 9, above).

Suggestions for improvement include hiring more experienced personnel, revising the audit manual for greater attention to trading activity (and less focus on forms and paperwork), and allowing leeway in applying the spirit of the law as opposed to the letter of the law. Of particular note is the suggestion that they utilize the services of retired traders. Four people have very similar unsolicited comments:

“Maybe one day if I retired and I was interested in helping the markets … I might come back and help out. You know, there's a lot of people with integrity in these markets, and people forget that. And those people, when they retire, a lot of them go live a nice life in the Cayman's, but some of them it would actually be a vacation for them to come back and maybe get a chance to just interview people, see what's new in the markets, not just to bust people, right? Those type of people, though would actually be capable of understanding a firm and understanding the nature of what's being traded, basically go beyond the check box.”

3.2: Regulation may not help.

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<td>&quot;I'm not sure that more regulation is the answer. I mean I – or even more reporting. Many of our clients got hurt a year ago with MF Global. But the fact of the matter is rules were broken there. And one of my clients said, “There's rules against robbing banks too.” I mean you can only have so many rules. In the end, you can have a rule, but having a rule doesn't mean that somebody's not going to do it anyway.&quot; [17N12]</td>
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<tr>
<td>&quot;This is all the aftermath of this crap that happened in mutual funds, so it's just made doing a mutual fund order so much more difficult that if somebody's got only $10,000 to invest, you don't even wanna put them in mutual funds even though they should be in them because of the paperwork required.&quot; [19N13]</td>
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Yet increased regulation may not help. Multiple respondents of both types suggested that certain people will always break the rules and that adding more rules does not necessarily result in different behavior [17N12]. Also, the current amount of regulation is burdensome to many professional investors and organizations [19N13]. It uses time they use to generate earnings for their clients to fill out paperwork, producing suboptimal profits due to excessive requirements (Table 10, above). Several investors suggested a return to the partnership model as a potential starting point:

“It would require regulation, different regulation, not necessarily more. ...For an example – I can give you a specific example. XYZ... they were a phenomenal company when they were a partnership because if the company was doing well, the partners made money. If it didn't do well, the partners lost money... Then XYZ became a public company. So if you think about it, if XYZ makes a ton of money, who is first in line to benefit from it? It's the manager. They're getting paid out first, the employees. So they have a tremendous incentive to take risk because the optionalties are only going one way. What happens if XYZ doesn't make a profit? Who is the first in line to suffer? It's not the employees because the argument is "No. We have to pay our best people." It's the shareholder, right? This is an agency problem. These incentives have to be aligned.”

Finding #4: In a system with perceived systemic fraud, there are solutions available to alleviate the problem specifically within the professional investing community.

4.1: In the professional investing community, the largest financial institutions are perceived to have too much power and control.

The data suggest, in the professional investing community, some perceive large institutions to be too powerful. Large banks with brokerages are consistently called out as a source of perceived corruption [14F5]. The concern is that even if these firms are perfectly ethical in their conduct, the way they integrated themselves across control mechanisms lessens the faith of the public in the marketplace and thus reduces the efficacy of markets overall. One respondent has a disturbing reply that suggests there
may be substance to the fear [7F1]. Suggestions for improvement range from a forced separation of large institutions to a return to private exchanges to the partnership idea echoed above in Finding 2.2, and below in Table 11.

### TABLE 11: Evidence that Institutions May Be Too Powerful

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<td>...(although FINRA is supposed to be independent and they tend to be, they’re still under the control of the treasury and the control of the SEC and the control of some of the exchanges. And you’ve got all kinds of comingling of firms and firms that have stated goals of placing their employees in those positions after they leave. And again, there needs to be some kind of separation of power and allowing all these brokerages to become banks, but they’re brokers, but they’re banks, then you start letting public funds go into – I mean, there’s just a whole bunch of stuff. It’s a big mess.” [14F5]</td>
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<tr>
<td>“The SEC has left us alone. At one time, they looked at cutting some of this out and cutting us down, but the big joke in our firm is that we own the SEC, to be honest. I mean, we own everybody. A couple of firms, ourselves, we control the playing field. And so it’s the same thing. I feel like I’m pretty protected now on a lot of levels that our firm has significant influence over the exchanges we’re members of. The group of firms have significant exchange over the regulators that would come look at us.” [7F1]</td>
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**4.2: In the professional investing community, payments for order flow practices are controversial.**

Pay for play—the practice of exchanges paying professional investors and institutions for order flow—is a controversial topic. When an exchange offers rebates to professionals to bring their customer’s orders to the trading platform of that exchange, this practice can hurt the customer. The customer might have had an order filled on a more active exchange, but now has the order go unfilled on this less active exchange. The customer might have to wait for supply or demand in the larger marketplace to push through their price. Perhaps the customer would even have to pay more, instead of receiving the first in first out treatment that may get their bid or offer filled at exchanges that are more active. Several investors comment that the practice of paying rebates has the potential to change the underlying motivation of the exchange from promoting a fair
and level playing field to one primarily focused on profit [20N7]. Again, concern that public retail investors might perceive a system biased against them, weighs on the minds of the respondents [28F10]. The primary solution offered is to abolish the practice uniformly and immediately (Table 12, below).

**TABLE 12: Evidence that Payments for Order Flow Are Controversial**

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<td>&quot;Get rid of all those payment-for-order flows. I think it’s corrupt by its nature. If you’re getting paid money to bring that order somewhere else, maybe someone’s not getting the best price. You don’t know that. You can say, “Oh, we all practice the NBBO, the nation’s best bidding offer. Yada, yada, yada.” But you know what? Bull. Your motivation is different.&quot; [20N7]</td>
</tr>
<tr>
<td>&quot;Pay for play is a joke. This industry used to be honorable and the exchanges were cleaner than the Vatican. Once they went public I really think the problems began to creep into the system. You can't stay pure once you cross a line. Pay for play, even if it were completely legit, makes the little guy think it's not, which should be enough to not do it.&quot; [28F10]</td>
</tr>
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**Discussion**

**Systemic Fraud: The Emergent Model**

The experiences of many of the respondents involved working in organizations that thrive despite having several factors in operation that would normally lead one to the conclusion the organization might be in imminent danger of failure. Fraud can enhance profits and increase stakeholder wealth, unless detected, and a culture perpetuating fraud can spread quickly. The power of fraud may be in its ability to bring together forces normally thought of as agents of change for good and utilize these agents in a manner that enhances profits but is ultimately destructive in its nature.

For example, while high levels of trust and familiarity tend to facilitate success when placed in a positive environment (Webber, 2002), in a system pervaded by fraud, they also appear to increase its efficacy. In addition, empathy, a feeling usually associated with positive action, enables or justifies fraud. Similarly, while law usually provides a
portion of the deterrence function, inside a structure with systemic fraud, it actually can create opportunity as evidenced by one of the respondents who earns a living exploiting new legislation for his clients:

“So every time the SEC comes up and says oh, here's a new rule, quite frankly, it makes me kind of excited again. To me, it's a whole new vision. Have I changed from what I was as a young man? Yeah. I look at the marketplace as an exciting place because there are rules out there that are made to be broken.”

Thus, systemic fraud is fraud that perceived as spread throughout a structure so pervasively that any or all forms of controls are negatively impacted, even to the point of potentially enabling more fraud. Perception is everything. A governmental regulator noted the importance of perception as a form of deterrence:

“The XX million (fine) included sort of a calculation of the benefit that the advisor received, and then a penalty amount that was intended to bring the message home. It was very widespread conduct in the industry, so we thought we were sort of making a policy statement.”

However, as noted in this study, many investors perceive there to be no calculation, or that the penalty is a small fraction of the actual profit one can earn by committing fraud. Thus, the perception of deterrence (penalty) and detection are extremely important factors. Pervading these structures is a need to keep score. It permeates the financial industry in particular, but as noted in this study, monetary totals often do not reflect the total score.

Therefore, in a structure containing systemic fraud, two of the classic elements of the Fraud Triangle (Cressey, 1953) continue to thrive: rationalization and opportunity. The data suggest the rationalization–fraud loop can initialize and justify the fraud in advance or take place after, with each fraud instance requiring less rationalization than
the one previous. Ethical and legal dilemmas take place that set the tone for rationalization and can create opportunities where capability is still required (Wolfe & Hermanson, 2004). However, financial pressure, while prevalent throughout the system, was not always obviously present in the individual fraud act.

Perception drives the entire chain of events. The perception that everyone is performing fraud (everyone is doing it) on some level enables rationalization and creates opportunity. Often management tries to set a proper tone at the top, but perception undermines the tone at the bottom. The perception of a low probability of detection and a low probability and/or penalty associated with deterrence creates a situation attractive for fraudsters to act, capitalizing on the situation or creating an opportunity. As noted previously familiarity enhances this process as once the participants are aware of other enactors, they may contact each other to make them aware of additional opportunities. Figure 7 presents a diagram of the conceptual model of the emergent factors:

**FIGURE 7: Model of Systemic Fraud**
To illustrate the process from a high level, I present the case of the retail investor within a full service brokerage firm below.

**Systemic Fraud and the Value Chain**

In the case of the retail investor—from a relatively high point of view—the value chain appears as follows in Figure 8:

**FIGURE 8: Value Chain Alteration: Retail Firm – Ordinary Operations**

Research on individual securities transpires and outstanding candidates for investment are located. Clients are located to match up interests with the wherewithal, desire, and ability and qualifications as suitable for the investment. A salesperson contacts the clients (at some firms, or for new customers, the suitability and sales order can be reversed) and obtains their consent and instructions regarding investment. The order goes to an electronic marketplace with nearly instantaneous matching and execution. In the past, this process, performed in parts by telephone, could take hours. Over time, these hours became minutes; to what are now fractions of a second due to digitization and the internet. The sales person then reports the fill to the client, or often the fill posts on the internet in the account records. The trade is then cleared and settled electronically between the buyer’s and seller’s clearing firms. This entire process, which used to take one week or more, now takes three days (of which nearly the entire period is due to settlement rules).
This process inserts value at each of the levels for the client. Although in the current market, many retail investors have found they can perform all but the settlement function on their own as firms digitize more and more of the research tools and execution services.

However, if fraud is systemic—that is to say that if a system or culture of fraud exists throughout the firm in which employees believe that everyone is doing it—the value chain can morph. This especially happens when the fraud occurs at the onset, as Figure 9 shows below.

**FIGURE 9: Value Chain Alteration: Retail Firm – Potential with Systemic Fraud Present**

In this example, poor internal controls create the opportunity, which combined with systemic fraud can create a large problem. In house proprietary trading, which should be kept separate (firewalled) from retail research and sales, instead can drive those areas, removing suitability checks—at least in part—prior to order entry. Digitization has allowed this process to be more transparent on the one hand, such that in a system where detection is preferred and fraud abuse is low, firms are able to find, report, and establish punishment more quickly and effectively. However, when systemic fraud occurs, the incentive to detect may be cursory. As such, when the firm needs to sell a stock, for
example, the lack of the firewall enables quick communication of this need. Incentives arise for sales of the stock through increasing commissions. Fast track waivers for customers regarding true suitability may come into play. Investors then invest in securities that may not match their objectives nor be in their own best interests. Enhancing the ability to conceal these movements, systems complexity uses non-digital means to implement the fraud. By additionally leveraging digitization increases its efficacy and speed, enhancing fraud. This process should cause one to think about fraud quite differently in understanding and designing systems.

**Limitations**

The results of this study should be viewed in light of its limitations, the primary being this is a descriptive, non-random, qualitative investigation. Purposeful selection of the participants from a pool of those personally known to me may have influenced the results. Additionally, the data may be influenced by self-selection bias. The sample, while considered adequate for grounded theory, is small (n=31) and concentrated in the Midwestern (n=21) and Northeastern (n=6) United States. As this represents the current location of the respondents over their careers, the data does match up with the industry geographically but only as applicable to the United States. The sample is light on gender diversity proportionate to those sampled in this age range (approximately 6.5% female versus a 10% norm) and contains no racial diversity. The respondents recollect specific instances in their careers. Asking this question tends to evoke rich data. However, it is possible that their recall will have been partial, flawed, or even inaccurate. Consequently, the sample may not be representative of the points of view of all professional investors.
A purposeful effort was made to minimize researcher bias. However, the principle researcher’s 20 years of experience as a professional investor may influence the data collection, interpretation and analysis.

**Future Research**

There are multitudes of exciting opportunities to research in the field of fraud and the findings and emergent ideas from this study only add to this mass. An empirical validation of the emergent model presented in this paper would prove a useful starting point to see if some or all of the factors hold. It would also be useful to see if the results are generalizable across any structures where fraud is systemic. It is possible that people working in different industries may respond to the factors in a similar manner if placed into an organization with systemic fraud, or new or altered factor interactions may appear. Each would prove both intriguing and useful to build on the body of knowledge regarding how fraud works. The data suggest a low incidence rate of fraud participation in the floor broker and wealth management community. Thus, a study confirming this discrepancy would be useful to set up a future study attempting to identify the factors that separate the actions of these professionals from the rest. Additionally, studies employing rationalization paths using sympathy, or circumstances containing sympathy, may increase existing knowledge of how pressure expands beyond the current literature surrounding it.

Inside the professional investing community, conducting similar research on a global basis would enhance the richness of the data, allowing for the exploration of geographic and cultural differences. In addition, a longitudinal study of organizational and individual behavior over time might reveal additional insight not captured in this
paper as to whether the motivational factors change or morph. The accounting profession has long known that auditors are not equipped to handle fraud, despite society’s call on the profession to detect it (Fogarty, Helan, & Knutson, 1991). While society continually demands responsibility from the audit community even to the point of penalization, financial statement auditors in practice remain currently responsible for the reasonable detection of fraud as related to a material misstatement of financial statements. This gap between needs and current practice is worthy of exploration as well. Especially problematic within the system studied in this paper is that at many of the firms there is no internal auditor. Thus, the onus of detection lies squarely on external regulatory examiners. A study to determine the rise or drop in effectiveness due to this unique environment would prove fascinating.

Additionally, literature continues to primarily focus on the accidental fraudster (Kassem & Higson, 2012), yet other types of fraudsters should be explored to see if they exist. Literature suggests the fraud predator (Kranacher et al, 2010) may prove difficult to find. However, deep, probing qualitative research may prove fruitful in instances where they are located in an attempt to ascertain the validity of the current understanding of the factors that influence their behavior.

Finally, it strikes the author as odd that prospect theory (Kahneman & Tversky, 1979) has been scarcely utilized as a tool in fraud literature. Tangential studies have looked at the concept from a fund manager perspective. As fund managers are often paid bonuses based on yearly performance, studies suggest they may be manipulating prices (Blocher, Engelberg, & Reed, 2011; Carhart, Kaniel, Musto, & Reed, 2002). They do so by weighing the risk of prosecution and/or a loss of investors against short-term
performance and personal gain. However, given the strong risk aversion suggested by the theory and the idea that the fraudster at some point makes an active decision to take a risk (commit fraud), this lens seems to be a useful tool for analysis. A study designed to test levels at which perceived payouts exceed risk aversion, or locates other factors at play may help the researcher discover new information.

These findings have strong implications and should be of interest to the governments, organizations, the professional investing community, FINRA, the SEC, and retail investors, among many. Little research exists regarding the experiences of the professional investing community or the fraud they perpetrate. This study may help regulatory organizations such as the SEC to develop the codification of meaningful regulation. FINRA and the exchanges might begin to use experienced retirees to expand their monitoring of compliance in ways not previously discussed, and look at the risk/return of pay for play policies. The United States government might look at large institutions and study if the partnership model does indeed serve a more useful function by moving away from a model that privatizes the profit for management but commonizes the cost of egregious errors for society.

Of particular note, auditors and organizations should be aware that the data suggest a previously undiscovered and sustainable system of fraud may exist to pervade their organizations. They should take precautions to ensure “tone at the top” that permeates each level of management, not just the very top. Given the gap between societal needs and financial statement auditor responsibilities, SAS 99 may be in need of expansion beyond the Fraud Triangle. Financial statement auditors may argue the litigatory environment makes it unfair that they bear increased financial risk due to
increasing the responsibilities for detection. However, until at least some burden beyond “reasonable assurance” accompanies the opinion statement in the case of more obvious forms of fraud, situations will likely continue to exist where fraud thrives simply because a true lack of accountability occurs in real world environments. This study will allow retail investors to have a more informed idea of the types of pitfalls that might emerge. Finally, to re-earn the investors trust, regulatory and financial auditors need to take action that increases responsibility, indicating seriousness in solving the problem.
CHAPTER SIX: THE ROBIN HOOD FRAUDSTER

Introduction

Fraud continues to increase in scale and scope (Andretti, 2014), and the financial community ultimately enacts and enables much of the damage (Rezaee, 2005). Although certain types of fraud may be misperceived as relatively harmless, fraud can produce enormous damage. Management desperately needs tools to combat the problem. Thus, scholarly inquiry must address: how do organizational culture, monetary rewards, and the threat of detection influence the decision making of the community of professional investors? Is it possible that in a strong, healthy organization, fraud will still transpire through an ethical rationalization? This line of inquiry requires extending existing fraud models in literature. It increases the efficacy of management by improving the detection and deterrence mechanisms utilized through a better understanding of the context and perspectives of multiple domains within the professional investing community.

This paper examines existing fraud models and provides an overview of the key methodologies and findings within it, followed by a review of current literature and hypotheses development. Next, the overview and design of the experiment follows, along with the sample population studied. An analysis of the methodology and presentation of the results ensues. Finally, a discussion of the limitations and results conclude the paper.

The Fraud Triangle (Cressey, 1950, 1953) suggests (financial) pressure, rationalization, and opportunity must all be present for a fraud enablement. While this basic model has held up well over time, subsequent models and theories that built on and modified this theory have often been conceptual in nature, requiring further testing. Those grounded empirically in financial statement data often fail to test fraud that occurs
outside of financial reporting requirements. Although technology continues to improve the ability to detect fraud (Williams, 2013), technology is neither comprehensive nor complete in its implementation. Additionally, experiments testing conceptual models often utilize undergraduate or graduate students for sampling, potentially introducing errors due to the sample not truly being representative of the population to which the theory is applied.

This paper contributes to the literature on fraud and non-numerical information by exploring the effects of organizational culture, monetary rewards, and the threat of detection in the professional investing community. Recent Accounting journals (e.g., Journal of Forensic and Investigative Accounting, 2013, Accounting, Organizations, and Society, 2013) have focused on fraud, devoting special issues to its coverage. However, none of these empirical or experimental studies examined the professional trading community. Several gaps continue to plague auditing literature outside of financial (mis)statement fraud, with motivation studied largely under the lens of negative (pressured) motivations, and moral sentiment remaining largely unexamined. If these factors empower fraud it is critical for the academic and auditing professions to extend existing models, educate practitioners, and allow deterrence system designers unique insights into the professional investing community they service. This research respond to calls for action (Brody, et al, 2012) to examine context and multiple perspectives by studying a broad group within the sample and establishing context within the instrument.

This research contributes to literature by adding specificity and complexity to existing fraud models. Lastly, I attempt to establish whether “Robin Hood” fraudsters exist that act despite strong ethical cultures, no rewards, and a high threat of detection.
Practice has largely led academia, with SAS 53 (AICPA, 1988), 82 (AICPA, 1993), 99 (AICPA, 1997), 113 (AICPA, 2006), and 122 (AICPA, 2011) finding its roots in the Fraud Triangle, expanding on statements for financial statement auditors aggressively. Professional organizations, such as the American Institute of CPAs and the CFA Institute do an excellent job in maintaining standards for their constituents, and already have continuing education requirements that allow new knowledge into the practitioner community. Specifically addressing ethics, many state CPA boards require ongoing ethics training of two or four hours annually. FINRA (the Financial Industry Regulatory Authority) requires all registered individuals to complete an intensive regulatory element training program every three years that includes ethics. This research is particularly timely for groups such as these, and adds depth and rigor to a subject routinely covered annually. Continued interchange between practitioners and academia creates powerful pathways for research and results in shared goals capable of extending theory while creating positive applied impacts.

The idea that people may commit fraud for reasons they deem ethical has its roots in psychology, with Zimbardo (2007) positing that role and context cause action, overriding natural tendencies towards inaction. Multiple studies outside the field of accounting have studied how emotional state impacts decision making, even suggesting that negative emotions enhance the potential for fraud (Haidt, 2001). However, the results of these studies are sometimes mixed, and while a meta-model exists inside of accounting literature (Dorminey, et al, 2012), it is largely conceptual, based on the idea of two main types of fraudsters: the classic fraudster and the fraud predator.
At the individual level, accountants have separated fraudsters into two main subtypes: the classic fraudster who happens upon a situation that can alleviate their (financial) pressure and the fraud predator who seeks out fraudulent situations. The classic fraudster’s actions can be analyzed with the Fraud Triangle and current literature tools. The classic fraudster is one who has a financial need and falls into a situation where that need is solvable. They rationalize the action and commit the fraudulent act. Subsequent actions often follow and the scale and scope of the fraud often becomes larger than the accidental fraudster ever anticipated. Conversely, the fraud predator removes rationalization from the Fraud Triangle, replacing it with criminal intent. This individual actively seeks fraud to commit with monetary rewards in mind. Given other rationale or rationalizations may exist that require unique perspectives of the forensic accountant in terms of context and multiple perspectives, this research examines a particular context from the perspectives of Chief Executive level employees down to clerks.

In my previous research, qualitative data suggests that the trading community has strong reactions to help those clients they perceive in need, despite a strong tone at the top, or fines they might incur, even if the chance of detection is reasonably high. Literature from psychology suggests a strong empathetic response mechanism, motivating individuals to act. Current accounting research and standards specifically address fraud and theft due to personal pressures, but fail to address fraud in an environment empowered by sympathy.

To examine how organizational culture, monetary rewards, and the threat of detection interact in the decision to commit fraud, I conduct an experiment. In the
experiment participants are assigned one scenario where each of the three factors is manipulated to be favorable (performance driven firm, high personal monetary payout, low chance of detection) or unfavorable. This creates eight separate scenarios with at least 30 participants in each. To operationalize the Robin Hood effect, the situation is such that there is a villain (the bank) and the chance to become Robin Hood (by saving a longtime client in need of rescue from the bank). Due to the beneficiary being beyond oneself, ethical decision-making literature finds increased action when ethical issues are present (Ferrell and Fraedrich, 2012).

Varieties of responses are expected. Some participants may act fraudulently even when there is a lack of positional advantage or monetary reward because they believe it is the right thing to do and they are in a position to help. This is consistent with literature that suggests individuals with high levels of unselfishness requires an individual to sacrifice his/her own interests (Niebuhr, 2013). Machiavellians may also do so for a different reason: they may assume they will not be caught. Others may act based on their code of morality (Greene & Paxton, 2009). As a result, I anticipate a “Robin Hood” effect in the data where some respondents choose to act regardless of strong culture, no rewards, and higher threats of detection. Similarly, I anticipate that the Fraud Triangle will hold, such that pressure (in the form of the reward and organizational culture), opportunity (in the form of detection), and rationalization (which is implicit in the decision to act) will significantly influence the decisions of the overall group.

The results of the experiment are largely consistent with the predictions. However, none of the factors directly influenced the decision to act. Instead, a combination of manipulations was required to trigger action. Remembering that the three
parts of the Fraud Triangle must all be present for fraud to exist, these findings make sense. Breaking down the results by group, the data suggest those in small firms are additionally motivated by the presence of strong monetary rewards and little chance of being caught. Those at large firms are influenced by a performance driven environment with little chance of getting caught. Extending the results, a lack of significant effect exists for intermediaries who enter orders on behalf on another, but who do not directly experience profit or loss from the trade itself. This implies the decision to commit fraud may be outside the standard work environment motivators.

Understanding the effect culture, reward, and detection risk play on the decision to commit fraud by the professional investing community matters. The data suggest that “Robin Hood” fraudsters do exist which operate outside traditional paradigms. Additionally, while current literature demonstrates promise in prediction by using information found in current financial statement disclosures (Dimmock & Gerken, 2012; Abbasi, et al, 2012; Bollen & Pool, 2012), many of these studies suffer from an inability to precisely control for differences in the environment. By using the same instrument with only minor changes in the manipulation variables (from high to low), this research controls for these differences and offers a unique perspective from the professional investing community.

By better understanding the context and perspectives of multiple domains within the professional investing community, management will gain insight into that which is significant to each population for action. In particular, intermediaries appear to be largely unaffected by culture, rewards, or detection. Similarly, those at smaller firms appear much less likely to act than those at large firms. Troublingly though, nearly all
participants were willing to act to some degree, even in the presence of high ethics, no
rewards, and a high threat of detection.

The next section explores previous research and derives hypotheses regarding the
operationalization of the fraud act and the existence of a “Robin Hood” fraudster. An
exploration of how theories from accounting, economics, and psychology inform these
hypotheses follows. In the subsequent section, details of the experiment and
operationalization of its factors follow. Lastly, the final section presents an analysis of the
results and conclusions reached.

Hypothesis Development

This paper utilizes fraud theory drawn from multiple disciplines, but is primarily
focused within the field of auditing and the ethical decision making process. Within fraud
theory, the Fraud Triangle (Cressey, 1950, 1953) serves as a beginning point of analysis,
which submits that pressure, opportunity, and rationalization need be present for fraud to
exist. However, using the triangle alone is not enough. Extensions may be required to
make it both valid and useful. Recent literature (Morales, 2014) suggests that as attempts
to generalize the triangle continue, diminishment of its usefulness in practice happens
without extension. As Morales pointed out, “the Fraud Triangle does not have a single
fixed meaning: it is subject to continuous reinterpretation.” Using the triangle to try to
explain all types of fraud occurring, moves it away from its author’s (Cressey, 1950,
1953) intentions. Additionally, with imprecision due to differences regarding the use of
pressure (Ramamoorti, et al, 2009), opportunity (Albrecht, 2004, Kassem, 2012, Wolfe,
2004), and rationalization (Barsky, 2011, Yonelinas, 2002) due to faulty recollection, its
internal validity is difficult to establish consistently. This leads to potential problems with
specific external validity as well. Nonetheless, the triangle has had strong generalizability across disciplines as a beginning point for theory development and thus, this paper begins with the triangle as a useful starting point to extend the analysis. I then approach the problem with specific lenses that loosely fit the Fraud Triangle, but are much more specific to the fraud examined in the experiment. In particular, I explore the influences of ethical organizational culture and the motivating effect of monetary rewards. The rationalization process is assumed when the participant decides to commit fraud. Previous work regarding ethical decision-making (Mullin, 2013) looks closely at cognitive moral development and engagement, extending into moral sentiment theory, and empathy specifically as influencing the decision making process.

**Fraud Theory**

Despite potential issues with its use, the Fraud Triangle (Cressey, 1950, 1953) is still widely applied today, suggesting pressure, opportunity, and rationalization as necessary for fraud to exist. Following Cressey’s original framework, Albrecht, et al explored personal integrity, suggesting that those with high levels of personal morals would be predisposed to act significantly less fraudulently than those who have low levels of personal morals (Albrecht, Howe, & Romney, 1984). Additionally, as pride can influence people to behave in ways that do not always produce optimal outcomes, Coleman (1987) suggested that if high levels of personal ego are involved, fraud is more likely to thrive. Further, if the fraudster lacks either the education, ability, or position to enact the fraud, just because the opportunity exists does not mean that fraud will transpire, therefore the capability of a potential fraudster is important (Wolfe & Hermanson, 2004). Similarly, if a person lacks experience they may not even be aware
the opportunity exists and thus high levels of experience enables fraud more strongly than lower levels (Ramamoorti, et al, 2009). Finally, a new meta-model that attempts to integrate these findings has been proposed (Dorminey et al, 2012). Coupled with modern research in the area (Cooper & Palmer, 2013), the three primary factors are discussed in detail below, adding extensions to prior research.

**Pressure**

Pressure comes in many forms. When people have authority figures regulating their actions at work, it is nearly inevitable that conflicts between their belief of what action is proper and what the authority figure requests will exist (Kornhauser, 1962). These conflicts can arise for a number of reasons. Personal vices, financial pressures at home or at work as imposed by the authority figure, and other work related problems tend to dominate the pressures related to the fraud act (Albrecht, Albrecht, Albrecht, & Zimbelman, 2011). Unsurprisingly then, a strong negative correlation exists between financial pressures imposed by such authority figures and the long-term performance of the organization imposing such pressures (Nickell & Nicolitsas, 1999). Expanding the view of pressure (Kranacher, 2010) to include monetary rewards, ideology, coercion, and ego may prove useful, but other forms of motivation are lacking. Without research from psychology, a gap in understanding remains. Psychology has long studied motivation in the workplace as influencing behavior (Vroom, 1964). The field subsequently subdivided motivators into intrinsic, or motivators that come from within driven by the task itself, and extrinsic, or motivators imposed externally driven to achieve an outcome, categories (Ryan, et al, 2000). Literature does suggest many forms of pressure (Pelletier, et al, 2002) as a large part of the factors that motivate action. Yet, additional factors such as ideology
Kranacher, 2010; Dember, 1974), cognitive dissonance and motivated reasoning (Kunda, 1990; Festinger, 1957), instinct, and enjoyment (Lepper, et al, 1975) do not neatly fit traditional fraud models utilizing forms of pressure for a framework. Thus, if the pressure component of the Fraud Triangle extends to include intrinsic and extrinsic motivating factors, the examination of the fraud studied in this research strengthens.

**Intrinsic Motivation**

If attempting to explain pressure as motivation, and separately motivation into intrinsic and extrinsic types, intrinsic motivation expands to include several factors grounded in research. Ideology is a powerful motivator for action (Von Krogh, et al, 2012; Dember, 1974). This ideology can produce personal values that conflict with societal norms and/or laws. When this occurs, society views good people as potentially evil (Zimbardo, 2007). However, as theory suggests (Barsky, 2011), reality is rarely as simply defined as good or evil. When moral disengagement occurs traditional inhibitors that people use daily to govern their behaviors (Grasmick & Green, 1980) fail to act as expected (Haidt, 2007). Additionally, enjoyment, often thought as the opposite of pressure, is a powerful form of intrinsic motivation (Gavala, et al, 2006). Thus, people may act due to motivators not usually associated with pressure. Finally, some forms of action may require no motivation at all. Instead, people respond instinctually to certain situations, and use the cognition process to make sense of what happened after the fact (Haidt, 2001).

**Monetary Rewards**

Monetary rewards (Izuma, 2008) and associated problems such as looming unemployment, loss of benefits, and gambling debts (Tella, et al, 2007; Cressey, 1953)
are traditional motivators associated with fraud. Similarly, the tone at the top (Shafer, et al., 2002) has been repeatedly shown to have an effect on the perception of deterrence and ultimately fraud. Recently, coercion and pressure appear to be powerful forces. As technological capability increases, teams of fraudsters work in conjunction with each other, coerced through a central figure, enhancing the systemic capabilities of a fraudster (Kranacher, 2010). As corporate executives shift towards a stock-price-management focus from traditional corporate management, this phenomenon has caused an increase in moral-hazard-related fraud in the marketplace (Albrecht, et al., 2004).

Thus, pressure alone is theoretically insufficient to describe the phenomena studied. If one were a purist, utilizing Cressey’s original definition of a non-shareable financial problem, the argument becomes even more absurd. Combining motivation theory across disciplines expands the scope and ability of researchers to conceptualize and frame the factor more accurately.

**Opportunity**

Vulnerable environments and scenarios filled with temptation offer prospective fraudsters the ability to weigh the potential reward of action versus the penalty of associated with detection. Criminals note these opportunity structures when they arise (Cressey, 1953). As people often rotate between legitimate and partially or wholly illegitimate enterprises, certain populations are predisposed to have access to one or the other, shifting the probability of how they will act (Cloward & Ohlin, 1960). Fraud theory focused on opportunity focuses on opportunity as empowered due to control or systemic weakness. However, there is a paucity of knowledge regarding opportunity due to capability. This is likely because if controls are adequate, capability in the form of
opportunity diminishes. However, if the individual capability of the fraudster is sufficiently high, even reasonable controls might be overcome. Yet, locating such individuals is a rarity. Those studies that have focused on capability (Kassem, 2012; Wolfe, 2004) tend to focus on the position held, education, and coercive abilities of the fraudster. However, cognitive moral development is not studied. The examination of opportunity created by capability is a useful tool to establish the type of fraud in this study and follows below.

**Rationalization**

Ernest Jones receives credit for creating the term “rationalization” as applied to psychoanalysis (Jones, 1908). The subconscious drivers for rationalization may appear irrational to the individual experiencing them (Fenichel, 1999). Behaviors out of line with the norm of one’s judgment system are justified and explained in a manner that appears rational in order to be bearable (Freud, Bonaparte, & Flieb, 1954). Similarly, cognitive dissonance (Festinger, 1957) suggests that action precipitates the struggle of the individual to tie the act performed to their internal belief of what should be proper action. This process helps to bridge the gap between what the mind can and cannot understand (Bateman & Holmes, 1995). In practice, literature suggests rationalization is an important part of the strategic reasoning process (Wilks & Zimbelman, 2004). Fraud motivations and enactment may happen in many areas and for reasons beyond the typical fraud misstatement (Kantšukov, 2013; Murphy, et al 2011; Trompeter & Wright, 2010). In addition to the financial pressures of monetary rewards (Izuma & Sadato, 2008), organizational ethical culture (Gabbioneta, 2013) and detection (Dorminey, et al, 2012) have been separately suggested to play a part in the unethical behavior process.
In accounting practice, AICPA Auditing Standards on Fraud, SAS No. 53 (AICPA, 1988), was created to recognize the problems associated with accounting irregularities reported in financial statements. In reaction to the public demand that financial statement auditors have some responsibility for fraud detection, auditors received further warning to the dangers of the increased prevalence of fraud. SAS No. 82 (AICPA, 1997) formally recognized fraud and the need to be mindful of the factors associated with fraud control weaknesses. It also helped to lay out a basic methodology for detection as well as the responsibility a financial statement auditor has in relation to fraud. SAS No. 99 (AICPA, 2002) recognized the Fraud Triangle, warning of the impact of pressure on individuals while focusing on materiality concerns associated with financial reporting as well as deceit in relation to assets. Later updates (AICPA 2006, 2011) increased the specific responsibilities of financial statement auditors in relation to fraud. Prior to the AICPA’s work, the presence of an audit committee did not appear to significantly influence the incidence rate of fraud in organizations (Beasley, 1996). However, current research suggests that applying the suggestions of the AICPA is effective for practitioners in approaching fraud (Marczewski and Akers, 2005; Specht and Sandlin, 2011).

This research examines a population scarcely sampled in accounting research: the professional investing community. The lack of attention the hedge fund community garnered for many years, operating without SEC oversight nor having audit requirements establishes a mindset that differs from many other sampling types. When this community combines with mixed regulatory oversight that differs greatly between other types of professional traders, an interesting and multi-faceted environment exists in which to
study fraud. Using monetary rewards, organizational ethical culture, and the threat of
detection to provide a substitutable context for pressure, opportunity, and rationalization
(implied by the decision to act) to form the first hypothesis. The decision to act will
imply rationalization, as expanded on further in the Experiment section below. Given that
literature suggests broader forms of these factors (i.e., pressure, opportunity, and
rationalization) need all be present for fraud to exist, I predict interaction effects
suggesting that the combinatory effect of these factors is required to influence the
decision to commit fraud:

**H1a:** With a low chance of detection, the presence of a weak (strong) ethical
organizational culture will significantly increase (decrease) the probability of a
decision to commit fraud.

**H1b:** With a low chance of detection, strong (no) monetary rewards will
significantly increase (decrease) the probability of the decision to commit fraud.

**H1c:** With a weak ethical organizational culture, the presence of strong (no)
monetary rewards will significantly increase (decrease) the probability of the
decision to commit fraud.

**Firm Size**

I define “small” as firms with less than 10 employees in accordance with
literature focused on gathering industry specific information (De Jong & Marsili, 2006;
Louter, Ouwerkerk, & Baker, 1991). Recent small and medium enterprise literature
further divides the category such that “micro” represents less than 10 employees and
“small” 10–49 employees (Lukács, 2005; Van de Vrande, De Jong, Vanhaverbeke, & De
Rochemont, 2009). However, it tends to do so when looking at broad samples across
industries and countries. As this study is focused on a sample scarcely sampled, classic
literature (Brusco, 1982; Gadenne, 1998) is followed. Thus, small is defined as firms with less than 10 employees and large is firms with 10 or more employees.

Research suggests (Vyakarnam, et al, 1997) that those in small companies tend to make ethics based decisions starting with an evaluation of the quality of the relationship with the person. Large companies tend to be more efficient at focusing on identifying relevant stakeholders, identifying their needs, and attempting to satisfy these needs through specific corporate social responsibility targets (Perrini, et al, 2007). While large companies attempt to formalize ethical frameworks (Robertson & Schlegelmilch, 1993), small companies are much less formal, instead focusing on enlightened self-interest (Spence & Rutheroord, 2001).

Further, while large company contracts tend to focus on age and seniority, smaller firm employment contracts are significantly more likely reward the effort of the individual (Zenger & Lazzarini, 2004), which tends to attract talent focused on more immediate economic rewards. Additionally, peer pressure appears to be an effective motivator at large firms (Kandel & Lazear, 1992), increasing in efficacy as firm size increases. Lastly, formal instruments and systemic integrity is favored at large firms, while dialogue and personal accountability receive attention at small firms (Graafland, Van de Ven, & Stoffele, 2003). Thus, the tone at the top appears to permeate the large firm culture, while personal tone and personal rewards pervades smaller firms.

Finally, although practice suggests small firms may be more vulnerable to fraud (ACFE, 2008), deeper differences in small and large firms by industry and type remain largely unexplored. For these reasons, I expect that with a low threat of detection, those in large firms are significantly influenced by a performance-based culture dominated by
the desire to make the next quarter’s earnings. This desire acts as a reflection of the environment in which they operate, while those in small firms are significantly influenced by the presence of monetary rewards:

**H2a:** With a low chance of detection, strong (no) monetary rewards will significantly increase (decrease) the probability of the decision to commit fraud for those in small firms.

**H2b:** With a low chance of detection, the presence of a weak (strong) ethical organizational culture will significantly increase (decrease) the probability of the decision to commit fraud for those in large firms.

**Robin Hood Effect**

Literature and practice alike tend to focus efforts on the classic fraudster, generally empowered by (monetary) pressures and/or the tone at the top and who sees an opportunity and rationalizes it. Secondary focus is on the fraud predator, who actively probes for weaknesses in systems and exploits these weaknesses. Yet many studies (Bandura, 2011, Mullin, 2013, Young, et al, 2007) suggest that unethical behavior is not cleanly delineated. Many studies look at the conflict that can arise between personal values and professional standards (Duska, et al, 2011; Finn, et al, 1998; Ponemon, 1990). Yet, ignoring those standards through choice or ignorance produces a potential contradiction between personal values and societal moral norms. This combination, when acting on behalf of another for “good”, leaves an unexplored gap in auditing literature. AICPA Auditing Standards on Fraud, SAS 99 (AICPA, 2002) addresses this in part by specifically calling out “theft of an entity’s assets where the effect of the theft causes the financial statements to not be presented… in conformity with GAAP.” This statement (AU §316.06.06) is specific in relation to personal financial issues or adversarial pressures (AU §316.85.A.3.a, 3.b). However, the notion that one may commit an ethics
code violation that results in fractional theft requires exploration. A participant who may not be aware there is a violation and does not have adverse relationships muddies the situation. Further, if there are not personal financial troubles or personal gains and the actions do not materially impact financial statements, this combination remains unaddressed. This is largely due to financial statement materiality being the chief driver of both practice and literature. Additionally, research regarding coercion exists (Kranacher, 2010), but there is a paucity of knowledge regarding systemic fraud. Qualitative findings from my previous study suggest such a system exists in the professional trading community, making it an ideal pool from which to sample to explore these phenomena. Additional data from that study suggests that the trading community will help a longtime client with a strong need despite a strong tone at the top, high chance of detection, or penalties they reasonably expected as a result.

Literature is rife with examples of the moral disengagement (Bandura, et al, 1999; Barsky, 2011; Detert, et al, 2008) that occurs as a part of unethical behavior process. However, what if one engages personal morality in the rationalization process? Barsky (2011) explores this phenomenon and finds significance. Poddar (2012) suggests this process strengthens when economic incentives are included, while Gino and Pierce (2010) utilize wealth as a discriminatory factor for action, suggesting people will cross ethical boundaries when they perceive their action hurts or helps others. When people cheat, the question of ethical decision versus immoral action comes to play (Mullin, 2013), with many finding that acting ethically involves something that society may have deemed immoral (Young, et al, 2007). Auditors may similarly, rationalize doing nothing
(Fogarty, et al, 1991) due to the enormous burden malpractice claims would place on
them.

Recent data from psychology (Nunnally, 2010) suggests cognitive models that are
far more complex than other models of fraud. Synthesis of several models can draw
inferences of unethical action, despite a well-grounded moral compass (Haidt, 2007) due
to subsequent utilization of the cognition processes. Further, it comes as little surprise
that wealth is a driver of fraudulent action (Gino & Pierce, 2009). Accounting tends to
focus on financial (mis)statement fraud, but recent studies (Ugrin, et al, 2014) have begun
to expand upon the motivations, and the field continues its calls for risk assessment and
action (Moeller, 2014).

Thus, because of this complexity, I predict fraudsters exist that may be motivated
and make decisions in ways that follow the combination of research across disciplines.
This approach will allow extension of the Fraud Triangle and traditional fraud literature.
As a result, when combining this complexity with the ability for people to put personal
values ahead of perceived societal morals, I predict a “Robin Hood” fraudster will
emerge. This fraudster will choose to commit fraud despite the threat of penalties, a lack
of monetary rewards, and an ethical tone at the top, given the opportunity to help
someone in need:

**H3:** “Robin Hood” fraudsters exist who will consider acting fraudulently
regardless of the presence of an ethical organizational culture, lack of monetary
rewards, and a high threat of detection.

**Controls**

I previously completed a qualitative study (n=31 professional investors) that
suggests the majority (n=20) of participants believe they will not be caught if they
commit fraud because they are smarter than everyone else is and lack scruples. This is unsurprising given literature regarding narcissism operating throughout the structures of professional trading organizations (Stein, 2003). Narcissism also affects high profile accounting fraud scandals (Chen, 2010) and increases the likelihood of risky decision making by professional investors (Foster, et al, 2011). Additionally, those with higher materialistic orientations and jobs are more likely to engage in interpersonal, even Machiavellian, manipulations (McHoskey, 1999, Kasser & Ryan, 1993, Wargo, et al, 2009). Likewise, Type A personalities appear to have lower ethical standards and higher levels of Machiavellianism (Rayburn & Rayburn, 1996). Thus, Machiavellianism and Narcissism are controlled for, given their effects in fraud and accounting literature (Hales, et al, 2012; Johnson, et al, 2012). As I expect firm size to matter, I control for firm size as well in the full (n=303) sample.

Method and Results

Experimental Overview and Design

I operationalize an experiment in which (n=303) people employed in the professional investing community are placed into the role of a broker and decide whether to sell shares illegally after the market closes. Random assignment of high/low scenarios regarding organizational culture, monetary rewards, and detection follows. Fixing the scenario for the duration of a given experiment protects against non-random role bias. Each participant is randomly assigned a scenario such that the eight (2x2x2) scenarios are approximately proportionately assigned amongst the sample (average participation per cell: n=38). In order to minimize unintended influences, I avoid contextually rich terms such as “fraud” or “jail” in the instrument (Haynes and Kachelmeier, 1998).
In the situation that is held constant, the decision involves selling 500,000 shares of a fund after the market closes, but marking the receipt of the order just before. Although electronic controls are in place to track order entry times, phone conversation logs are not always available. Given the volume of orders received at the close, many firms –but not all- have cutoff times for orders far in advance of the market closing time for a mutual fund order. Thus, a broker receiving orders at or near the close may need a moment to sort out the orders placed and send them for (sale) redemption by the fund. Additionally, technology breakdowns and other control failures, such as the recent case of the firm creating order tickets with inaccurate allocation times (FINRA, 2014) continues to lead to opportunities created due to control breakdowns.

500,000 shares is chosen to illustrate the high dollar transaction involved. This implies a large ($250,000) incentive in a situation where the broker is paid only on commissions. This is done in accordance with the manipulation treatments described in the pilot testing below. Urgency comes from a home loan that will reach 22 percent if not paid immediately. Given that the client is in trouble, I investigate the subprime market. Literature suggests that over 60 percent of subprime loans originated in 2006 came from higher wealth, high credit score individuals (Sherman, 2009). Further, default interest rate and ARM penalty triggers, inherent in these loans, often causes effective interest rates to exceed 18 percent (Engel and McCoy, 2011). In addition, state usury laws in popular investment locations such as Florida (2014 Florida Statutes §687.01, 687.02), Nevada (no statutes), and the District of Columbia (2012 District of Columbia Code §28-3301(a)) meet or exceeding 24 percent. In the manipulation treatments in the pilot testing, the final
situation uses 22 percent to establish this urgency. Figure 10 below maps the details of the design procedures.
FIGURE 10: Research Design Procedures

2x2x2 Experiment
Region: US
Disciplines: Accounting, Finance, Economics, Management, Psychology, Social Science, Criminology

Experiment Development

Pre-Testing and Analysis

Results & Interpretation

Quantitative Data Collection

Quantitative Data Analysis

Results & Interpretation

Procedure

- Develop hypotheses, informed by literature
- Understand key factors in operationalizing fraud models
- Adapt, adopt scales
- Sample (24+ in each) professional investors to test 3 cells of each scenario (2x2x2 = 8 * 3 = 24)
- Perform simple ANOVA
- Discover if manipulations, scales are effective
- Recalibrate manipulations
- Repeat process with two more samples (students) of 24+ in each
- Significance in ANOVA
- Create panels for data
- Implement internet based experiment
- Test Hypotheses and models
- Interpretation of data from two phases of experiment analyzed sequentially

Product

- Hypotheses formed
- Preliminary scale and manipulations developed
- Refinement of manipulations and scales
- Functional experiment
- Numeric Data
- Target N = 240, minimum 30 responses per cell
- Descriptive Statistics
- Analysis
- Discussion & Implications
- Insights for Further Research
Three pilot tests ensure participants understand the experiment and the differences in the factors examined. A small (n=24) panel of professional investors is gathered to test the instrument and each of the manipulation variables, with three cells per each of the eight scenarios populated. A simple ANOVA test is run to ensure each manipulation was distinct and the high/low differences were significantly (p< 0.001) different. The experiment is then tested with student populations (n=48) to highlight nuanced key wording such as the pay NOT being commission-based or in the alternative experiment NOT being salary-based. Based on the results, the manipulation for monetary rewards is initially (50,000 shares) not significantly different (p>0.10). Subsequently I discuss shares aligned with compensation at 100,000 shares, and test at 250,000 and 500,000 until achieving significance. Similarly, the interest rate at the bank being 10% is not a significant influence with the professional trading pre-test group, and it moves to 15% and then 22%, where it has a significant influence. The detection rate differentials, developed with the assistance of a scattered sample of ten professional traders, are significant in all tests. Similarly, the data from the experiment indicate that the subjects understand the differences in the manipulations and the questions asked (p<0.001 within each indicator). The final instrument, associated measures, and scales can be viewed in detail in Tables 13, 14, and 15, which follow.

**Research Setting**

Figure 11 outlines the sequence of events that occurs in each part of the experiment. After participants arrive in a common situation, random assignment of a scenario ensues followed by questions designed to gauge their perceived likelihood of action. Because the participant may be placed into a scenario at a highly ethical firm or
one focused on performance, as well as personally financially benefit or not, and encounter a high or low probability of detection, outcomes should hold globally. However, these outcomes will not be in equilibrium since a perceived state of information asymmetry exists. Thus, the decision to act includes fraud as defined by legal statute and implicitly includes rationalization by choosing to act. It also includes fraud based on taking advantage of any perceived information imbalance.

FIGURE 11: Research Timeline

This experiment examines a setting where a broker works for a firm such that the broker has to decide whether to sell shares of an open-end fund for a client after the close of the market. In the stock market, the close has great significance. Many funds publish the value of one share based on the closing prices and quantities of the securities the fund holds, in addition to any buy and sell (redemption) orders they receive. As a result, there are usually specific cut off times to place orders. Orders received after this time are either disallowed or treated as though they are received the following business day. This is important because allowing orders placed after this time could advantage the individual by collectively costing the rest of the investors proportionately. For example, if news breaks after the close that one of the companies the fund invests in heavily has a financial scandal, the value of the fund the next day will likely decline. Because of this, shareholders are not allowed to exit at prices calculated prior at the close. Several scandals involving this behavior have emerged in the markets, with the most famous occurring in 2003 (Houge & Wellman, 2005). Although the Financial Industry
Regulatory Authority (FINRA, 2014) fines firms nearly every year for such infractions this behavior continues.

Instrument, Manipulations, and Situation

Table 13 presents the instrument and manipulations below. This research focuses on organizational culture, monetary rewards, and the threat of detection as described earlier. The situation was adapted from previous vignettes, and informed by the best practices of the professional trading community. Great care to keep the manipulations as simple and clean as possible allows effective changing of the environment with few words.

**TABLE 13: The Instrument and Manipulations**

<table>
<thead>
<tr>
<th><strong>Situation</strong></th>
<th></th>
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<tbody>
<tr>
<td>The Situation: Veronica, a loyal Mercurius client for 15 years owns 500,000 shares of a fund and calls in just as the market closes to request urgent assistance in selling all the shares. John, her longtime broker and a 20 year Mercurius employee, takes the call. Veronica tells him she needs the money today to bring her house loan below $100,000 or her bank will raise her loan interest rate to 22%. Once shares are sold, the firm lends cash to its clients while it awaits payment from the buyer. John can get Veronica’s order to trade today if he stamps it one minute earlier than he actually received it.</td>
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<tr>
<th><strong>Organizational Culture</strong></th>
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<tbody>
<tr>
<td>Background about the Firm: Mercurius, a professional trading firm with a strong moral culture and a proud history of consistently exceeding the ethical standards of its industry, is headed by a conservative CEO who is also a soup kitchen volunteer. Mercurius employees make above board decisions and give priority to clients’ long term interests even if these decisions are unfavorable for the firm’s interests in the short term.</td>
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</tr>
<tr>
<td>Background about the Firm: Mercurius, a professional trading firm with a strong performance culture and a proud history of consistently exceeding the analysts’ earnings forecasts, is headed by a driven CEO who also races his own formula one car. Mercurius employees make decisions that focus on producing financial results for the firm, and give priority to the firm’s interests in the short term.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Monetary Rewards</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercurius employees are compensated by a fixed and competitive salary plan and do not earn any commissions. They do NOT get paid extra for selling shares.</td>
<td></td>
</tr>
<tr>
<td>Mercurius employees are compensated by commission. They receive $0.50 for each share of a fund they sell. They do NOT receive any salary.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Threat of Detection</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Because the call log that matches call times and orders is working, John estimates there is a 70% chance this will be detected internally and a 30% chance an external audit will detect it.</td>
<td></td>
</tr>
<tr>
<td>Because the call log that matches call times and orders is not working, John estimates there is a 5% chance this will be detected internally and a 3% chance an external audit will detect it.</td>
<td></td>
</tr>
</tbody>
</table>
Participants

Table 14 outlines a summary of the sample. The sample is comprised of panel data constructed by locating publically accessible records information published by each major stock exchange. This information helps to contact small, medium, and large firms registered as member firms of U.S. stock, options, and futures exchanges or listed by the exchange as conducting business there. In-person contact that begins with the chief regulator, the CEO, or a head official within a trading firm generates the highest response rate (50%). Blanket email from public records targets listed agents of firms by the exchanges with some (3%) success. Additionally, the posting the survey virally on several trading blogs and several online sites geared towards the professional investing community targeting hedge funds and smaller, unlisted firms generates responses. Geographical diversity of the sample, concentrated appropriately around the major trading hubs of Chicago and New York, transpires through supplemental selective viral targeting. More than 20 firms represent the sample. The sample is heavily (73%) male, consistent with gender skews common to positions held in this industry (Niessen & Ruenzi, 2006, Beckmann & Menkhoff, 2008). Because I allow the experiment to spread virally, the overall response rate is unknown, but over 80% of those who start the survey complete it. I ask the dependent variable question (take action to sell shares) from four different points of view to create a composite to minimize response bias. Additionally, I compare the answers of the first and last 50 respondents, as well as by type of solicitation. In all cases, there is no significant differences in the answers, diminishing the likelihood of common forms of response bias.
TABLE 14: Participant Sample

<table>
<thead>
<tr>
<th>Sample</th>
<th>Size of Firm</th>
<th>Responses (n)</th>
<th>Median Age</th>
<th>Male</th>
<th>Female</th>
<th>College Graduate</th>
<th>CPA</th>
<th>CFA</th>
<th>Registered with SEC</th>
<th>Median Yrs Current Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 10</td>
<td>61</td>
<td>39</td>
<td>44</td>
<td>17</td>
<td>45</td>
<td>19</td>
<td>17</td>
<td>43</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>\geq 10</td>
<td>242</td>
<td>34</td>
<td>176</td>
<td>66</td>
<td>189</td>
<td>113</td>
<td>88</td>
<td>188</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>303</td>
<td>35</td>
<td>220</td>
<td>83</td>
<td>234</td>
<td>132</td>
<td>105</td>
<td>231</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

1: Over 20 firms represented
2: 61 at small proprietary trading firms
3: 11 grouped positions represented
4: 54 C-level, 19 VPs, 36 Brokers, 25 Portfolio Managers, 37 Self/Proprietary Traders, 32 Firm Traders, 6 Accountants, 38 Analysts, 16 Financial Advisors, 21 Managers, 19 Trading Clerks
5: < 10: 17/28%, \geq 10: 66/27%, Total: 83/27%
6: Advanced Degrees: <10: 12, \geq 10: 49, Total: 61

Selection of the Performance Measures

Table 15 displays the definitions of the measures. 100-point probability estimate scales measure the indicators unless stated otherwise. Four points of view creates the decision to sell the shares, as seen in Table 16 below. Participants answer whether they or others would sell the shares, committing fraud in the act. Machiavellianism is measured with five items, adapted from the MPI (Dahling, et al, 2009), utilizing a 100-point scale. Similarly, the entitlement and superiority portions of the NPI (Raskin & Terry, 1988) for Narcissism are adopted. As this scale utilizes dichotomous variables, tallying the sum of the answers for each creates separate measures.
<table>
<thead>
<tr>
<th>Measure/Vignette</th>
<th>Definition</th>
<th>Scale/Vignette Adapted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sell Shares</td>
<td>The decision to sell shares</td>
<td>Reidenbach and Robin, 1990</td>
</tr>
<tr>
<td>Performance (or Ethical) Culture</td>
<td>The working environment norms focused on performance (ethical) metrics, and reflected by the actions of management</td>
<td>Kaptein, 2011</td>
</tr>
<tr>
<td>Monetary Reward</td>
<td>The amount of payment one receives such that it is sufficiently large within the social context</td>
<td>Izuma, 2008</td>
</tr>
<tr>
<td>Low Detection</td>
<td>The perceived threat of internal or external detection</td>
<td>Matsumura and Tucker, 1992</td>
</tr>
<tr>
<td>Narcissism - Entitlement</td>
<td>The expectation of special favors without reciprocation</td>
<td>Raskin and Terry, 1988</td>
</tr>
<tr>
<td>Narcissism - Superiority</td>
<td>A lavish sense of self-importance accompanied by fantasies of unlimited success</td>
<td>Raskin and Terry, 1988</td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>One's propensity to distrust others, engage in amoral manipulation, seek control over others, and seek status for oneself</td>
<td>Dahling, et al 2009</td>
</tr>
</tbody>
</table>
TABLE 16: Scales

<table>
<thead>
<tr>
<th>Measure</th>
<th>Number of Items (Choices)</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sell Shares</td>
<td>4 (100)</td>
<td>I would sell the shares. I would sell the shares. Anyone in the same position as John would sell the shares. The shares will be sold.</td>
</tr>
<tr>
<td>Monetary Rewards</td>
<td>3 (7)</td>
<td>If John sells the shares to what extent will John: personally financially benefit ….. not personally financially benefit receive commissions ….. receive his base salary increase the amount of his paycheck ….. not affect the amount of his paycheck</td>
</tr>
<tr>
<td>Detection Risk</td>
<td>4 (7)</td>
<td>If John sells the shares to what extent will John’s actions be: detected by the firm ….. not be detected by the firm detected by a regulatory agency ….. not be detected by a regulatory agency detected internally ….. not be detected internally detected externally ….. not be detected externally</td>
</tr>
<tr>
<td>Performance (or Ethical) Culture</td>
<td>4 (7)</td>
<td>To what extent is Mercurius more focused on: strong ethical culture ….. strong performance culture client needs ….. firm needs the short run ….. the long run profit ….. doing the “right thing”</td>
</tr>
<tr>
<td>Narcissism - Entitlement</td>
<td>6</td>
<td>Directly adopted from the NPI.</td>
</tr>
<tr>
<td>Narcissism - Superiority</td>
<td>5</td>
<td>Directly adopted from the NPI.</td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>5 (100)</td>
<td>I am willing to be unethical if I believe it will help me succeed. I am willing to sabotage the efforts of other people if they threaten my own goals. I would cheat if there was a low chance of getting caught. I believe that lying is necessary to maintain a competitive advantage. The only good reason to talk to others is to get information that I can use to my benefit.</td>
</tr>
</tbody>
</table>

Controls

As previously discussed, Machiavellianism and Narcissism are controlled for, given their effects in fraud and accounting literature (Hales, et al, 2012; Johnson, et al, 2012). Additionally, given the gender imbalance in this industry and in this sample,
gender is used as a control. As I expect firm size to matter, I control for firm size as well in the full (n=303) sample. Lastly, age is used as a control to account for potential generational differences in attitudes.

**Analysis**

I use SPSS version 21 to conduct the analysis and analyze the results. An Exploratory (EFA) and Confirmatory (CFA) Factor Analysis is performed in alignment with literature (Rietveld & Van Hout, 1993) to insure adequacy, validity, and reliability of the scales measured. The communalities are sufficient (>0.50, Hair, et al, 2009) and the constructs have reasonable sampling adequacy (KMO 0.90, Bartlett’s Test of Sphericity<0.001). Additionally, the factors load highly (>0.50), indicating satisfaction of convergent validity criteria (Hair, et al, 2009). The correlations between the factors are all less than 0.70, satisfying discriminant validity criteria (Fornell & Larcker, 1981). Cronbach’s Alpha (α) (>0.85) is also sufficient to demonstrate internal consistency. Finally, tests for configural invariance are satisfied, using AMOS version 21 (Chi square 608.58, df 161, p<0.001, CFI 0.98, GFI 0.95, NNFI 0.98, RMSEA 0.04). Thus, computing the mean of the item responses for each factor creates composite variables tested in the results section below.
Results

TABLE 17: Results of Hypotheses Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Supported?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1a</strong>: With a low chance of detection, the presence of a weak (strong) ethical organizational culture will significantly increase (decrease) the probability of a decision to commit fraud.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>H1b</strong>: With a low chance of detection, strong (no) monetary rewards will significantly increase (decrease) the probability of the decision to commit fraud.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>H1c</strong>: With a weak ethical organizational culture, the presence of strong (no) monetary rewards will significantly increase (decrease) the probability of the decision to commit fraud.</td>
<td>No</td>
</tr>
<tr>
<td><strong>H2a</strong>: With a low chance of detection, strong (no) monetary rewards will significantly increase (decrease) the probability of the decision to commit fraud for those in small firms.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>H2b</strong>: With a low chance of detection, the presence of a weak (strong) ethical organizational culture will significantly increase (decrease) the probability of the decision to commit fraud for those in large firms.</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>H3</strong>: “Robin Hood” fraudsters exist who will consider acting fraudulently regardless of the presence of an ethical organizational culture, lack of monetary rewards, and a high threat of detection.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Hypotheses 1a, 1b, 1c

As indicated in Table 17, H1a and H1b are supported. In accordance with literature, the stand-alone effects of an unethical culture, monetary rewards, and a low threat of detection were not significant across the general sample. As predicted, the interaction of detection with any of these factors produce significance, implying that the presence of more than one measure is required to enable fraudulent action. As fraud is a complex mechanism, it is logical that multiple factors need be present for the fraudster to act. Thus, while monetary rewards and ethical organizational culture can empower the fraud process, the combinatory effect of the threat of being caught continues to drive fraud (Figure 12, Figure 13), as predicted by most models. Counter to intuition and adding to complexity, subgroups within this sample experience a wide range of effects.
This alone suggests further study be done utilizing similar subjects in order to gather rich data.

However, the combination of a weak tone at the top and strong monetary rewards (H1c) is not enough to spur a decision. It is possible that any perceived threat of detection in these cases caused participants to think twice, given there were no mitigating circumstances to cover their actions. It is also possible that when one acts when motivated by empathy, having too many negative ethical motivators present cancels out the empathetic response. This is worthy of more study.

As expected, firm size and Machiavellianism significantly influence the decision to commit fraud. Further analysis of firm size follow below by scrutinizing the results separately for those in small and large firms. Surprisingly, age, gender, and narcissism are not significant (Table 18).
TABLE 18: Univariate Analysis of Variance – Hypothesis 1 – All Groups

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>F-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>98113.04</td>
<td>13</td>
<td>19.45</td>
<td>***</td>
</tr>
<tr>
<td>Error</td>
<td>112132.71</td>
<td>289</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Culture</td>
<td>469.43</td>
<td>1</td>
<td>1.21</td>
<td>ns</td>
</tr>
<tr>
<td>Monetary Rewards</td>
<td>1034.14</td>
<td>1</td>
<td>2.67</td>
<td>ns</td>
</tr>
<tr>
<td>Low Detection Risk</td>
<td>10.83</td>
<td>1</td>
<td>0.03</td>
<td>ns</td>
</tr>
<tr>
<td>Performance X Rewards</td>
<td>5.23</td>
<td>1</td>
<td>0.01</td>
<td>ns</td>
</tr>
<tr>
<td>Performance X Low Detection</td>
<td>1796.45</td>
<td>1</td>
<td>4.63</td>
<td>.016</td>
</tr>
<tr>
<td>Reward X Low Detection</td>
<td>1138.10</td>
<td>1</td>
<td>2.93</td>
<td>.044</td>
</tr>
<tr>
<td>Performance X Reward X Low Detection</td>
<td>49.37</td>
<td>1</td>
<td>0.13</td>
<td>ns</td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>54271.48</td>
<td>1</td>
<td>139.87</td>
<td>***</td>
</tr>
<tr>
<td>Narcissism - Entitlement</td>
<td>217.07</td>
<td>1</td>
<td>0.56</td>
<td>ns</td>
</tr>
<tr>
<td>Narcissism - Superiority</td>
<td>2.21</td>
<td>1</td>
<td>0.01</td>
<td>ns</td>
</tr>
<tr>
<td>Age</td>
<td>125.79</td>
<td>1</td>
<td>0.32</td>
<td>ns</td>
</tr>
<tr>
<td>Gender</td>
<td>9.80</td>
<td>1</td>
<td>0.03</td>
<td>ns</td>
</tr>
<tr>
<td>Firm Size</td>
<td>6936.08</td>
<td>1</td>
<td>17.88</td>
<td>***</td>
</tr>
</tbody>
</table>

Adjusted $R^2 = 0.44$, 1 tailed $p$-values, $ns = not significant$, *** $p < .001$
FIGURE 12: Entire Sample – Interaction Effects - Performance Culture X Detection Threat

FIGURE 13: Entire Sample – Interaction Effects - Monetary Rewards X Detection Threat
As both scenarios did have a threat of at least minimal detection, it is possible that simply having a threat of detection at any level caused the participants to overestimate the risk. Machiavellianism is utilized as a control. As expected and informed by literature, the data suggest significance between high levels of Machiavellianism and the increased tendency to commit fraud.

**Hypotheses 2a, 2b**

Interestingly, the presence of a low chance of detection with another factor is required to influence participants in both small firms and large firms. Tables 19 and 20, combined with Figures 14 and 15, illustrate this influence. Monetary rewards combined with a low chance of detection effects those at small firms, while combining a company culture focused on high performance with a low threat of detection, effects those at large firms. It is possible that the relative incidence rate per capita of fraud is similar. This would imply it is possible to see no fraud in a small firm, while different types of fraud might be viewable more often in larger firms. It is also possible that since the smaller firms tend to be self-owned, the behaviors of these owner-investors manifests differently than those who are simply employed by a larger entity.
TABLE 19: Univariate Analysis of Variance – Hypothesis 1 – Small Firm

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>F-Statistic</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>18344.00</td>
<td>12</td>
<td>5.12</td>
<td>***</td>
</tr>
<tr>
<td>Error</td>
<td>14318.98</td>
<td>48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>F-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Culture</td>
<td>5.10</td>
<td>1</td>
<td>.02</td>
<td>ns</td>
</tr>
<tr>
<td>Monetary Rewards</td>
<td>471.48</td>
<td>1</td>
<td>1.58</td>
<td>ns</td>
</tr>
<tr>
<td>Low Detection Risk</td>
<td>16.78</td>
<td>1</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>Performance X Rewards</td>
<td>153.57</td>
<td>1</td>
<td>.52</td>
<td>ns</td>
</tr>
<tr>
<td>Performance X Low Detection</td>
<td>60.44</td>
<td>1</td>
<td>.20</td>
<td>ns</td>
</tr>
<tr>
<td>Reward X Low Detection</td>
<td>2797.07</td>
<td>1</td>
<td>9.38</td>
<td>.002</td>
</tr>
<tr>
<td>Performance X Reward X Low Detection</td>
<td>66.64</td>
<td>1</td>
<td>.22</td>
<td>ns</td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>9620.29</td>
<td>1</td>
<td>32.25</td>
<td>***</td>
</tr>
<tr>
<td>Narcissism - Entitlement</td>
<td>265.10</td>
<td>1</td>
<td>.89</td>
<td>ns</td>
</tr>
<tr>
<td>Narcissism - Superiority</td>
<td>304.39</td>
<td>1</td>
<td>1.02</td>
<td>ns</td>
</tr>
<tr>
<td>Age</td>
<td>84.50</td>
<td>1</td>
<td>.28</td>
<td>ns</td>
</tr>
<tr>
<td>Gender</td>
<td>49.57</td>
<td>1</td>
<td>.17</td>
<td>ns</td>
</tr>
</tbody>
</table>

Adjusted R² = 0.45, 1 tailed p-values, ns = not significant, *** p < .001

TABLE 20: Univariate Analysis of Variance – Hypothesis 1 – Large Firms

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>F-Statistic</th>
<th>2-tail Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>63359.67</td>
<td>12</td>
<td>13.27</td>
<td>***</td>
</tr>
<tr>
<td>Error</td>
<td>91144.43</td>
<td>229</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>F-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Culture</td>
<td>283.44</td>
<td>1</td>
<td>.71</td>
<td>ns</td>
</tr>
<tr>
<td>Monetary Rewards</td>
<td>1269.74</td>
<td>1</td>
<td>3.19</td>
<td>.038</td>
</tr>
<tr>
<td>Low Detection Risk</td>
<td>.22</td>
<td>1</td>
<td>.00</td>
<td>ns</td>
</tr>
<tr>
<td>Performance X Rewards</td>
<td>114.23</td>
<td>1</td>
<td>.29</td>
<td>ns</td>
</tr>
<tr>
<td>Performance X Low Detection</td>
<td>2809.29</td>
<td>1</td>
<td>7.06</td>
<td>.004</td>
</tr>
<tr>
<td>Reward X Low Detection</td>
<td>26.65</td>
<td>1</td>
<td>.07</td>
<td>ns</td>
</tr>
<tr>
<td>Performance X Reward X Low Detection</td>
<td>2.28</td>
<td>1</td>
<td>.01</td>
<td>ns</td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>47084.57</td>
<td>1</td>
<td>106.82</td>
<td>***</td>
</tr>
<tr>
<td>Narcissism - Entitlement</td>
<td>228.59</td>
<td>1</td>
<td>1.11</td>
<td>ns</td>
</tr>
<tr>
<td>Narcissism - Superiority</td>
<td>121.65</td>
<td>1</td>
<td>.18</td>
<td>ns</td>
</tr>
<tr>
<td>Age</td>
<td>97.74</td>
<td>1</td>
<td>.22</td>
<td>ns</td>
</tr>
<tr>
<td>Gender</td>
<td>34.02</td>
<td>1</td>
<td>.20</td>
<td>ns</td>
</tr>
</tbody>
</table>

Adjusted R² = 0.38, 1 tailed p-values, ns = not significant, *** p < .001
FIGURE 14: Small Firms – Interaction Effects - Monetary Reward X Detection Threat

Estimated Marginal Means of Sell_Shares

FIGURE 15: Large Firms – Interaction Effects - Performance Culture X Detection Threat
Hypothesis 3

Table 21 below displays data that confirms Hypothesis 3. The data suggest that a non-classic, non-predatory fraudster that I label the “Robin Hood” fraudster does exist. Given the scenario where the tone at the top is strong, there are no commissions to be earned, and a high chance of detection exists, this group (n=30, mean 51.32%, std. error 5.08) is likely to act and is insignificantly different in its decisions from the other scenarios where at least one motivating factor exists. Finally, only three out of the 303 participants sampled decides there is a zero percent chance of taking action, implying at least some tendency towards action on behalf of the entire sample. Thus, I propose a new fraudster type warranting further study, be who is neither classic nor predatory in approach, which I deem the “Robin Hood” fraudster.

<table>
<thead>
<tr>
<th>Ethical Culture, No Commissions, High Chance of Detection (n=30)</th>
<th>n=30, “Robin Hood” Group; n = 273, Rest of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>std. error</td>
</tr>
<tr>
<td>“Robin Hood” Group</td>
<td>51.32</td>
</tr>
<tr>
<td>Rest of the Sample</td>
<td>52.54</td>
</tr>
</tbody>
</table>

Supplemental Analysis

Also of great interest, the data suggest those at small (less than ten, n=61) firms are the least likely to act (mean 35.04, std. error 2.99), while those in large (ten or more, n=242) firms exhibit a high tendency to act (mean 56.80, std. error 1.63), as noted in Table 22.

Multi-group analysis sheds further light on the phenomenon. In this sample, Enactors (n=130) are defined as those intermediaries who ensure the shares are traded
(e.g., Brokers, Portfolio Managers, Proprietary Traders, and Firm Traders). Additionally, Support (n=100) is defined as those who provide the support for the trading team (e.g., Accountants working for the firm, Analysts, Financial Advisors, Managers, Trading Clerks). Enactors (n=130) are not significantly influenced unless both rewards and a low threat of detection are present. However, Support personnel (n=100) tend to be significantly influenced only when a performance-driven culture is present with a low threat of being caught.

**TABLE 22: Supplemental Analysis of Means**

<table>
<thead>
<tr>
<th>Decision to Sell Shares - Means</th>
<th>Mean</th>
<th>std. error</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Sample</td>
<td>52.54</td>
<td>1.59</td>
<td>303</td>
</tr>
<tr>
<td>Executives</td>
<td>68.72</td>
<td>2.61</td>
<td>73</td>
</tr>
<tr>
<td>Enactors</td>
<td>46.36</td>
<td>2.22</td>
<td>130</td>
</tr>
<tr>
<td>Support</td>
<td>48.40</td>
<td>2.59</td>
<td>100</td>
</tr>
<tr>
<td>Small Firm</td>
<td>35.04</td>
<td>2.99</td>
<td>61</td>
</tr>
<tr>
<td>Large Firm</td>
<td>56.80</td>
<td>1.63</td>
<td>242</td>
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</tbody>
</table>

**Discussion and Conclusion**

**Discussion**

Although not hypothesized, the combination of a high threat of detection and a performance culture decreases the decision to commit fraud by over six percentage points for those at large firms. In the case of the large firm, it is possible that since organizational culture has an influence on behavior, an ethical culture creates the perfect environment for sympathetic fraud to occur. The rationalization process allows participants to see their decision to commit fraud as ethical. However, in a performance environment, peer pressure may lead primarily to actions driven by the bottom line alone. A sympathetic client with a high chance of detection does not appear to enhance the bottom line. Thus, with a high threat of detection in a performance environment, those in large firms do not decide to act. However, once the chance of detection is lower, the
combination of peer pressure for bottom line impact and little chance of detection tempts the participant past the tipping point.

Likewise, with a high threat of detection, the presence of large monetary rewards decreases the decision to commit fraud by over eight percentage points for those at small firms. In the case of the small firm, it is possible that since it is likely the action will be noticed, the decision to commit fraud has to be seen as beyond reproach. Even though small firms may have large incentives for individuals, these firms also tend to focus on the individual and interpersonal relationships. Thus, one might view acting to aid a client without reward as a form of good service and relationship building. Yet, when paid large monetary rewards for committing the action, the underlying motivation shifts away from service and could cause problems for the employee who knows they will likely be detected. Thus, with large monetary rewards and a high chance of detection, those in small firms decide not to act, but once the chance of detection is lower, rationalization process allows participants to see their decision to commit fraud as ethical. However, in a performance environment, peer pressure may lead primarily to actions driven by the bottom line alone. Thus, with a high threat of detection in a performance environment, those in large firms decide not to act, but once the detection is lower the temptation the extra money offers proves too powerful, and those in small firms decide to act.

Extending the overall results, I split the file and discover differences in how each group responds. Executives (n=73), consisting of Vice Presidents and C-level employees, are the most likely to act (mean 68.72, std. error 2.61). This group has a mean decision to act over 15 percentage points higher than the rest of the sample. This suggests that despite the best efforts of regulators, those employed in the professional investing
community may still have great room for improvement in the tone at the top. Perhaps due in part to seeing it as the culture they designed, unsurprisingly the data suggest Executives are significantly more likely to act in the presence of a performance culture, or in a performance culture laden with financial incentives. It is possible that upper management (especially when combined with Machiavellian tendencies) experiences feelings of untouchability, allowing them to make decisions without fear of consequence. Studies (Ruiz, Ruiz, & Martinez, 2011; Treviño, Brown, & Hartman, 2003) already suggest problems in the tone at the top when negative motivators are present. However, given their ability to act across motivators, further study can help determine if this effect is generalizable across industries.

Brokers and Financial Advisors (n=52), are not significantly influenced by any combination of manipulations or controls, and are surprisingly non-Machiavellian in their approach. They appear to have acted despite obstacles for altruistic purposes to help their client. Given that these two types of positions are the most likely to directly encounter a situation like that given in this experiment, it should be of interest to note that when they act, they do so regardless of environment.

Of particular note is that monetary rewards alone are a significant motivating factor for those at large firms to decide to commit fraud, but when another factor was present, the combinatory effect cancelled out the significance. This may imply that those who act based on empathetic response may feel they deserve to be rewarded for their efforts. Yet, they might lose the ability to defend themselves if caught given a deplorable situation where it was known they might be doing it to boost numbers or because they do not think they will get caught. Further study would be useful from the unit of analysis of
size of the firm to see if this tendency holds across industries. Further study should also attempt to determine if the behaviors are truly different or if these actions truly are just a function of relative size.

**Limitations**

There are four primary limitations to this study. While the research is able to manipulate factors within a given scenario, the situations are hypothetical. The amount of money and auditor pressure a professional investor experiences in the course of their job can never truly be replicated whether in person or in online simulation. Additionally, motivations to sell may exist beyond the factors I study that drive the type of Robin Hood behavior suggested, although some of the measures still require a degree of altruism or selflessness. Secondly, participants chose to respond voluntarily. I compared the responses of the first 50 participants against the last 50 and found no significant differences, with the decision to act remaining within a 95% confidence interval (first 50 mean=53.81 versus last 50 mean=52.48). It is possible that the type of person who voluntarily responds to this survey will differ from others in general. Third, by not inquiring whether respondents participated in a FINRA or SEC examination, the perceptions may not be affected. Finally, because the pool of respondents is limited to U.S. investing professionals, and the situation is specific to them, it is possible that the data and associated suggestions are limited to this type of sample and situation.

**Conclusion**

A different type of fraudster, neither accidental nor predatory (nor necessarily collusive) appears to have emerged in this study. As fraud is a complex mechanism, it is logical that multiple factors need be present for the fraudster to act. Thus, while the tone
at the top and monetary rewards continue to drive fraud, as predicted by most models, these factors do so when combined with each other or an environment with a low chance of detection. Counter to intuition and adding to complexity, subgroups within this sample experience a wide range of effects. This alone suggests further study be done utilizing similar subjects in order to gather rich data.

Of great surprise initially is that the threat of detection alone does not alter behavior. However, the results make sense given that the Fraud Triangle stipulates the concurrent presence of pressure, opportunity, and rationalization need be present for fraud to occur. Most groups are only be influenced by a combination of at least two (e.g., performance culture, rewards, low chance of detection) factors. This implies that one factor alone may not allow the rationalization process to complete, or that the participant did not detect a true opportunity. When designing internal controls, upper management should be mindful of the interactive effect between incentive structure, tone at the top, and detection mechanisms. If the decisions were made as a result of superimposing one’s personal environment onto the hypothetical environment created is worth further study.

Additionally, those who act as intermediates for the trades were unaffected by the manipulations and provide a wealth of information. It is possible their decisions are a reflection of the culture in which they currently operate. For example, if fraud is systemic in the population, committing a fraud such as the one asked by this experiment would be a relatively mundane task. It might be thought of as earning a measure of goodwill for other transgressions. Whether these actions are driven in response to anticipated actions by those in superior positions, or if the actions tend to be a byproduct of the position remains to be seen. Nevertheless, this group deserves future study.
Finally, those who work at smaller firms were much less likely than those at larger firms to commit fraud. It is possible that this situation is more prevalent and well known at larger firms, making it easier to act. It is also possible that since compliance is performed as a separate function in large firms, but generally performed by someone from operations in smaller firms, that the separation in large firms exacerbates the problem. This tendency should prove troubling to the investing community as the industry continues the trend towards consolidation (and larger firms). Further study should be done to determine if small firms purposefully engender a less fraudulent environment (or if larger firms accidently enable a more fraudulent environment) due to the nature of compliance responsibilities or if other factors influence behavior.

Understanding the effect culture, reward, and detection risk play on the decision to commit fraud by the professional investing community matters. Those in academia have fertile ground on which to expand the understanding of fraud. The professional trading community offers a rich contextual dataset and requires further research in this area. Many previous studies using archival data use student populations as proxies. While many studies suffer from an inability to precisely control for differences in environment, rewards, and detection perceptions, this research makes only minor changes in the manipulation variables to control for the differences and offers a unique perspective.

By analyzing not only context but also situation, this quantitative research examines an unusual type of fraud in which those at well-functioning firms may unknowingly be enabling actions contrary to the desires of those running the firms. With the Executives leading the way, however, it seems that this type of fraud may become systemic, thriving across multiple types of organizations. Boards of directors should be
mindful, therefore, that an efficient and highly regarded firm might be just as or even more susceptible to the type of “Robin Hood” fraud captured herein. Those charged with internal or external controls can use these results to make better-informed decisions regarding selective targeting. Additionally, changing inquiry strategies by job type seems prudent, given the data. Furthermore, those at small firms appear to face differing challenges to those in large firms. Given a perceived lower than normal threat of detection, those who enact the trades in small firms appear to be enticed more by money, while those at large firms tend to respond to ethical culture. This may prove useful for both forensic accountants and external auditors when tasked with designing controls, or locating fraud triggers within an organization.
CHAPTER SEVEN: EMPOWERING ROBIN HOOD – HOW CURRENT REGULATORY DESIGN CAN EMPOWER FRAUD

Introduction

Regulatory agencies continue to hire accountants and lawyers to perform field examinations, recommend potential sanctions, and arbitrate and adjudicate cases where a dispute may arise (SEC, 2014). Yet, fraud continues to increase in scale and scope (Andretti, 2014). The trading community enacts much fraud (Wexler, 2010). Seemingly harmless frauds such as trading after the market closes (for a mutual fund) only penalizes individual shareholders fractions of a cent per share. However, the aggregate effect can be both large and decrease investor confidence in the markets (Choi & Kahan, 2007). After enduring a large scandal relating to such actions in the early 2000s, data suggest similar types of fraud may again be on the rise (Patterson, 2013). This behavior continues despite the hard work of the regulatory audit and arbitration community. An increased understanding of how factors affecting punishment influence recommendations may help all types of auditors, arbitrators, and members of boards of directors to change codifications of conduct or implement training as appropriate. Scholarly inquiry helps to resolve the paucity of knowledge regarding regulatory auditors, arbitrators, and decisions to punish fraud. Namely, how does sympathy for the fraudster, money paid for committing fraud, and suggested criminality influence decisions?

Is it possible that in a strong, healthy regulatory organization, fraud will still increase through a sympathetic rationalization? This line of inquiry requires extending existing knowledge in accounting and governance, and increasing the efficacy of regulators by improving the deterrence mechanisms utilized. This question is especially
timely, given FINRA’s recent statement that firms continue to fail in setting their standards for ethical behavior. As a result, one of their focal points of regulatory scrutiny for 2015 will be on market access controls (FINRA, 2015a). Presumably, the goal is to reduce the incidence rate of actions related to those suggested by this experiment.

This paper contributes to literature on fraud and punishment by exploring the effects of sympathy, monetary rewards, and suggested criminality on the decision to punish. I study this decision in the regulatory community, who is presented a fraudulent act with specific monetary damages. Recent accounting literature (Grenier, Pomeroy, & Stern, 2014; Messier, Quick, & Vandervelde, 2014; Schauß, Hirsch, & Sohn, 2014) highlighted judgment and discretion. However, none of these empirical or experimental studies examined the regulatory community who ultimately is entrusted with external detection and sanctions. In financial statement audit practice, auditors provide reasonable assurance that financial statements are free of material fraud (AICPA, 2002). However, regulatory bodies are in charge of detection and enforcement. Thus, regulatory examiners, business conduct committee members, and arbitrators often work together or individually to establish controls failures and punishments (SEC, 2014 as one of many examples of job type descriptions). As a result, several gaps continue to plague accounting, fraud, finance, and governance literature outside of financial (mis)statement fraud relating to compliance, with the effects on punishment decisions and sympathetic circumstances remaining largely unexamined. If these factors mitigate the size of the monetary penalties suggested, it is critical for the academic and auditing professions to rethink existing models and educate practitioners. Additionally, this allows deterrence system designers unique insights into the audit and arbitration community they service.
This research responds to a call for action (Brody, et al, 2012) to inspect multiple perspectives by studying a broad group and establishing a set background within the experiment. This research contributes to literature by adding specificity and complexity to existing judgment, punishment, and deterrence theory. Further, by using a population rarely sampled, this paper adds an additional dimension to fraud theory by exploring the actions of the regulatory auditors. Historically, fraud examination is from the perspective of the perpetrator. Examining the regulator’s choice of deterrence, given a fraudulent act allows new theory generation.

To examine how sympathy, monetary rewards, and criminality interact in the decision to punish fraud, I conduct an experiment. Participants are assigned a single situation where each of the three factors is manipulated to either be favorable (sympathetic situation, no monetary reward received by the fraudster, no past criminality suggested) or unfavorable in reducing penalties for the fraudster. This creates eight separate scenarios with at least 39 participants in each. Since the beneficiary is not the person perpetrating the fraud, ethical decision-making literature suggests the intersection of ethics and cognition will influence their choices (Ferrell & Fraedrich, 2012).

Theories of punishment still engender debate as to how or if the punishment should even fit the crime. As a result, it comes as little surprise that many see punishments as unfair or unjust (Tonry, 1998). In a qualitative study, I discover that nearly all traders believe the punishments meted are too lenient, while nearly all regulatory auditors believe the punishment exceed the crime. Using monetary fines as a measure of punishment, I examine how boards of directors, regulatory auditors, and arbitrators decide on an appropriate punishment.
The results suggest that all three factors influence the punishment decisions of the sample overall. Of note, however, is there is no significant influence on those who are members of boards of directors. It is troubling to note, that in aggregate and in parts, each of the groups decided to fine the fraudster significantly less than the stated damage done. Even without sympathy, a large monetary reward for the fraudster, and a suggested history of wrongdoing, participants were likely to suggest fines under 40% of the damage done.

This paper introduces current guidance for regulators. It proceeds, investigating existing punishment, deterrence, and judgment research. The paper then provides an overview of the methodologies and findings within it, followed by a review of current literature and hypotheses development. Next, that paper presents the overview and design of the experiment, along with the sample population studied. An analysis of the methodology ensues, followed by the results. Finally, a discussion of the limitations and results, with specific recommendations for action, conclude the paper.

**Literature Review and Hypotheses Development**

My goal is to study the effect of mitigating circumstances and perceptions on fraud sanctions in accounting and financial regulatory organizations. Mitigating circumstances that elicit professional judgment generally result in reduced penalties or negative findings in comparison to similar situations without mitigation. This is because such situations often involve rationalizable elements invoking sympathy and the decision maker attempts to achieve comparable parity with past judgments with similar conditions. This creates feelings of impartiality, and while the detection effect of auditing is probable in deterring fraud, the effect of professional judgment as applied to such mitigation may
actually increase the acceptability of fraud. Accounting literature tends to examine the effects on judgment on conservatism (DeZoort, Harrison, & Taylor, 2006; Moreno & Bhattacharjee, 2003; Ng & Tan, 2003) and whether principles or rules based standards are more effective (Agoglia, Doupnik, & Tsakumis, 2011; Wüstemann & Wüstemann, 2010). Literature is sparse regarding how mitigation in the form of perceptions of the fraudster impact audit judgment. Ng and Han (2003) find financial statement auditors are more likely to concede to a client’s (aggressive) position regarding EPS restatements if they perceived the client concedes some ground from their initial position. However, this finding was secondary to the study, and one-dimensional. In law literature, Archer, Davis, and Aderman (1979) utilize experiments to learn that both empathy and those who scored high on an empathetic scale increased leniency in sentencing. Moreover, while informative, the study used undergraduates as proxies for jurors, did not fully inform them, and studied a population that likely differs from those who perform regulatory functions professionally. Thus, prior research offers some guidance as to how factors external to the fraud act impact auditor and arbitrator judgment. Yet, little research exists regarding the effects of migratory circumstances and perceptions present within the fraud act.

I believe that examining whether mitigating circumstances and perceptions reduce fraud sanctions when the monetary damage of the fraud is known provides a test of the application of professional judgment in empowering fraud. Prior research focuses on the Fraud Triangle to learn if strategy or high-level brainstorming increase the efficacy of an audit with fraud risk present (Hoffman & Zimbelman, 2009; Knapp & Knapp, 2001; Wilks & Zimbleman, 2004). Additional research covers the effect of the Fraud Triangle
on risk assessment (LaSalle, 2007; Choo & Tan, 2008). Further studied is the lack of use of nonfinancial information by financial statement auditors, even when presented with inconsistent information (Brazel, Jones, & Prawitt, 2013). Adding to existing knowledge, this study focuses on factors that may result in decisions that empower fraud so that I can better understand how to modify rules to reduce unintended consequences. Further, given the perception of traders that the punishment does not fit the crime and the perception of regulators that it does, I experiment to learn -in terms of monetary penalty- which position is correct.

Additionally, accounting literature is unresolved regarding the issue of auditor independence. On the one hand, prior research suggests external auditors are not able to be independent (Bazerman, et al, 1997). This is unsurprising, given their conflicting business interests, exemplified when small banks aggressively manage earnings (Kanagaretnam, Krishnan, & Lobo, 2010). On the other hand, financial statement auditors appear to retain their independence despite non-audit service fees (Defond, Raghunandan, & Subramanyam, 2002; Ashbaugh, LaFond, & Mayhew, 2003). Independence also asserts itself when working for private firms subject to low levels of litigation risk due to location (Norway) (Hope & Langli, 2010). Of note is that much research focuses on earnings management as either explicitly tied to, or a proxy for independence. In each case, mitigatory circumstances that may have impaired judgment or individual perceptions of those who prepared the reports were either absent, or controlled for in aggregate. Continuing this line of research, Kanagaretnam, et al (2010) suggests potential judgment impairment in a small financial institutional setting (small banks). Additionally, problems with financial regulation seem to increase despite
increased attention to the topic (Goodhart, et al, 2013; Routledge, Sebnem, Papaioannou, & Peydro, 2013; Williams, 2014). Thus, prior research is troubling in its split regarding how auditor independence can be compromised and gives little guidance on how mitigatory circumstance and perceptions influences judgment.

**Professional Guidance for, and Role of Regulatory Auditors, Arbitrators, and Members of Boards of Directors**

Accountants, lawyers, and organizations attempt to define the roles and responsibilities that auditors, field examiners, and arbitrators have with respect to fraud detection, deterrence, and penalization. The AICPA constructed auditing standards specific to fraudulent situations involving accounting irregularities (SAS No. 53, AICPA, 1988). In response to public pressure demanding and auditing standard for fraud, SAS No. 82 (AICPA, 1997) requires financial statement auditors to evaluate the risk of fraud in relation to material misstatements. SAS No. 99 (AICPA, 2002) suggests using the Fraud Triangle as a reference point for fraud assessment and increasing the emphasis of inquiry during the course of a financial statement audit. Later updates (SAS No. 109, AICPA 2006, SAS No. 122, AICPA, 2011) emphasize attention to fraud risk in internal controls. In addition, there is extra direction for financial statement auditors seeking to learn their responsibilities with respect to detecting fraud. However, the demands from the public for financial statement auditor accountability end with the primary responsibly remaining to provide reasonable assurance that financial statements are free of material fraud.

The regulatory community addresses this gap in part by probing for controls weaknesses and actions that transpired due to these weaknesses. Then punishment is
determined. The Financial Industry Regulatory Authority (FINRA) is the primary regulator for the NYSE and NASDAQ. FINRA publishes (FINRA, 2013) sanctions guidelines for use by various bodies adjudicating disciplinary decisions and specifically calls for consistency focused on deterrence. These guidelines came from necessity, given the constant need for surveillance and enforcement by regulatory auditors and adjudicators in market surveillance and business conduct committees. The call for transparency from the professional investing community resulted in publication of the guidelines in 1993, with several major revisions since. The Guidelines are consistent in stating that they are not “predetermined, fixed sanctions for particular violations. Rather, they serve as a guide for the committees in an effort to achieve greater consistency, uniformity, and fairness when imposing sanctions” (FINRA, 1993). Further, General principle number 2 (FINRA, 2013) states, “Disciplinary sanctions should be more severe for recidivists”. This principle notes that even without a history of misconduct, the current issue may justify sanctions beyond the ranges suggested. No. 3, No. 5, and No. 6 suggest that decisions be tailored to fit the crime. While sanctions beyond the ranges suggested are allowed, there is no mention of specificity in developing the ranges of the specific guidelines used in this paper.

Several exchanges – Chicago Mercantile Exchange (CME) (CME, 2009), Chicago Board of Options Exchange (CBOE) (CBOE, 2015), New York Mercantile Exchange (NYMEX) (CME, 2009), among others - currently utilize business conduct committees. These committees may be comprised of representative members of the exchange (such as traders, compliance officers, or members of boards of directors), regulatory officers, and/or members of the public, to impose sanctions and fines. The
NYSE used to regulate itself and utilize these types of committees. In later years, FINRA performed the regulatory duties. However, with the contract expiring January 1, 2015, the NYSE announced it would once again self-regulate by the end of 2015 by utilizing its own non-profit subsidiary, NYSE Regulation (Mont, 2014). NYSE Arca, a subsidiary of the NYSE is currently reliant on business conduct committees for a portion of enforcement as well (NYSE, 2010). Thus, it appears likely that regulatory decisions may continue to come from a variety of sources. However, primary to the decisions are generally those who examine, oversee, and arbitrate compliance.

Punishment Theory, Deterrence Theory, and Professional Judgment

Punishment theory suggests five motivations to punish: deterrence, rehabilitation, incapacitation, retribution, and restoration (Banks, 2012). Within the field of auditing, when people are queried regarding a punishment decision, reputation (Desai, Hogan, & Wilkins, 2006), sanctions and fines (Reinstein, Moehrle, & Reynolds-Moehrle, 2006) are often outcomes associated with extant literature. The association of monetary fines with punishment is consistent across research (Becker, 1974; Bigoni, et al, 2012). Much literature focuses on the effectiveness of the punishment (Boyd, et al, 2003; Hopfensitz & Reuben, 2009), and to a lesser extent, restoration (Wenzel & Thielmann, 2006). When people are called upon to make a punishment decision, they often focus on the level of punishment (Herrmann, Thöni, & Gächter, 2008). They attempt to implement a penalty high enough to induce fear in the person being sentenced, as well as would be future criminals (Gibbs, 1975). Additionally, jurors and judges attempt to set penalties that fit the crime and restoring wrongs to as close to their original state as possible (Cotton, 2000) while amplifying penalties for repeat offenders (Emons, 2007). Thus, according to
punishment theory, regulators would be motivated to set unique punishments if they believe deterrence will increase because of their actions and/or the wrongdoing may be partially undone because of their punishment.

Deterrence theory can help expand the understanding of how punishment discourages future crimes through the lens of certainty, severity, and speed of punishment (Gibbs, 1975). When the perception exists that the chance of detection will be high in committing a particular crime, the net marginal utility of whatever benefits are associated with the crime decrease (Shavel, 1985). Alternatively, marginal costs increase (Nussim & Tabbach, 2009), reducing the probability that people will engage in that crime. Additionally, criminology and economic literature suggests that the perception of certainty is the key, not the actual probability (Anwar & Loughran, 2011; Lochner, 2007). Although there is mixed evidence regarding the severity of punishment, without any punishment crime tends to rise quickly (Klepper & Nagin, 1989; Skatova & Ferguson, 2013). My previous research indicates that the perception of current deterrence mechanisms is that they are minimally existent. 20 out of the 31 traders interviewed in a qualitative study agreed, exemplified by: “even if I get caught, it’s not like I’m going to have to pay much back.” However, the severity of punishment may be less important than if people believe the actual behavior is wrong (Chen, Kelly, & Salterio, 2012). Moreover, professional judgment and discretion requires the use of empathy, compassion, and fairness in deciding on a punishment (Dong, 2014). Ability, knowledge, environment, and motivations dictates this decision-making performance (Libby & Luft, 1993). Therefore, combining the motivation to deter with empathy, compassion, and fairness helps one to understand that regulatory auditors and arbitrators may be motivated to
punish. Yet, mitigating circumstances that make the act perceived as “less wrong” may partially offset the severity of the punishment recommendation.

**Hypothesis 1: Changes in the degree of sympathetic circumstance: moral sentiment**

Adam Smith argued long ago that moral emotions impact perceived prosocial behavior (1759). Haidt (2003) suggests moral emotions are feelings related to the interest of others. Feelings of anger and guilt are examples of emotions that appear to be drivers for punishment (Nelissen & Zeelenberg, 2009). When individuals consider the circumstances behind how others were hurt or wronged, feelings like empathy emerge. These feelings can then become triggers underlying third party punishment (Skarlicki & Kulik, 2004). Just as empathy is a necessary precursor to the guilt necessary to rehabilitate a fraudster, it also influences sentencing (Archer et al, 1979). The mood a person has helps determine what emotions they feel (Bono & Llies, 2006) and research increasingly acknowledges the importance of mood on financial statement auditor judgment (Cianci & Bierstaker, 2009). Therefore, it comes as little surprise that auditors moods and emotions significantly influence their ethical decisions and professional judgments during the course of an audit (Bhattacharjee & Moreno, 2013). Further, data suggest auditors are even more prone to empathy and lower assessment of audit liability than are laypersons, given an adjudication setting (Reffett, Brewster, & Ballou, 2012). As a result, it is likely that sympathetic circumstances will influence regulatory auditors and arbitrators. Hence, using punishment theory and judgment with the lens of empathy I predict:

**H1:** Fraudsters with a sympathetic circumstance will be fined significantly less when punished.
**Hypothesis 2: Changes in the amount of monetary rewards the fraudster received**

When people see a criminal receiving an economic reward for committing the criminal act, they get upset (Dyck, Morse, & Zingales, 2010). This emotional trigger runs counter to the sense of justice and fairness required in using discretion (Jallow, 2005). A focal point for this trigger continues to be Wall Street, and people who work in the trading industry, when profiting from unethical behavior, tend towards excess (Tett, 2009). As a result, the desire for retribution tends to become a primary motivator for punishment (Carlsmith, 2006). Therefore, when brokers profit from an illegal act, I expect that the desire to punish them will increase. Similarly, if they receive no profit, the sense of altruistic behavior on behalf of the broker will decrease the desire to punish. Therefore, applying punishment theory focused on deterrence and retribution, I predict:

**H2**: Fraudsters who receive extra monetary rewards from committing fraud will be fined significantly more when punished.

**Hypothesis 3: Changes in the suggested criminality of the fraudster**

People who commit a crime for the first time may have not even meant to do so, while repeat offenders clearly knew what they were doing. As a result, when people are asked to adjudicate, people tend to treat repeat offenders more harshly than first time offenders (Miceli, 2013). Even the FINRA Sanctions Guidelines specifically call for leniency for first offenses (FINRA, 2013). A sense of retribution can become overwhelming in wanting to ensure the punishment fits the crime in both cases (Carlsmith, 2002). When faced with decisions in financial statement auditing, auditors under pressure tend to become more conservative and less lenient in their judgments (Hatfield, Jackson, & Vandervelde, 2011). Similarly, arbitrators tend to impose stiffer
penalties for those committing a crime (Emons, 2007). Research indicates that just the suggestion of past criminality is enough to impact decision making. The actual history only matters when people take the time to learn about it (Holzer, Raphael, & Stoll, 2006). Further, cognitive bias clouds judgment and predisposes those in authority to attribute ambiguous behavior to criminality (Richardson, 2012), even if no actual conviction history is present. Therefore, when biased with information regarding suspected past criminal behavior, it is likely that the participants will react negatively. Likewise, those presented as presumed first time offenders will produce a cognitive bias towards leniency. Thus, I predict:

**H3:** Fraudsters suggested to be repeat offenders will be fined significantly more when punished.

**Hypothesis 4: Experience as a moderator**

Research demonstrates that affective, but irrelevant information significantly influences financial statement auditors with less experience, but does not do so for those with more experience (Bhattacharjee & Moreno, 2002). Additionally, experience tends to decrease professional skepticism, which decreases financial statement audit quality (Payne & Ramsay, 2005). Auditors receive training to be impartial and research supports the notion that as clients perceive financial statement auditors to be fair, their value to the client rises (Herda & Lavellem 2012). The value rises due to experience. With experience, auditors can deal with complex problems while disregarding information deemed irrelevant. Yet, the tendency to fill in non-factual information with patterns they experience can lead to reduced skepticism (Nelson, 2009).
Similarly, arbitrators are concerned with perceptions of fairness and fair decision making (Gross, 2007). In adjudicating, auditors with less experience tend to be significantly more likely to find for a grievant than are those with more experience (Nelson, et al, 1981). Additionally, guidelines for lawyers suggest auditor experience is important. A good auditor will understand and focus on the facts to maximize time management (Mills and Brewer, 2004). Thus, I expect that as both groups gain experience, the mitigatory circumstances will be less relevant to the decision than the circumstances will to younger, less experienced counterparts. In our sample, nearly half (154 of the 348) of the participants have more than 20 years of industry experience. Therefore, I predict:

**H4:** Those with more than 20 years of industry experience will not be significantly impacted by sympathy, monetary rewards received, or suggested criminality when deciding to fine a fraudster.

**Question 1: Does the punishment fit the crime?**

Evidence suggests that arbitrators and accountants tend to follow authoritative guidance when given (Flanagan & Clarke, 2007). Additionally, evidence from my qualitative study suggests that traders view current economic sanctions are generally lower than the damage done (or reward collected). Literature suggests the SEC may not be very successful in detecting crimes (Macey, 2010), yet once high profile crime is prosecuted evidence suggests punishments are larger than ever (MacDonald, 2012). As a result, I question if the perceptions of the traders or the actual recommendations of decision makers are more correct. Thus, I do not hypothesize about the levels of monetary punishment recommendations with mitigating or non-mitigating circumstances present. Instead, I ask the question:
RQ1: Is the average monetary punishment recommendation significantly smaller than the damage done when mitigating circumstances are present?

Question 2: What methods do regulatory auditors select to penalize?

While literature is clear regarding the punishment of the individual, the types of punishment selected when given guidance are unclear in the regulatory auditor community. Research indicates boards should be comprised of those with altruism as a driving motivator (Stout, 2003), given the difficult decisions they must make. However, little research exists regarding what personal qualities make a good auditor. Further, although data exists that suggests financial statement auditors will sacrifice future revenue when a strong going-concern is present (Tucker, Matsumura, & Subramanyam, 2003), this relates to risk minimization more than penalization. Because the scope of financial statement auditors lies outside penalization, in accounting other options regarding specific penalties they use remains scarcely studied. Even arbitrator judgment evidence is mixed. Evidence suggests that when rogue traders act, for example, firms often escape with little to no punishment relative to the individual sentenced (Huisman & Van Sliedregt, 2010). However, other studies (Zatz & Hagan, 1985) suggest strong punishment. Historically, fraud examination is from the perspective of the perpetrator. By using the regulatory community, this paper adds an additional dimension to fraud theory by exploring their decisions. By examining their choice of penalty, new research venues for theory generation might be established. Thus, with a lack of information regarding what regulators use to penalize, instead of hypothesizing an outcome, I ask the last question:
RQ2: What are the preferred punishment choices for the type of fraudsters in this study?

Experimental Design and Method

Experimental Design

Figure 16 below displays a conceptual framework, integrating the hypotheses and key questions of interest above. The framework shows the independent variables to receive treatment are sympathetic circumstances, monetary rewards, and history of criminality. How these independent variables influence the monetary fine recommendation (the dependent variable) is the key question studied. Additionally studied: does industry experience moderate these influence? Further, the framework addresses: does the fine exceed the damages? What are other types of punishment do the participants recommend for this type of fraudster? These concepts drive the design of the experiment, detailed below.
In accordance with the hypotheses and questions, I conduct a 2 (Sympathetic circumstance present, No sympathetic circumstance present) X 2 (No monetary rewards received, Monetary rewards received) X 2 (No suggested criminality, Suggested criminality) between subjects experiment (please see Table 23 Panel A). In the experiment, a broker receives an order to sell shares of a fund just after the cutoff time expired to do so. A cutoff time for mutual funds exists to allow an orderly calculation of the value of the shares and because of the potential for abuse. Without a cutoff, traders, but not the public, could profit by buying or redeeming shares after the release of market moving information. This discovery led to a large scandal and the behavior continues presently.
Thus, in the experiment, the broker executes the order regardless, slightly adversely affecting the value of each share for remaining shareholders. Each manipulation changes the nature of the circumstances behind the broker’s action. The first variable presents a situation in which the broker may have acted out of sympathy for the client measured against one in which overt sympathetic circumstance is lacking (Sympathy). The second variable presents a situation where the broker received no commissions for executing the trade measured against a situation where the broker receives commissions. The third variable tests a situation in which the broker has a clean record against one in which the broker’s record is clean but suspicion of similar actions have happened previously. In all situations, I hold constant the relationship between the broker and client, the action taken, the damage done, the guidelines governing the action and accompanying recommendations from FINRA.
**TABLE 23: Experimental Design**

Experimental design

<table>
<thead>
<tr>
<th>Panel A: between-subjects independent variable manipulations</th>
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<tbody>
<tr>
<td><strong>Extent of condition present predicted to influence increases in monetary fine recommendations</strong></td>
<td></td>
</tr>
<tr>
<td>State of Manipulation</td>
<td>(No) Sympathy</td>
</tr>
<tr>
<td>-----------------------</td>
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</tr>
<tr>
<td><strong>Low</strong></td>
<td>Sympathetic circumstances present</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>Non-sympathetic circumstances present</td>
</tr>
</tbody>
</table>

Panel B: 1. dependent variable and 2. response bias questions

1. If you decided to recommend a fine, how much would you recommend Taylor be fined (please enter 0 if you chose no fine)? ____________________________

2. In your opinion, would most others fine Taylor more, less, or the same? __More   __Less   __About the same

3. How much more or less would you estimate others fine Taylor (enter 0 if you chose about the same)? ____________________________

**Participants**

Regulatory auditors service multiple needs within governmental (SEC, 2014) and nongovernmental (FINRA, 2015b) regulatory entities. From collecting and investigating evidence, to conducting field examinations, to suggesting penalties (where appropriate), the accounting community is important to the regulatory process. Similarly, arbitrators are vital in adjudicating punishment. When firms disagree with the findings of the regulatory auditors, or the penalties become too steep, an arbitrator adjudicates the process and determines the final penalty. The two groups often work together to collect evidence, detect problems, and implement corrective or punitive action (CBOE, 2015; CME, 2009; FINRA, 2013; NYSE, 2010; SEC, 2014). Given the large involvement both groups have in the regulatory process, the inclusion of both is necessary to understand
punishment recommendations. Further, the quality of internal controls is a function of the control environment, including the board of directors (Krishnan, 2005). COSO (COSO, 2009) and the SEC (SEC, 2014b) have specifically signaled the increased responsibility of boards to address risk oversight. Thus, including the views of those who sit on boards will allow for a deeper understanding of how mitigatory circumstances influence from those in charge of overseeing the control environment.

Recruitment of participants comes from a variety of sources. Panel data are constructed by locating regulatory auditors and arbitrators through professional networks, such as LinkedIn, and in person contact with regulators located in the Midwestern United States. When possible, I join communities dedicated to accounting, trading, and regulatory arbitration and request help in seeding the study. Additionally, panel data from Qualtrics locates and uses members of boards of directors. I insert test questions for arbitrators, auditors, and boards of directors (such as does a person being audited generally prefer to receive a qualified or unqualified report) appropriate to the discipline. This helps ensure respondents are who they represent themselves to be. For the Qualtrics panel, I also insert two attention filters approximately 2/3 and 3/4 of the way through the experiment, respectively to ensure the participants are still engaged properly. Although the overall response rate is indeterminable as a result, I do know that of those who moved through the profession filters properly, over 90% of those who start the experiment complete it successfully. Because of the multiple methods used for contact, participants are both geographically and technologically diverse. However, participants from all groups responded voluntarily. Thus, even though response patterns are similar from all
groups, it is possible that those who responded are different in some way from those who did not.

I begin with a sample of 353 participants. The median time to complete the experiment is just over 11 minutes. I exclude 5 participants who spent 4 or less minutes due to timing and response (in)consistency. I include the rest of the sample for the sake of conservatism and because of the strong significance of the manipulation checks. Table 24 presents the demographic information about the final sample of 348 participants. Overall, IP addresses indicate I received responses from over 57 distinct locations, centered on 25 different organizations. Geographic concentrations are widespread throughout the United States, but with concentrations as expected near regulatory hubs in the Northeast, Midwest, and Western United States. The sample is slightly (59%) male, consistent with gender skews common to positions held in the financial investing industry (Niessen & Ruenzi, 2006, Beckmann & Menkhoff, 2008). The average age is just over 45 years old and the median level of experience is 10-20 years, with the largest representation (44%) having over 20 years of experience.
TABLE 24: Sample

<table>
<thead>
<tr>
<th>Participant profile (N=348)</th>
<th>Frequency</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>205</td>
<td>58.9%</td>
</tr>
<tr>
<td>Female</td>
<td>143</td>
<td>41.1%</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;26</td>
<td>19</td>
<td>5.5% CPA</td>
</tr>
<tr>
<td>26-35</td>
<td>99</td>
<td>28.4% CPA</td>
</tr>
<tr>
<td>36-45</td>
<td>53</td>
<td>15.2% CPA</td>
</tr>
<tr>
<td>46-55</td>
<td>70</td>
<td>20.1% CPA</td>
</tr>
<tr>
<td>56-65</td>
<td>78</td>
<td>22.4% CPA</td>
</tr>
<tr>
<td>&gt;65</td>
<td>29</td>
<td>8.3% CPA</td>
</tr>
<tr>
<td>Primary Designation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPA</td>
<td>201</td>
<td>57.8%</td>
</tr>
<tr>
<td>Auditor / Field Examining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPA</td>
<td>91</td>
<td>26.1%</td>
</tr>
<tr>
<td>Auditor / Field Examiner</td>
<td>181</td>
<td>52.0%</td>
</tr>
<tr>
<td>Board of Directors</td>
<td>76</td>
<td>21.8%</td>
</tr>
<tr>
<td>Years of Industry Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1</td>
<td>11</td>
<td>3.2% Education</td>
</tr>
<tr>
<td>1-3</td>
<td>28</td>
<td>8.0% Some College</td>
</tr>
<tr>
<td>3-5</td>
<td>51</td>
<td>14.7% 4 years College</td>
</tr>
<tr>
<td>5-10</td>
<td>50</td>
<td>14.4% &gt;4 years College</td>
</tr>
<tr>
<td>10-20</td>
<td>54</td>
<td>15.5% Board of Directors</td>
</tr>
<tr>
<td>&gt;20</td>
<td>154</td>
<td>44.3% Board of Directors</td>
</tr>
</tbody>
</table>

Experimental Procedures

Participants click on the hyperlink provided, which automatically opens the experiment on the hosting website. Participants read general information about the study, the protections of their anonymity, and the contact information of the authors. They then click on a consent button to signify their consent and begin the experiment, where they randomly view one of the eight situations available. This is the only time they see the situation, but they also receive instructions that this will be the only time they can access the situation. A timer ensures participants stay on the page for at least one minute to minimize any accidental clicking that might result in moving forward to the questionnaire before they are ready. After reading about the situation, the survey software guides them through the questionnaire where they make judgments. The participants then answer
demographic and other post-experimental questions, including recollections and interpretations of the scenarios presented.

Trading After the Bell Situation

As a reference point underlying all situations, I present a scenario that should be familiar to regulators in the trading industry given the enormous attention it received: a variation of the mutual fund scandal of 2003-2004 (Bhojraj, Cho, & Yehunda, 2013). Professional investors had discovered on a widespread basis that they could profit by trading after the official close of a fund. They did so by buying or redeeming shares on days when news indicated the market for the securities underlying the fund would move significantly the next day. By submitting their orders as though they took place prior to the cutoff time, the order execution registered as the same day. In such a manner, professional investors and investment houses could effectively enter or exit markets and profit from information that occurred during a non-allowed period. As a mutual fund must sell or buy underlying securities the next morning to offset these effects, there was adverse impact on the underlying value of the fund. Long-term investors ultimately paid the price for these unjust profits. However, the impact on the price per share was negligible, given the amount of profit generated on any given day was split among millions of shares held by investors of the fund (Houge & Wellman, 2005). At the time, the fines and sanctions the SEC implemented associated with the scandal exceeded $3.7 billion (McCabe, 2009).

The NASD issued a special notice to inform members (NASD, 2003) of the illegality of these transactions - per the Investment Company Act Rule 22c-1(a) - and the rules it violated. NASD Rule 2110, superseded by FINRA Rule 2010 (FINRA, 2015b),
remains in use by the Sanctions Guidelines - which governs fair-trading. FINRA Rule 2020 - superseded by NASD Rule 2120 (FINRA, 2015b) - covers deceptive practices. FINRA is usually the regulator of record. I present a situation not nearly as egregious, but adapted from mechanics similar to the scandal: the client has a real need to sell shares today, but just missed the cutoff. The broker proceeds to pre-date the order, violating the rules, and the participants learn this act ultimately resulted in $90,000 in damages spread out among remaining shareholders. FINRA publishes its sanctions guidelines (FINRA, 2013). Thus, I present abbreviated forms of the guidelines applicable to 2110 and 2020 in all scenarios. This refreshes information or informs participants of the rules and guidelines relevant to the situation.

Independent Variables – Empathy

I begin by changing levels of sympathetic circumstances. As discussed earlier, empathy influences judgment. Prior to discussion with professionals, empathy was invoked by comparing a trip to Las Vegas against a bank foreclosure against the son of the client. After much discussion, the trip to Las Vegas changed to a generic trip to the purchase of a vacation home. Each change increased the likelihood that participants understood the concept in the same way. Similarly, although the foreclosure invoked sympathy, it is too closely tied the audience being audited and adjudicated in this study. In addition, language regarding the son was removed to ensure balance and comparability of the point of view between both situations. Thus in the final analysis, to ensure differentiation in levels of sympathetic circumstance to generate empathy, I look at work by Bornstein and Shelton (2011). They suggest that medically necessary procedures invoke sympathy for patients in malpractice suits. Yet, unnecessary procedures invoke
higher findings of liability for the patients. I specifically state the immediacy of the situation and imply the necessity due to the number of shares needing to be sold. To suggest a less sympathetic situation, I invoke feelings of wealth with the immediate need to settle funds for an ultra-high-end home auction, clearly a non-necessary expense.

**Monetary Rewards**

In the monetary rewards condition, participants are either explicitly told the broker receives a salary (is not be paid for this transaction) or receives no salary. In the no salary condition, the broker receives commissions for this transaction. Discussion with professionals caused the salary to move from $60,000 originally to $80,000 in the final instrument aligning more closely with perceptions the professionals have. Discussions from the pilot testing suggest that broker pay is a key to the decision process, given the sense of retribution that accompanies perceptions of unjust enrichment.

**Suggested History of Criminality**

The instrument informs participants that the broker has a clean record without any suspicion in one scenario or that the clean record was still there, but a suspicious history accompanied the record in another scenario. Discussion whether the history should be known or unknown resulted in prejudice that should not be present when the history was merely suggested. This indicates an issue worth exploring. The effects of cognitive bias are discussed earlier. This, it is important to test those with clean records against those suspected but not prosecuted to trigger potential bias. Again, retribution fueled the early participants in the pilot test who felt this knowledge to be important.
Dependent Variables – Monetary Fine Recommendation: The Individual

Fines have long been a preferred tool of market regulators for punishment (Park, 2012). Yet, these same regulators work in an environment that settles cases over 98% of the time, a rate higher than private parties (MacDonald, 2012). I give guidelines to the participants suggesting two rules that may be applicable and the ranges of fines proposed as generally applicable by the guideline publisher, FINRA (FINRA, 2013). These guidelines provide direction so adjudicators can impose sanctions that are consistent and fair (FINRA, 2013). Thus, in accordance with industry practice, I present abbreviated versions of two such rule guidelines prior to asking the participants to make a monetary fine recommendation.

Upon completing the data collection, I notice that the amount participants chose to fine the firm is not significant using Levene’s test of equality of error variances. However, the amount they choose to fine the broker is significant. After viewing regression plots, I decide a categorization would be appropriate to measure significance. I then categorize the responses for the amount the broker should be fined as follows: $0 fine = 0, <= $2,500 = 1, <= $5,000 = 2, <= $7,500 = 3, <= $10,000 = 4, <= $20,000 = 5, <= $40,000 = 6, <= $75,000 = 7, <= $90,000 = 8, > $90,000 = 9. I use these breakpoints because I wish to space the sample according to fine ranges and preserve the integrity of the responses as proportionate to their levels of penalty. However, there are two exceptions. (1) Zero deserves its own categorical value due to the strength of conviction that likely accompanies no fine. Also, (2) $90,000 was the stated damage done and therefore using it as a split point separates groups who based their decisions on it. 30 participants decide on the fine category 0, 55 on 1, 81 on 2, 15 on 3, 85 on 4, 25 on 5, 21
on 6, 14 on 7, 14 on 8, and 8 participants are in category 9. The regression plots confirm
Levene’s non-significance (0.290) with this new scale implemented. Thus, results for H1,
H2, H3, and H4 utilize this scale. RQ1 and RQ2, use the raw data as submitted, as their
questions are unaffected. Additionally, I offer participants a range of probable
punishment options in accordance with FINRA’s guidance (FINRA, 2013). Spearman’s
rho (p < 0.001) indicates that the probability the participant would recommend a fine for
the broker and the probability that the participant would recommend a suspension of the
broker’s license highly correlate with the dependent variable. I, therefore include these
two measures as controls helping to explain the decision behavior. Finally, the
participants believe others would fine the broker ($15,997.21 others versus 15,198.54
self) insignificantly (p > 0.20) differently. Given the two measures were highly (p <
0.001) correlated, I chose to use participants answers rather than those they imagined of
others.

*Research Question Dependent Variable - Monetary Fine Recommendation: The Firm*

I ask the research question of fines for the firm because firms are often the targets
of investigation by regulators (MacDonald, 2012). People who work at companies are
often viewed as representatives of that company. When a representative of the company
acts poorly, people associate the company with a bad image (Brinson and Benoit, 1999).
This perception, combined with the desire for retribution, may influence the penalty the
participants recommend.

*Selection of the Performance Measures*

Tables 25 and 26 display the definitions of the factors measured and the scales
used. 100-point probability estimate scales measure the indicators unless stated
otherwise. Measurement of the decision to fine the broker comes from the point of view of the participant. Participants also answer regarding the decision to fine the firm. To check for bias, participants reply how much more or less (or the same) they believe others would fine the broker. Participants give feedback on a range of punishment decisions. In an earlier study, I examined the fraud decision behaviors of traders and found Machiavellianism to be significant. To explore whether commonalities exist between trader and auditor decisions, Machiavellianism was measured again with five items, adapted from the MPI (Dahling, et al, 2009), utilizing a 100-point scale. Similarly, an empathy scale, measuring the capacity one has to feel empathy (Jolliffe & Farrington, 2006) was adapted. As this scale utilizes dichotomous variables, the sum of the answers for each creates separate measures.

**TABLE 25: Measures and Definitions**

<table>
<thead>
<tr>
<th>Measure/Vignette</th>
<th>Definition</th>
<th>Scale/Vignette Adapted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine</td>
<td>The amount of a fine one determined appropriate, given an offense.</td>
<td>Carlsmith, et al, 2002</td>
</tr>
<tr>
<td>Jail Time</td>
<td>The amount of time determined appropriate to spend in jail, given an offense.</td>
<td>Carlsmith, et al, 2002</td>
</tr>
<tr>
<td>Machiavellianism</td>
<td>One's propensity to distrust others, engage in amoral manipulation, seek control over others, and seek status for oneself</td>
<td>Dahling, et al 2009</td>
</tr>
<tr>
<td>Empathy</td>
<td>The capacity one has to feel sympathy for another.</td>
<td>Jolliffe and Farrington, 2006</td>
</tr>
<tr>
<td>Client Sympathy</td>
<td>The empathetic moral sentiment one has for the client of a fraudster.</td>
<td>Batson, et al, 1991</td>
</tr>
<tr>
<td>Monetary Reward</td>
<td>The amount of payment one receives such that it is sufficiently large within the social context.</td>
<td>Izuma, 2008</td>
</tr>
<tr>
<td>Presence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggested Criminality</td>
<td>The perception of the proclivity of the fraudster to commit fraud.</td>
<td>Nagin and Paternoster, 1991</td>
</tr>
<tr>
<td>Measure</td>
<td>Number of Items</td>
<td>(Choices)</td>
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<tr>
<td>------------------</td>
<td>-----------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Recommendation</td>
<td>8 (100)</td>
<td>What is the probability you will recommend:</td>
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<tr>
<td>Fine</td>
<td>2 (infinite)</td>
<td>If you decided to recommend a fine, how much would you fine Taylor (please enter 0 for no fine)?</td>
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<tr>
<td>Fine Rationale</td>
<td>3 (100)</td>
<td>In percentage terms, roughly how much of your fine was due to:</td>
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<tr>
<td>Jail Time</td>
<td>1 (8)</td>
<td>If you decided to recommend jail time, how much jail time would you recommend?</td>
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<tr>
<td>Machiavellianism</td>
<td>5 (100)</td>
<td>To what extent do you agree that:</td>
</tr>
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<tr>
<td>Empathy</td>
<td>7 (100)</td>
<td>To what extent do you agree that:</td>
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</tbody>
</table>
Pre-Test of the Experimental Instrument

I discuss the instrument with three industry professionals: one ex-trader who served as an arbitrator who has also served on business conduct committees for exchanges, one field examiner, and one regulatory official who served as an arbitrator and examiner. This refines the instrument based on the theories discussed above. I then pilot test the instrument with 42 undergraduate senior accounting students. Feedback from the group and professionals indicated that the sympathetic circumstance needed to be of similar perspective (the broker had acted for his own interests due to a family medical situation originally). The group responses also reveal the manipulation test of monetary rewards is reasonable and is significant, as is the suggested criminality manipulation test. However, participants express confusion over the rules and guidance for fining the broker. Thus, I locate rules approximate to the situation presented and include adapted versions of this guidance in the final pilot test. Literature suggests Amazon’s Mechanical Turk (MTurk) workers tend to perform tests representatively as long as the task does not rely on factual answers - which they use the internet to answer (Goodman, Cryder, & Cheema, 2013). Thus, I decide to use 24 auditors and 23 arbitrators from MTurk for the final pilot test. I require workers to have performed at greater than a 98% level of passing previous studies to increase the efficacy of the sample. Participants pass all manipulation checks and appear to understand and respond to the material appropriately so I proceed to launch the experiment, following the procedures as noted above, and detailed in Figure 17 below.
FIGURE 17: Experimental Protocol

**Procedure**

- Develop hypotheses, informed by literature
- Understand key factors in operationalizing fraud models
- Adapt, adopt scales
- Sample (40+) senior accounting students to test 3 cells of each scenario \((2 \times 2 \times 2 - 8 \times 5 = 40)\)
- Perform simple ANOVA
- Discover if manipulations, scales are effective
- Recalibrate manipulations
- Repeat process with additional sample (47 professional arbitrators and auditors)
- Significance in ANOVA
- Create panels for data and seed study
- Implement internet based experiment
- Test Hypotheses and models
- Interpretation of data from experiment analyzed

**Product**

- Hypotheses formed
- Preliminary scale and manipulations developed
- Refinement of manipulations and scales
- Functional experiment
- Numeric Data
- Target \(N = 240\), minimum 30 responses per cell
- Descriptive Statistics
- Analysis
- Discussion & Implications
- Insights for Further Research
Instrument, Manipulations, and Situation

Table 27 below presents the instrument and manipulations. As described earlier, this research focuses on sympathetic circumstance, monetary rewards received, and perception of criminality. Thus, the instrument is manipulated in accordance with each. The situation was adapted from previous vignettes, and informed by the best practices of the professional compliance community, relying on the FINRA Sanctions Guidelines (FINRA, 2013) for adaptation. By keeping the manipulations as simple and clean as possible, few word changes can effectively change the environment.
TABLE 27: The Instrument and Manipulations

<table>
<thead>
<tr>
<th>Sympathetic Situation [Non-Sympathetic Situation]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chris, a loyal client for 15 years owned 100,000 shares of a fund and called the brokerage firm just as the cutoff time expired to sell the shares. Taylor, Chris's longtime broker and a 20 year employee of the firm, took the call. Chris told Taylor the money was needed immediately for a medical procedure the insurance company denied in the pre-check for payment. [Chris told Taylor the money was needed immediately to buy an ultra-high end vacation home being auctioned live as a part of a foreclosure auction.] Taylor entered Chris's order, marking it placed just before the cutoff time for the fund, violating trading rules and the code of conduct at the firm, but allowing Chris to get the money. This will adversely affect the net asset value of one share by a fraction of a penny for all shareholders.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No Monetary Rewards Received [Monetary Rewards Received]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taylor is compensated by a fixed and competitive salary plan of $80,000 per year and does not earn any commissions. Taylor does NOT get paid extra for selling shares. [Taylor is compensated solely by commissions, which will be $0.80 per share for this fund, and does not earn any salary. Taylor ONLY gets paid for selling shares.]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No Suggested Criminality [Suggested Criminality]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taylor has a clean record and has never before been suspected of any wrongdoing. [Taylor has a clean record and but has several similar incidents in the past which were suspected but never proven with other clients.]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taylor was caught and a field examiner has collected the evidence. You are the compliance officer assigned to make a recommendation for action in this case. The firm estimates net assets were adversely impacted by $90,000.</td>
</tr>
</tbody>
</table>

The FINRA Sanctions Guidelines offers suggestions designed to deter future misconduct and improve overall business standards. Sanctions should be sufficient to achieve deterrence without being punitive. It was suggested that NASD Rule 2110, which governs fair trading, and FINRA Rule 2020 which covers deceptive practices would be the rules which may be applicable.

In general, 2110 suggests fines of $5,000 to $10,000 for the first action and $10,000 to $100,000 for subsequent actions. 2020 suggests fines of $2,500 to $50,000 for negligence and $10,000 to $100,000 for reckless misconduct.

You have a range of non-monetary penalties available. In egregious cases, the guidelines allow for barring the individual and/or expelling the firm (2020).

The penalties (both monetary and non-monetary) recommended should be tailored to the situation and thus, can fall outside the recommended ranges.

Results

Manipulation Checks

To enhance rigor and ensure triangulation availability in the case of a manipulation failure, I use at least three manipulation checks each for sympathy,
monetary rewards, and suggested criminality. Table 28, below, displays the questions asked. In accordance with Libbey, Bloomfield, and Nelson (2002), manipulation checks measure recognition and comprehension of the independent variable. In the sympathetic circumstance, participants’ recall of the exact needs (medical procedure) as well as outcome expectation (live a normal life) is measured. The monetary reward manipulation also checks for exact recall (receive commission) as well as outcome (financial benefit). Finally, suggested criminality differences also checks recognition (clean record) and comprehension (clean record with questions). I use multiple checks to triangulate the responses and reduce the chance the any one question influences the response. In the pre-test, I interviewed professionals and students to enhance validity. I found all participants recognized and understood the independent variables corresponding to their particular instrument.

At least one check for each variable is worded inversely to the expected outcome to ensure participants are paying attention and understand the material as presented. A 7-point Likert-type scale with variations of high/low conditions available at each end of the question measure the manipulations. I perform an ANOVA and discovered that all three checks are significant ($p < 0.001$, all differences between high/low means per each variable exceed 3.8 out of 7).
TABLE 28: Manipulation Checks

<table>
<thead>
<tr>
<th>Manipulation #1: Client Sympathy</th>
<th>To what extent did Chris need the money:</th>
<th>4 (100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>to live a normal life … to live an extravagant life</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to get a good deal … to stop a bad situation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>for a procedure … for an extra home</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to buy real estate … for medical bills</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manipulation #2: Monetary Reward Presence</th>
<th>When Taylor sold the shares, to what extent did Taylor:</th>
<th>3 (100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>personally financially benefit … not personally financially benefit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>receive commissions … receive the base salary</td>
<td></td>
</tr>
<tr>
<td></td>
<td>not affect the amount of the paycheck … increase the amount of the paycheck</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manipulation #3: Suggested Criminality</th>
<th>Prior to this event does Taylor have:</th>
<th>3 (100)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A clean record with no questions … a clean record with questions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a history that suggests this problem … nothing to suggest this problem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>no suspicion of wrongdoing … suspicion of wrongdoing</td>
<td></td>
</tr>
</tbody>
</table>

**Individual Tests of Hypotheses and Research Questions**

Table 30, Panel A displays an omnibus test of hypotheses H1, H2, and H3. I conduct a 2x2x2 ANCOVA to test the significance of each variable. In H1, where participants are presented with a situation where the client needed the money immediately for a medical procedure contrasted against the situation where the money was needed for a vacation home, I find a significantly higher fine recommendation from those presented with the vacation home situation (mean $11,828.28 (std. dev. 20,349.60) versus $18,809.52 (std. dev. 28,011.61). Thus, H1 is supported (p < 0.003).

In H2, which contrasts levels where the broker receives no commissions with one in which $80,000 was received, I also find that regulatory auditors, arbitrators, and boards of directors recommend fines which are significantly higher for those who receive payment for their fraudulent act versus those who do not (mean $10,477.84 (std. dev. ...
17,227.27) versus $20,029.01 (std. dev. 29,570.50). Hence, H2 is also supported (p < 0.001).

H3, which compares a situation in which this the first wrongdoing with one in which there is a suspicion of wrongdoing in the past is supported. The participants in the sample are likely to fine those with a suspicion of wrongdoing more than those who are first time offenders (mean $11,360.41 (std. dev. 18,891.82) versus $18,949.44 (std. dev. 28,621.34) (p < 0.009).

Table 30, Panel B presents the results of testing H4, which is not supported. H4 suggests that those with the most experience (greater than 20 years) will not have their decisions significantly influenced by mitigating circumstances. In all three cases, the opposite was true: their decisions were significantly influenced by all three factors. Of interest is that for those with 20 or less years of experience, the combined effects of a sympathetic situation with perceptions of a history of wrongdoing additionally impact their decisions significantly (p < 0.009), while the broker receiving economic rewards combined with perceptions of a history of wrongdoing approaches significance (p < 0.052).

Table 30, Panel C presents the results of tests for RQ1. The data suggest that the perceptions of the trading community may be correct. The participants significantly (p < 0.001, 99% confidence level) fine the fraudulent broker less (mean $15,198.54; median $7,500) than the damage known to have transpired ($90,000). When sympathy, no monetary rewards, and a first offense were present, the mean recommendation drops to $7,627.70. Even when presented with a non-sympathetic circumstance, full commissions of $80,000 received, and suggested criminality, the group still decides to fine the
fraudulent broker significantly ($p < 0.001$) less (mean $34,056; \text{median } $10,000) than the damage done.

Finally, Table 30, Panel D, displays the results regarding the last research question, RQ2, which measures the decision probabilities of each penalty independent of other decisions. The data suggest fines are the most popular option, with nearly 90% of the participants suggesting there is at least a 10% chance they will fine the broker. Censure (72.7%), a warning (73.0%), and a suspended license (50.6%) represent views of the majority. Surprisingly, nearly 50% (44%) of the participants think there is a greater than 10% chance the broker would lose his/her job. However, considering the means, only fines (64.3%) and warnings (55.4%) are probable outcomes on average. The data suggest the participants are reluctant to use much more than a fine for this offense, not surprisingly following suggested guidelines given. However, that so many think there is a chance the job would be lost, but the overall penalty is still low is interesting and worthy of future research. Table 29 below, presents the final support for the hypotheses and questions. The summary of the results follows in Table 30, as discussed.
**TABLE 29: Results of Hypotheses Testing**

| Hypotheses                                                                 | Supported? |
|                                                                           |            |
| **H1**: Fraudsters with a sympathetic circumstance will be fined significantly less when punished. | Yes        |
| **H2**: Fraudsters who receive extra monetary rewards from committing fraud will be fined significantly more when punished. | Yes        |
| **H3**: Fraudsters suggested to be repeat offenders will be fined significantly more when punished. | Yes        |
| **H4**: Those with more than 20 years of industry experience will not be significantly impacted by sympathy, monetary rewards received, or suggested criminality when deciding to fine a fraudster. | No         |
| **RQ1**: Is the average monetary punishment recommendation significantly smaller than the damage done when mitigating circumstances are present? | Answer: Yes |
| **RQ2**: What are the preferred punishment choices for the type of fraudsters in this study? | N/A        |

**TABLE 30: Results**

DV: Monetary Fine Recommendation for the broker (Taylor)

Panel A: analysis of covariance of monetary fine recommendation for the broker

<table>
<thead>
<tr>
<th>Source</th>
<th>SS*</th>
<th>df</th>
<th>MS*</th>
<th>F</th>
<th>2-Tailed Sig.</th>
<th>Hyp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>92.91</td>
<td>1</td>
<td>92.91</td>
<td>25.62</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td><strong>H1</strong>: No Sympathy</td>
<td>28.19</td>
<td>1</td>
<td>28.19</td>
<td>7.77</td>
<td>0.006</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>H2</strong>: Commissions Received</td>
<td>42.98</td>
<td>1</td>
<td>42.98</td>
<td>11.85</td>
<td>0.001</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>H3</strong>: Unclean Record</td>
<td>20.78</td>
<td>1</td>
<td>20.78</td>
<td>5.73</td>
<td>0.017</td>
<td>0.009</td>
</tr>
<tr>
<td>No Sympathy X Commissions Received</td>
<td>6.02</td>
<td>1</td>
<td>6.02</td>
<td>1.66</td>
<td>0.199</td>
<td></td>
</tr>
<tr>
<td>No Sympathy X Unclean Record</td>
<td>5.89</td>
<td>1</td>
<td>5.89</td>
<td>1.63</td>
<td>0.203</td>
<td></td>
</tr>
<tr>
<td>Commissions X Unclean Record</td>
<td>5.08</td>
<td>1</td>
<td>5.08</td>
<td>1.40</td>
<td>0.237</td>
<td></td>
</tr>
<tr>
<td>No Sympathy X Commissions X Unclean Record</td>
<td>0.84</td>
<td>1</td>
<td>0.84</td>
<td>0.23</td>
<td>0.630</td>
<td></td>
</tr>
<tr>
<td>% Chance Broker Fined</td>
<td>233.06</td>
<td>1</td>
<td>233.06</td>
<td>64.27</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>% Chance Broker Suspended</td>
<td>47.26</td>
<td>1</td>
<td>47.26</td>
<td>13.03</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>1225.59</td>
<td>338</td>
<td>3.63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R-squared = 0.313 (adjusted R-squared = 0.294)
Panel B: H4 Significance: Years of Experience (1-tailed sig)

<table>
<thead>
<tr>
<th>Condition</th>
<th>No Sympathy</th>
<th>Commissions Received</th>
<th>Unclean Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience &lt;=20 yrs</td>
<td>0.007</td>
<td>0.011</td>
<td>0.125</td>
</tr>
<tr>
<td>Experience &gt; 20 yrs</td>
<td>0.015</td>
<td>0.008</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Panel C: RQ1: Was the broker's fine significantly smaller than the damage?

<table>
<thead>
<tr>
<th>DV: Amount to fine the broker</th>
<th>N</th>
<th>Mean</th>
<th>std. dev.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>348</td>
<td>$15,198.54</td>
<td>24,565.20</td>
<td>-56.80</td>
</tr>
<tr>
<td>df</td>
<td>347</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-tailed Sig</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>99% Confidence Lower</td>
<td></td>
<td>$ (78,212.16)</td>
<td>$ (71,390.77)</td>
<td></td>
</tr>
<tr>
<td>99% Confidence Upper</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

compared to $90,000 stated damages

Panel D: RQ 2: Broker penalty selections

<table>
<thead>
<tr>
<th>n: number who thought there was a &gt;10% chance</th>
<th>n as a percent of the total</th>
<th>mean probability of penalization from all (n=348)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jail Time</td>
<td>48</td>
<td>13.8%</td>
</tr>
<tr>
<td>Censure</td>
<td>253</td>
<td>72.7%</td>
</tr>
<tr>
<td>Fine</td>
<td>310</td>
<td>89.1%</td>
</tr>
<tr>
<td>Suspend License</td>
<td>176</td>
<td>50.6%</td>
</tr>
<tr>
<td>Barred for Life</td>
<td>58</td>
<td>16.7%</td>
</tr>
<tr>
<td>Warning</td>
<td>254</td>
<td>73.0%</td>
</tr>
<tr>
<td>Fired</td>
<td>153</td>
<td>44.0%</td>
</tr>
<tr>
<td>Nothing Happens</td>
<td>44</td>
<td>12.6%</td>
</tr>
</tbody>
</table>

Additional Analysis

Robustness Checks

As mentioned above, the amounts the participants chose to fine the fraudster required rescaling due to non-equality of variances between the independent variables. Subsequently, data screening for normalcy (skew, kurtosis) and multicollinearity (VIF scores < 3.0) suggested the methods used to test the hypothesis are appropriate (Hair, et al, 2009). However, Hayes and Cai (2007) advocate checking the standard error estimates and significance of the independent variables when heteroskedasticity (non-similar amounts of variance) may be present. Given the rescaling of the dependent variable, the
robustness check advocated by Hayes and Cai are used. Table 31 below shows the results. Data are compared between the standard errors and p-values under homoskedastic conditions against conditions containing heteroskedastic-consistent error estimators. The introduction of heteroskedastic estimates does not change the significance of the independent variables. The level of significance and standard errors do change, but not to a large extent. These checks suggest robustness of the standard errors across homo- and hetero-skedastic assumptions. In addition, the model is checked against each of the eight punishment options available (set as the dependent variable). Similarly, an ordinal (plum) regression suggests significance at or below the OLS p-values across scenarios. The significance of the variables and explanatory power of the model remains highest in the form presented in this paper.

TABLE 31: Robustness

<table>
<thead>
<tr>
<th>Robustness Check</th>
<th>OLS</th>
<th>Heteroskedasticity-Consistent Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Source</td>
<td>SE</td>
</tr>
<tr>
<td>Constant</td>
<td>Constant</td>
<td>0.267</td>
</tr>
<tr>
<td>No Sympathy</td>
<td>No Sympathy</td>
<td>0.206</td>
</tr>
<tr>
<td>Commissions Received</td>
<td>Commissions Received</td>
<td>0.206</td>
</tr>
<tr>
<td>Unclean Record</td>
<td>Unclean Record</td>
<td>0.208</td>
</tr>
<tr>
<td>% Chance Broker Fined</td>
<td>% Chance Broker Fined</td>
<td>0.003</td>
</tr>
<tr>
<td>% Chance Broker Suspended</td>
<td>% Chance Broker Suspended</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Comparing the Decisions of Each Group within the Sample

Breaking the data down by job type (N=76 Board of Directors members, N=91 Arbitrators, N=181 Regulatory Auditors) yields interesting results. Those members of boards are not significantly impacted by any of the mitigatory situations presented in the experiment (p < 0.05), although sympathy approaches near significance (p < 0.055).
Arbitrators significantly change their recommendations when presented a sympathetic circumstance (p < 0.001) or a history of wrongdoing (p < 0.02), but whether or not the broker was paid is not of significant consideration in their decisions. Regulatory auditors however, are not impacted by sympathetic situations, but their decisions are significantly changed by monetary rewards (p < 0.001), a history of wrongdoing (p < 0.048), and the combination of sympathy with other elements. Regulatory auditors suggested fines higher than the other two groups overall and at the worst levels of circumstance. However, sympathy has a significantly negative effect on them when combined with other factors. That is to say, regulatory auditors are willing to fine the broker implementing the trade for the medical procedure more than the broker entering the trade for the vacation home is. It is likely that if the participants had receive both situations simultaneously these results will differ, but it is interesting to note the difference in reaction.

**Using Jail Time Instead of Monetary Fines as a Dependent Variable**

As mentioned previously, I ask the participants to list the probabilities they would act in accordance with published FINRA guidelines, and one such question involves jail time. The overwhelming decision recommendation was for no jail time. Yet, it is interesting to note that those given a situation containing a history of wrongdoing are significantly (p < 0.03) more likely to recommend increased time in jail relative to those with a clean record.

**Limitations, Discussion, and Conclusions**

**Limitations**

There are four primary limitations to this study. While the research is able to manipulate factors within a given scenario, the situations are hypothetical. The situations
occurring in real life experiences in the course of a job can never truly be replicated whether in person or in online simulation. Additionally, motivations to punish likely exist beyond the factors I study. Third, participants chose to respond voluntarily. I compared the responses of the first 50 participants against the last 50 and found no significant differences, with the decision to penalize remaining within a 95% confidence interval. It is possible that the type of person who voluntarily responded to this experiment differs from others in general. Finally, the pool of respondents is limited to U.S. compliance professionals and the situation is specific to them. Consequently, it is possible that the data and associated suggestions are limited to this type of sample and situation.

**Discussion and Conclusions**

Literature stresses the importance of accounting and auditor judgment, but this emphasis is often within the confines of financial reporting (Agoglia, et al, 2011). In those studies focused on litigatory reactions and concerns, emotions (Reffett, et al, 2012) and environment (Hope and Langli, 2010) influence decisions. However, the influence of mitigatory circumstances on these decisions remains largely unexplored in accounting, finance, governance, and compliance literature. I examine the effects of discretion and judgment as impacted by mitigatory circumstances in a setting that calls for punitive recommendations. I do so via a controlled online experiment. The results suggest that if an individual who committed fraud has sympathetic circumstances, did not economically profit from their actions, or is a first time offender, regulatory auditors and arbitrators are likely to reduce sanctions. Additionally, even when there is a lack of sympathetic motivation, the fraudster profits from the act, and a history of wrongdoing is suspected, participants are loathe to penalize to the extent of the profit.
I additionally examine whether these groups behave differently and find that they do. Members of boards of directors, perhaps being mindful of their primary duty to shareholders, remain unmoved by mitigatory circumstances. This suggests either that these members are behaving properly or that compliance officers or examiners may not be penalizing fraudsters as the board intends. Further research would be useful to learn what, if any, mitigating circumstances do sway board members. Moreover, even though their decisions are not significantly influenced, why did these members still choose to penalize the fraudster significantly less than the damage done? Additionally, specific to the duties of Chief Compliance Officers (COOs) is designing controls and locating weaknesses within them. In a previous qualitative study, I find that fraud is systemic in the professional investing community. In such an environment, fraud is the norm rather than the exception. Thus, when COOs come from within in such an environment, they may be blind to certain risks due to fraud inside the system. Even when risks are known and efforts are made to address the risks, the system may be such that the efforts are not implemented as designed. Fraud is often an individual decision. Yet the COO makes decisions in design addressing the collective and is subject to the rules of an external organization (such as FINRA). Thus, there are several points of potential disconnect between the fraud and the intent of the COO. A study using COOs as participants would add value by understanding how these circumstances influence their intent and decisions.

Further, as literature suggests that arbitrators (Zoltowski, 2007) and auditors (Flanagan & Clarke, 2007) both tend to follow guidelines, I wonder if the guidelines may be contributing to unintended consequences. Despite the desire for retribution, these guidelines may limit punishment to amounts as suggested. Because the guidelines appear
to have influenced the ranges of penalties suggested by the participants, this effect should be further investigated by increasing and decreasing the amount of damage done in the situation. Retesting will allow seeing what effect this change has on the decision to penalize the individual broker. Is there a point at which the damage will be severe enough that the penalties will approach or exceed such damage? Conversely, is the guideline effect so strong, that even with high damages, participants refuse to exceed the recommended range or continue to fine a small fraction of such damage? These questions deserve answers and research can help to learn the effect guidelines might have on such decisions. Additionally, given the significant impact of each of the factors on the decision, it would be useful for those in auditing to consider if similar factors impact the final opinion recommendation of the auditor during an examination. The data suggest regulators prefer to use warnings and fines to penalize the type of fraud presented here, but job loss is a real possibility. Further research can discover how different types of fraud influences these punishment decisions.

Practitioners should note that guidelines, while useful in ensuring consistency and fairness, might actually be promoting fraud empowering behavior by utilizing set limits as opposed to recommended ranges as a percent of damages. Even though it clear that decision makers can set penalties outside the guidelines, only 1 of the 348 participants sampled chose to do so. In financial statement audit practice, litigation tends to involve large monetary awards, as the damage of Enron, WorldCom, Bernie Madoff and similar situations tends to affect thousands of people. However, regulatory auditing tends to focus on the impact of specific controls failures within a firm and attempts to do so prior to the destruction of the system. Thus, the amount of the monetary penalties imposed tend
to differ as the crime may or may not be material to a financial statement. Nevertheless, it may be beneficial to consider a reexamination of the guidelines. Basing guidelines on a percentage of damages may help decision makers feel less constrained to stay within the set ranges given.

Additionally, it may be useful to pair less experienced decision makers with more experienced ones to obtain a more complete view of an appropriate sanction. The data suggest that newer decision makers may try to stay true to training, not allowing the suggestion of criminality to influence their decisions. Yet, the suggestions influence experienced decision makers. This suggests adjudicators may become jaded over time, and prejudice may increase over time. Once a person has been through a long and repetitive process of selecting punishment, even the suggestion of a history appears to be treated as though there is a history. Further, while an interactive effect was not present for those with greater than twenty years, it was present for those newer. By pairing newer decision makers with more experienced ones, I believe that the newer people will remind the experienced ones of the importance of impartiality, while benefiting from nuances in determination that only come over time.

Finally, I conclude that the compliance community may well be empowering fraud without intending to do so. By issuing relatively meager fines, even with the noble dual intentions of fairness and justice in mind, the signal the trading community has received is that the punishment does not fit the crime. As fraud is on the rise worldwide, this is a troubling signal to send. Regulators would be wise to attend to these perception gaps so that more fair and stable markets will result over time.
CHAPTER EIGHT: INTEGRATED FINDINGS AND DISCUSSION

The pervasiveness of fraud in the professional investing community despite the enormous resources spent to detect, deter, and reduce fraud inspires this dissertation. Three studies investigate: (1) how fraud works, how fraud is influenced, and the perceptions of fraud in the professional investing and regulatory community, (2) how money, ethics, and detection threat influence fraud decision making in a sympathetic environment, and (3) how money, sympathy, and criminality influence fraud punishment. Underlying these investigations is the question: is it possible that a strong, healthy regulatory environment fraud enables and even empowers such?

To answer these questions, this dissertation uses a sequential mixed methods design, within the greater framework of fraud and punishment theory, applying organizational culture, motivation, moral sentiments, deterrence, and judgment theories within the frameworks of each. This allows findings that are emergent beyond existing research, extensions of existing research, and multi-faceted, investigating the behavior of both fraud and fraud punishment decisions by individual participants.

The data suggest that sympathetic circumstance is a powerful agent of fraud, and serves to extend the knowledge of how rationalization through sympathy influences fraud. Healthy organizations with a strong tone at the top, generous compensation packages, and strong audit functions may actually enable frauds deemed as “ethical”. Similarly, given a fraudster who acts due to a circumstance seen as sympathetic, regulators are reluctant to punish. Thus, empathy enables and empowers fraud. This creates extensions of rationalization worthy of further explanation inside the Fraud
Triangle, and raises questions regarding its specific usefulness in control design. This chapter continues with a discussion of findings that matter to theory and practice.

**Contributions to Theory**

**Sympathy Matters**

Sympathy, an emotion associated with positive intrinsic motivation derived from empathetic response, is important as a potential motivator for action on behalf of the fraudster. This finding extends the rationalization portion of the Fraud Triangle and can supply motivation beyond financial pressure, and beyond even most “normal” forms of pressure studied in relation to fraud. Further, although empathy is known to influence financial statement auditor judgment (Ng and Han, 2003), the data indicates it influences the punishment decision as well. Therefore, a two-sided analysis of the data suggests that both fraudsters and those charged with their punishment may share one frame of common reference in motivating the decision to commit fraud as well as penalize it.

Extending theory further still, and reversing the direction, monetary rewards for the fraudster –clearly identified as a motivator for fraud in all salient literature- also motivated the participants. Of interest, however, is the lack of this inclusion as a common motivator for action across models of punishment, deterrence, and detection. If monetary rewards for the fraudster is so important in motivating fraud action, it seems likely – confirmed by the data- that those charged with designing controls to prevent, deter, and prosecute action- will also be concerned by the presence of money the fraudster receives. While professional guidance (AICPA, 2002) does continually focus on monetary rewards as a motivator for the fraudster, accounting theory lacks its specific inclusion as a motivator for penalization due to penalties being outside the scope of a financial
statement audit. The commonality of monetary rewards both influences the fraudster and influences the penalty decisions of regulators. Thus, it seems likely that either financial pressure or extrinsic motivation might provide a common point across action and deterrence to describe fraud from its inception to outcome.

Research Design Matters

The use of mixed methods elicits richer data than qualitative or quantitative methods could alone. In particular, by learning the discrepancy in how potential fraudsters and regulators view current punishment decisions in regards to retribution, this dissertation is able empirically clarifies a subject that no single method alone would have discovered and resolved. Additionally, comparing how potential fraudsters act with the decisions regulators make in enforcement allows for a more comprehensive model of fraud. Factors that influence both populations can extend or perhaps replace the portions of theory in the meta-model. For example, expansion of controls theory focused on prevention and deterrence can include retribution, given its prevalence in literature. Extending this reasoning, if motivation is common to retribution, people will attempt to not only prevent and deter crime, but also to make punishments that fit the crime. Establishing factors common to this retribution model will help those charged with designing controls to think deeper about the ramifications of their selections for prevention and deterrence. As the study indicates, having strong preventive controls might unintentionally cause the opposite effect to happen in the workplace when sympathy arises, for example. By using qualitative data combined with quantitative validation, researchers can better triangulate phenomena such as these, integrating their findings into models that more precisely describe how and why behavior occurs.
Sample Population Matters

By comparing the specific decisions of the professional investing and regulatory participants this research adds an additional dimension to integrating both positions. Historically, fraud examination comes from the perspective of the perpetrator. Examining the decisions of the regulator as well allows the construction of new theory. Specifically, this construction will come from better understanding the perception of punishment from would be fraudsters as well as punishment selection from regulators. Particular to the punishment theory (retribution and deterrence) it is important to note that regulators did not penalize proportionate to the crime. This suggests that the general population will not hold the perception of retribution. This perception decreases the effectiveness of future deterrence efforts and increases the probability fraud will occur. Additionally, the data suggest that the population charged with making the decision to enter the trades or not (referred to Enactors in Study II), and thus closest to the fraud decision, are not significantly impacted by a strong ethical culture or the threat of detection. This may be the direct result of the perception that the punishment does not fit the crime. Therefore, even if detected, a fraudster may perceive that they will be okay. Thus, aspects of the fraud meta-model related to pressure and detection begin to break down because of the failure to apply retribution fairly.

Rationalization Timing Matters

The point at which rationalization occurs may help explain the decisions of the fraudsters and help in separately designing controls for each. In each experimental condition this dissertation presents, the decision maker viewed an element that would allow rationalization to occur prior to making the decision. In such a manner, theory can
be separated based on rationalization occurring prior to the decision (as presented here) and after the decision (as assumed in much of accounting literature). This is of particular importance to the model of the fraud predator, for whom literature currently suggests rationalization is not present (Dorminey, 2012). Data from Study I indicates that rationalization is present for groups actively seeking fraud, but this rationalization either appears one time, prior to the act, or multiple times prior to the act. In each case, the rationalization justifies preying on control failures. Since actions regarding the fraud predator only exist in theory to this point, this is a key issue to note.

Thus, this research addresses many of the research gaps identified earlier. Table 32 below presents a summary of many of the above scholarly contributions.

**TABLE 32: Scholarly Contributions**

<table>
<thead>
<tr>
<th>Type of Knowledge</th>
<th>Gap</th>
<th>Source of Gap</th>
<th>Gap Filled</th>
<th>Where Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarly</td>
<td>Fraud Triangle (pressure) needs extension; Meta-Model of fraud needs extension</td>
<td>Fraud Triangle (Cressey, 1953; Morales, 2014); Meta-Model (Dorminey, 2012)</td>
<td>Positive intrinsic motivation -&gt; Decision to commit fraud</td>
<td>Study II</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Auditor judgment lacking punishment decisions</td>
<td>Auditor Judgment (Ng and Han, 2003); Empathy -&gt; Judgment (Reffett, et al, 2012)</td>
<td>Empathy -&gt; Auditor punishment</td>
<td>Study III</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Paucity of mixed methods analysis</td>
<td>Davilla and Foster, 2007; Grafton, 2011; Graham, 2005 most prominent example</td>
<td>Mixed methods utilized</td>
<td>Dissertation</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Sample - Little research in professional trading, market compliance population</td>
<td>Scant literature available: Haigh and List, 2005; Abbink and Rockenbach, 2006</td>
<td>Professional trading, regulatory compliance populations sampled</td>
<td>Dissertation</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Rationalization - implied timing</td>
<td>Fraud Triangle (Cressey, 1953); Meta-Model (Dorminey, 2012)</td>
<td>Rationalization before decision</td>
<td>Dissertation</td>
</tr>
<tr>
<td>Scholarly</td>
<td>Fraud Predator = no rationalization</td>
<td>Fraud Predator (Dorminey, 2012)</td>
<td>Fraud predators rationalize before decision at least once</td>
<td>Dissertation</td>
</tr>
</tbody>
</table>
Contributions to Practice

Large Firm Influence Matters

Size matters in the financial marketplace. Whether it be through the factors that influence fraud being perceived differently in those at large and small firms (Study II), or in identifying problems with how exchanges conduct business and governance (Study I), large firm influence is perceived as currently harmful to the marketplace. Two key practices, identified in Study I, contribute largely to this problem:

When exchanges pay large institutions for orders, professional investors perceive a conflict of interest between customers, exchanges, regulators, and institutions. Perception is important inside this community. This practice is non-transparent, as a customer is generally unaware of how and why the order is routed. Thus, those charged with designing controls would be wise to consider the implications of continuing to allow the practice in its current form. While literature does not indicate a large awareness on behalf of non-professional investors, it was overwhelmingly identified as a problem by the professional investors in Study I. Should an exchange or exchange member be publically caught for abusing a practice related to these payments, a scandal could ensue that would hurt investor confidence in the markets. Thus, payment for order flow is practice that is important and deserving of attention. By often having large majorities represented on the boards of stock exchanges, regulatory agencies, and in key positions in government, the perception of an unfair playing field exists. This perception exists regardless of whether large firms actually are influencing the creation and enforcement of rules. This causes the perception that deterrence and detection might be selective, further weakening confidence in the markets, and thus deserving of attention.
Deterrence, Detection, and Controls Matter

Literature and data from my own study agree that detection and deterrence are not working as intended in the marketplace. Given these are the two keys to having proper controls for an organization, this suggestion should trouble practitioners. Using fraud guidance suggested by professional organizations and supplying guidelines to those charged with enforcement from the regulatory agencies helps direct those charged with detection and deterrence. Yet, this guidance may be having the unintended effect of stifling judgment. Practice is strong in suggesting that judgment should rule the decisions. However, the data suggest that regulators may be using the upper end of guidelines as maximums. Further, regulators tend to penalize near the lowest end of the suggested guidelines. This results in decisions by enforcement that are contrary to those who sit on boards, and introduces conflict that should not exist. This conflict exists by having those who enforce the rules doing so differently than expected from those who design and oversee the rules. Thus, guidance and controls matter greatly and the detection and deterrence procedures related to them require examination.

Systemic Fraud Matters

Lastly, systemic fraud matters. In an environment where fraud is so pervasive it the perception is that it is common practice and even necessary to maintain one’s position at times, the potential for the worst types of fraud thrives. Due to the systemic fraud located in the qualitative study, coercion is almost not required as teams can attack controls without fear of repercussion and increased difficulty in detection. As noted by one of many fraudsters, “when they hired me, they told me that I would put out a report that was just signed off on by me, but sometimes teams of people would be responsible
for things and I’d be a part of a larger team. So, the boss used that line and kind of cherry picked the parts that were good from each of our reports and put it together. It was a bit dismaying, but I thought, “Okay. The firm has an obligation to its clients. It’s got a certain obligation –” in this case the client is this company that we do a lot of business for, and I’m not going to involve myself in that. I thought about it and I said, “You know, it’s not something I’m going to lose my job over. It’s not my decision to make. I’m just going to keep doing my job and they do theirs.” Likewise, predators move freely from firm to firm, implementing their schemes, collecting their rewards, and moving on without fear: “one of the dirty secrets of the business is that most brokers, if they really wanna make a lot of money tend to move every three to five years depending on how long of a contract they've signed because the industry has what in some respect is a bit of a death wish where they're always looking to hire producing brokers, and right now I mean they're paying crazy money. They'll pay like two times what a broker's commission revenue has been on average for the past couple of years. So if somebody's generating let's say $500,000 a year in commissions, they'll pay them a million, sometimes a million and a quarter dollars upfront.” As a result, even though many strong ethical firms and individuals exist in such a system, the tendency to corrupt is high and fraud can run rampant. Although portions of the system seem nearly out of the ability to control, many others remain ethical in practice, suggesting hope for the community overall. By addressing both the system and the specific gaps, controls designers might find their efforts strengthened. These gaps, identified throughout the course of this dissertation and above, matter. Table 33 below presents a summary of many of the above contributions and a high-level overview of the associated solution specific to the
The next chapter will conclude the paper with the limitations of the study, implications for research, and solutions for practice.

**TABLE 33: Practitioner Contributions**

<table>
<thead>
<tr>
<th>Type of Knowledge</th>
<th>Gap</th>
<th>Source of Gap</th>
<th>Gap Filled</th>
<th>Where Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practitioner</td>
<td>Pay for order flow</td>
<td>U.S. Financial Exchanges</td>
<td>Eliminate payment for orders</td>
<td>Study I</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Exchange Governance</td>
<td>CME, FINRA, NYSE, NASD</td>
<td>Reduce former and current member control &lt; 50%</td>
<td>Study I</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Positive intrinsic motivation -&gt; fraud</td>
<td>AICPA, 1997</td>
<td>Positive intrinsic motivation -&gt; fraud</td>
<td>Study II</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Deterrence is not working</td>
<td>MacDonald, 2012</td>
<td>Deter fraud by firm size</td>
<td>Study II</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Detection is not working</td>
<td>Patterson, 2013</td>
<td>Detect fraud by job type</td>
<td>Study II</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Sanctions guidance</td>
<td>CBOE, 2015; CME, 2009; FINRA, 2015b; NYSE 2010</td>
<td>Change guidelines from hard numbers to percentages (partially filled)</td>
<td>Study III</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Controls not enforced as Boards intend</td>
<td>Internal Controls</td>
<td>Independent review of situation</td>
<td>Study III</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Systemic Fraud</td>
<td>Financial Marketplace</td>
<td>Focus on control design, not individual rules</td>
<td>Dissertation</td>
</tr>
</tbody>
</table>
CHAPTER NINE: LIMITATIONS AND CONCLUSION

Limitations

The results of this study should be viewed in light of its limitations, the primary being this is a non-random, mixed methods investigation. Purposeful selection and seeding of the participants from a pool personally known to me may have influenced the results. Additionally, I took precautions to measure or eliminate bias. Nevertheless, the data contain sources of self-selection bias beyond which I can test. The qualitative sample, while considered adequate for grounded theory, is small (n=31) and concentrated in the United States. Similarly, the quantitative sample is primarily from the United States. International perspectives may produce different results. While the experimental research is able to manipulate factors within a given scenario, the situations are hypothetical. The influence of the factors studied can never truly be replicated whether in person or in online simulation. Additionally, motivations may exist beyond the factors I study. Further research should examine these factors. Lastly, I made purposeful effort to minimize researcher bias. However, I acknowledge that my 20 years of experience as a professional investor may have influenced the data collection, interpretation, and analysis. Consequently, the results may not be representative of the points of view of all professional investors and regulators.

Future Research Implications and Remarks

While this dissertation addresses several gaps in literature, several more open because of the process. An examination of selected emergent gaps follows below.
Motivation as Better Explaining Pressure

Just as sympathetic circumstances influence fraud decisions, other emotions and motivation types likely exist beyond even the expanded definition of pressure used in the literature. Researchers would be wise to use psychological literature as a base, subdividing pressure types into intrinsic and extrinsic factors and testing the influence of each on fraud. A great many more types of fraudsters likely exist beyond those currently theorized, and an understanding of their specific motivations may allow controls designers in those communities to more closely align the controls with behavior. Additionally, knowing the prevalent motivations of the community examined will allow detection focused on queries relating to this motivation, and deterrence designed contrary to the motivation type.

Motivation as a Common Point of Reference for Fraudsters and Those Who Charged with Prevention and Punishment

The current meta-model of fraud (Dorminey, 2012) suggests little in common factors shared between those who commit fraud and those charged with its prevention or prosecution. Motivation, as a general category, and intrinsic motivation more specifically, likely share common points of reference between both groups. Some forms of motivation (i.e. extrinsic - money received by the fraudster) increase the chance of action on behalf of the fraudster and increasing the desire to prevent and catch by those in charge of controls. Yet other types of motivation (i.e. intrinsic – empathy) may reduce the tendency to act in both populations. Thus, further research is required to investigate behavior. The current scholarly understanding of fraud theory and punishment may require extension or
rethinking as scholars design models that more accurately reflect influences shared in both communities.

Mixed Methods are Useful in Accounting and Fraud

As mentioned previously (Grafton, 2011) there is a serious lack of mixed methods research in accounting. Exacerbating the situation, the overwhelming majority of research focuses on quantitative methods. Thus, research that locates real world practitioner problems may suffer from a lack of information. This can cause delays in studying phenomena needed to influence practice, or worse still, cause theory building without regard to significant influences within theory. The use of mixed methods can help bridge this gap by relying on theory, but investigating multiple perspectives and/or emergent influences to develop stronger models than accounting and fraud researchers employ currently. Future, established researchers would serve the field well to utilize additional methodologies and be open to them as editors and reviewers.

Future Research Needed Using Professional Investors and Regulatory Examiners

The professional investing community provides an exciting sample opportunity for future research. By providing a system in which fraud thrives, participants are likely to be more familiar with fraud and may be less afraid to provide answers regarding fraud, reducing bias. While this idea should be investigated, by examining a population immersed in fraud, factors beyond those studied in this research are likely to emerge that are generalizable to other populations. Additionally, given that regulators design and enforce controls, it is baffling that more studies do not attempt to use them as participants in their research. While using students as proxies is noble, there are likely to be nuances of practice that a skilled researcher will access by using those with experience in their
field. Future research on the regulatory community will help theory builders further understand control design theory, and practitioners to enhance best practices.

Rationalization Timing

Until now, the assumption is that rationalization happened after the fact, not at all, receives no attention regarding the timing of when it occurs. The data suggest, however, that understanding when rationalization occurs could provide a key to the Fraud Triangle. For example, the participants in this dissertation suggest that rationalization happens, but it happens once: just before the first fraud incidence. Sometimes this rationalization even becomes a justification to become a predator. This notion should be empirically investigated so that theory can be designed that correctly models behavior. Knowing whether rationalization is used as a justification to commit fraud (rationalize before the fact) or as an explanation to rectify the action taken with desired behavior (after the fact), may help researchers to design fraud theory differently than presented today. This process helps to generate new theory or to extend existing understanding.

Specific Solutions for Practice

Reduce Large Firm Influence

Currently, exchanges pay large institutions for sending orders to the exchange. While it is possible that this practice happens without undue influence, it creates problems for at least two reasons. The first is that this practice can hurt the customer, who might have had an order traded on a more active exchange, but whose order might not trade on another, paying exchange. Second, because market participants perceive the underlying motivation of the exchange has less focus on promoting a level playing field and has more focus on one primarily focused on profit, investors might perceive a system
biased against them. This upsets the underlying principles of fairness that created the exchanges.

With over three quarters of the board of governors of FINRA comprised of large firm members or ex-members, and multiple key governmental positions charged with regulating markets filled by ex-members of large professional investing institutions, it is not surprising that concern regarding conflicts of interest continue (http://wallstreetonparade.com/2014/07/goldman-sachs-very-fishy-dark-pool-settlement-with-finra/). This problem is pervasive and as it affects government, exchanges, and those charged with designing and enforcing regulatory controls, likely enhances the systemic fraud that exists. A solution to alleviate this problem would be to reduce large firm membership and influence to less than 50%. In conjunction with this approach, non-partisan regulatory examiners could serve two-year terms at large firms while representing their interests in regulatory matters. In such a manner, investigators receive exposure to the firms and represent dual viewpoints to both the firm and regulators. Short terms will help mitigate the systemic effect of fraud potentially corrupting their judgment.

Alternatively, the construction of the FASB board offers another approach that may reduce the appearance of conflict. FASB requires that members sever their connections to industry before joining the board. Additionally, FASB boards are highly diverse in their construction and interests. Terms last five years with one renewal available. However, due to the nature of systemic fraud, the ability to truly severe ties is difficult in the professional trading community. Additionally, potential terms of 10 years, while useful for continuity, may prove too tempting given the power the board positions
hold in the regulatory community. Thus, I submit that a shorter term and a maximum
limit for current and former members of large (n>100) institutions might produce a
stronger approach to board construction.

Detection, Deterrence, and Controls

Because of the importance detection and deterrence play in allowing controls to
function as designed, several recommendations to improve practice related to these two
functions follow. First, the data suggest those at small (<10) firms are influenced by the
combination of monetary rewards and detection threat. Hence, deterrence efforts focused
on increasing fines and associated publicity of such in the small firm community will
help increase the perception of deterrence effectiveness at small firms. One way to do this
is to announce specific enforcement goals focused on unethical behavior at firms
(specific targets are customarily identified each year by regulators). Next, implement
strong monetary penalization of small firms caught. Follow with a public relations
campaign that ensures the community is aware of the change.

Second, since the combination of detection and ethical culture deters those at
large firms, regulators – still operating under the previously announced focus on
unethical behavior - could target large firms in two stages. Stage one would be to
temporarily suspend large firms found to have poor tones are the top. This determination
would be in conjunctions with examinations focused on Anti-Money Laundering and
Regulatory Compliance documentation in the areas of ethics. Additionally, normal
inquiry in an examination attempts to determine the tone established by management.
Field examiners should spend extra time on this portion of the examination. Firms with
poor tone may contain large amounts of systemic fraud and the focus of the trading
community is on continued operations. Hence, suspending operations even for a day would send a strong message that regulators will not tolerate unethical organizational cultures.

Stage two uses mass targeting – one at a time - within each organization established to have a poor tone. In this manner, concentrated efforts can uncover fraud at one large firm at a time, instead of locating a few frauds spread across industries. By focusing on one particular type of control weakness each year, regulators could prosecute large quantities of bad behavior. Even if the fines are not as large as they could be, the message transmitted is that detection is working and unethical behavior does not pay.

For those charged with enforcement, the guidelines need rethought to remove specific ranges. By suggesting a specific dollar range of penalties, those who enforce the rules are confining their decisions to the range suggested. I suspect (but as noted above further research is required) that even when the fraud moves to egregious levels, the recommended penalty may exceed the suggested thresholds. Yet, it will likely be far lower than would be suggested without a set range present. A stronger approach would be to set ranges based on a percentage of estimated damages. That way if those who design and oversee controls intend for treble damages to occur, as was stated in Study I, suggested penalties could be set to be 300% of damages. However, if regulators seek lessor financial penalties, lower percentages can be set. By doing so, a measure of retribution and perceived fairness might be slowly re-established, and detection and deterrence efforts might have more influence than is the situation now.
Systemic Fraud

Lastly, because a special type of fraud - systemic fraud - appears to exist in several firms and subcultures of the professional investing community, special care needs to be given to controls designs as opposed to individual rules. The professional investing community already identified problems in the quantity of rules present. Thus, creating controls that are principles based, but heavily enforced and publicized may slowly turn the tide. Detection will increase by focusing efforts on specific areas of control weakness. Then place the majority of regulatory personnel into a specific firm or culture thought to contain weaknesses related to this area. Once fraud detection transpires, if enforcement is aggressive in punishment and publication of such punishment, word will spread through the system. However, if these enforcements only occur every few years the perception will grow that published enforcement targets for the upcoming year are the only controls about which to worry. Thus, in some years the actual enforcement focus should likely be different from that published.

Additionally, it is interesting to note the renewed focus and enforcement action on auditor independence by joint efforts of the PCAOB and the SEC (http://www.sutherland.com/NewsCommentary/Legal-Alerts/169036/Legal-Alert-SEC-and-PCAOB-Address-Independence-Requirements-in-Audits-Related-to-Broker-Dealers-Financial-Statements). Great attention is paid to the requirements for independence when producing financial statements, yet as noted earlier, the independence internally is corrupted at multiple levels within the financial regulatory process. The SEC and PCAOB serve similar functions for their constituents in that they make the rules for the audit, they inspect to ensure the rules are followed, and they punish those who do not.
Similarly, auditors are required to be proficient, written procedures are followed to inspect those being audited, and an auditor gives an opinion on internal controls which may result in action. These procedures often result in checklists corresponding to the examination performed. The PCAOB allows for the use of non-practicing CPAs, and even mandates that the PCAOB chairman not have practiced for five years if the chairman was a CPA. However, the definition of practice remains subject to debate, and other defined roles for retirees are less clear, while the SEC and FINRA do not address the issue. Given that both fields appear to be failing to reduce fraud, perhaps the suggestions of the practitioners from the qualitative study would be of use. Namely, retirees should work with regulatory auditors and adjudicators in detecting current fraud and designing both standards and controls which would be less intrusive but more effective in deterrence efforts.

By implementing the above suggestions, scholars and practitioners will have much to study and develop. As terrible as fraud is, the current environment provides a situation that is not likely to get boring soon. The increased participation of researchers, regulators, and professional investors would be welcome in combating the problem.

**Closing Remarks**

As a research topic, fraud provides an exciting opportunity. After having remained largely dormant for 60 years (with brief periods of incremental theorization), the field is alive and flourishing. It even received enough attention to fuel the creation of a new division in the American Accounting Association: Forensic and Investigative Accounting. Although the Fraud Triangle provides an excellent resource for teaching, brainstorming, and theory building, its limitations relating to design specific to
populations and fraudster types are beginning to show. Even with all the current activity in the field, I foresee several lifetimes’ worth of research ahead before practice and scholarship can close the gap across disciplines. The qualitative data suggests the true nature of the problem. Fraud continues to evolve. Whether it is through the transactions happening in nanoseconds through preprogrammed high frequency trading, or the collusion of multiple firms in manipulating interest rates, fraud is ever changing. Given the increased prevalence and damage fraud produces, I hope more join the fight. Lastly, thank you for either reading this far (or skipping to this part). If you are reading this, it likely means you made (or will make) a difference in my life and I cannot thank you enough for this. This journey has been memorable. While I am thrilled beyond words to complete the process (hopefully), I am also thrilled beyond words to have to do it again. I look forward to the many challenges ahead and hope my work can meaningfully bridge practice and scholarship.
REFERENCES


