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THE EXPANSION OF FINANCIAL REGULATION TO INCLUDE HUMANITARIAN ISSUES: AN EXAMINATION OF THE DEVELOPMENT OF CONFLICT MINERAL REPORTING REQUIREMENTS USING ACTOR-NETWORK THEORY

by

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A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Kenneth G. Dixon School of Accounting in the College of Business Administration at the University of Central Florida

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Major Professor: Robin Roberts

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ABSTRACT

This study conceptually and empirically examines the establishment of certain financial regulation that resulted from the Global Financial Crisis (GFC) of 2007-2009. The crisis led to the establishment of the most extensive change in the regulation of the financial sector since the Great Depression (Green, 2011). During the forty years leading up to the crisis, the United States had engaged in a process of increased deregulation to promote greater efficiency (Yaron & Hendershott, 1998). The belief that reduced regulation would improve efficiency and foster innovation became the mantra of many economic advisers to policy setters, to the point that as the regulations were relaxed there tended to be little fanfare or outrage to changes in regulation policy. This is true with both republican and democrat administrations throughout this period. Since 2000, there have been two major legislative actions that can be viewed as antithetical to the principle of deregulation, the first being Sarbanes-Oxley, which occurred as a result of Enron and other accounting scandals. The second, known as the Dodd-Frank Act, resulted in legislation that bailed out various sectors of the economy and fundamentally changed the structure of financial regulation in the United States.

Specifically, I examine one part of this regulation related to corporate disclosure of activities that deal with conflict minerals. Within the political debates over regulation of corporate disclosure, an interest in corporate activities in war-torn areas emerged. Ultimately, regulation was adopted that required corporations to disclose operative activities that included mining of minerals in countries affected by political conflict. My research explicates using an actor-network approach, how and why activities in the

U.S. political arena led to mandated disclosure of corporate activities dealing with the mining of local mineral deposits eventually referred to as "conflict minerals."

My findings show that a confluence of unlikely parties found common ground in their assessment of the issues surrounding the mining of conflict minerals and worked together towards the adoption of disclosure regulation that lead to more transparency in corporate reporting of their involvement in commercializing mineral deposits. Margaret Tennant has inspired me all of the way

Provided me insight, and led me to pray

Encouraged my learning of all that I know

To value understanding more than pretension to show

Perseverance her legacy for me to translate

That guided me here to this moment and fate

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With any significant endeavor there are many people involved in its successful completion. This is definitely true with this dissertation as well. I want to thank my beautiful wife, Lisa, and my loving family, who endured this process with me.

This adventure would not have been possible without Dr. Mary Ann Guidice, my neurologist and friend that helped with my recovery from a traumatic brain injury. Without her unrelenting commitment to my early care, I never would have been able to return to my academic pursuits.

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The tireless support of the doctoral faculty at UCF helped immensely as I worked to complete my program. I could not ask for a better advisor than Robin Roberts. His long talks and deep insights have served to make me a better researcher and hopefully a better person. Sean Robb has seen me at my highest and lowest points, and has always been an unwavering voice of support during this journey. Steve Sutton and Vicky Arnold have always challenged me to improve my writing, so that my research reflects the best that I can achieve. Sherron Roberts has helped me reach the end, when things seemed as though they were flying apart, she provided a calm to the storm.

Finally, I would like to thank Jesse Dillard. His provocative questions have led me to dig deeper and to refine my understanding of Latour, Actor-Network Theory, and life.

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1 INTRODUCTION & BACKGROUND

This study conceptually and empirically examines one key aspect of the establishment of the financial regulation that resulted from the Global Financial Crisis (GFC) of 2007-2009. The crisis led to the establishment of some of the most extensive changes in the regulation of the financial sector since the Great Depression (Green, 2011). During the forty years leading up to the crisis, the United States had engaged in a process of increased deregulation to promote greater efficiency (Yaron & Hendershott, 1998). The belief that reduced regulation would improve efficiency and foster innovation became the mantra of many economic advisers to policy setters, to the point that as the regulations were relaxed there tended to be little fanfare or outrage to changes in regulation policy. This is true with both republican and democrat administrations throughout this period. Since 2000, there have been two major legislative actions that can be viewed as antithetical to the principle of deregulation, the first being Sarbanes-Oxley, which occurred as a result of Enron and other accounting scandals. The second resulted in legislation that bailed out various sectors of the economy and fundamentally changed the structure of financial regulation in the United States.

The sweeping changes to the financial industry are the result of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank). Like the regulatory reforms of the 1930's, Dodd-Frank was enacted in response to systemic market failure, which caused a fundamental shift in the theoretical approach to regulating the financial industry. A variety of factors, including accounting standards, have been explored as contributing factors to the crisis. This eight hundred and forty nine page law establishes a framework for regulating the financial sector. In Addition, Dodd-Frank requires that

additional regulations be implemented to fulfill the mission of the law. To date, over thirteen thousand pages of regulation have been finalized to clarify the Act, and another nine thousand pages have been proposed (Davis & Polk, 2015).

The law and accompanying regulations produce major implications to accounting praxis (how accounting is done), as well as to the state of the profession (Brennan & Kirwan, 2015). The change in financial regulation theory and implementation that has resulted from the GFC is of specific importance to accounting praxis, as well as, to the profession as a whole. Like the events that led to SOX being passed, the legislation that resulted from the GFC has further constrained the autonomy of the profession, through increased authority granted to the PCAOB, and other government agencies. Increased reporting requirements have also been established in the wake of the crisis. In the early months of the crisis, critics of fair value accounting raised concerns of the contributory influence of current accounting standards to the depth and magnitude of the financial difficulties (Whalen, 2008). Because of these and other accounting concerns, the changes in the regulation of the financial sector presents a potentially rich environment to explore how relevant actors enlist support to affect changes in legislative policies that impact both the sector and the accounting profession. This dissertation is concerned specifically with one aspect of Dodd-Frank that addressed corporate accountability and transparency regarding U.S. commercial mining activities in Africa. The concerns raised and the regulations eventually adopted represent a unique set of political influences that resulted in broad oversight of U.S. mining interests in Africa.

In order to analyze these issues embedded in Dodd-Frank, I employed the theoretical work of Bruno Latour. Specifically, I used Latour's Actor-Network Theory

(ANT), and other works utilizing ANT, as the driving theoretical force for my empirical analysis. ANT has been used in numerous qualitative studies across a wide array of disciplines. It has been used in over two hundred accounting research studies. (Justesen & Mouritsen, 2011) My application of ANT represents one of its more comprehensive applications. In addition to my empirical contribution by the study of Dodd-Frank, my thesis contributes to the ongoing interpretation of ANT as it applies business and accounting research.

Chapter 1 provides an introduction and background to the regulatory history of financial regulation and its evolution over time. Also, chapter 1 elucidates the events of the global financial crisis. The theoretical foundations, literature review and research questions are presented in chapter II. Chapter III addresses the research methods used in this research. The results are analyzed in Chapter IV. The final chapter discusses conclusions drawn from the research, policy implications of the findings, limitations of the study, and finally, suggests potential future research area.

1.1 Objectives of the Study

The first objective of this study is to review and analyze the relevant prior literature associated with the various aspects of the study. The first area of literature review is dedicated to Actor-Network Theory (ANT) and its place in accounting research. ANT has been employed in a variety of accounting research, but typically has employed a methodology based on the early writings of Latour (1987). This study utilizes the methodology advocated in *Reassembling the Social* (Latour, 2005). Also, this study uses ANT to analyze political policy, which is less common in accounting research than in other disciplines. The second area of literature review considers the

prior accounting research that has employed ANT as a framework for analysis. The accounting literature in this area has typically employed ANT in a supporting role, along with other theories such as Foucault, or institutional theory.

The second objective is to employ ANT, in its current form, to changes in regulation theory and practice with regards to the financial sector, specifically related to the establishment of conflict mineral disclosure requirements in Dodd-Frank, as well as the accounting profession's interest in this regulation. The accounting profession was drawn into the debate at the onset of the GFC due to regulatory concerns over fair value accounting standards and the failure of auditors to recognize the risks present in the sector (Kothari and Lester, 2012). The profession's interests extended to other areas of concern as the legislation was established, including conflict mineral disclosure. The actors engaged in lobbying activities during the legislative phase of the Act and employed other methods in engagement subsequent to it passage, related to conflict minerals.

ANT is an accepted method of qualitative empirical research that has been cited over 100 times in major accounting journals. Also, Latour's writings have been cited over 200 times in published accounting research. However, employing ANT to policy issues represents only a small portion of its usage in accounting research. The study seeks to modernize the use of ANT based on *Reassembling the Social* (Latour, 2005) in accounting research and demonstrate how its methodology can be used to explain changes in policy.

The third objective is to add to the accounting lobbying literature by examining how congressional support is gained for financial regulation reform. Prior accounting public policy research has examined certain sociological factors, from the point of

view that Latour describes as sociology of the social, by examining specific social factors ability to predict legislative outcomes (Dwyer and Roberts, 2004; Thornburg and Roberts, 2008), whereas this study seeks to contribute to the literature through examining social factors through the lens of sociology of action (ANT).

The study's fourth objective is to demonstrate that ANT can be used as a standalone theory in accounting, as it is often used in other disciplines. In the field of medical research for example, ANT has been used to examine the adoption of nonsmoking area regulations for public areas (Young, Borland and Coghill, 2010).

1.2 Justification for the Study

The focus of the study is on understanding how the actors most central in managing the GFC built consensus for a new regulatory model, which allowed space for new disclosure requirements such as those related to conflict minerals. This focus addresses both theoretical and applied questions that appear interesting and relevant in understanding how the various actors affected the regulation. Two major pieces of legislation resulted from the crisis. The first is the Emergency Economic Stabilization Act of 2008, which established the Troubled Asset Relief Program (TARP). The second legislative act is the Dodd-Frank Wall Street Reform Act (Dodd-Frank). The former law provided funding to ensure that the financial sector did not collapse (US Treasury). The latter, Dodd-Frank, contains eight hundred and forty nine pages of law that has led to over 22,000 pages of proposed and adopted regulation (Polk, 2015).

As such, not every aspect of the Act was examined. This study adds to the body of literature on accounting regulation, specifically from a policy perspective. It also adds to the accounting lobbying literature. Incremental contributions are also made to the

sociology literature through the application of social theories in a financial accounting setting.

This study seeks to investigate the process in which regulation is shaped and supported throughout the legislative process and support is built for its eventual passage. Paramount in this study is the role of the various accounting related actors in this process and the effectiveness of their contributions in shaping the resulting regulation, requiring conflict mineral disclosures.

1.3 Background

When performing an historical analysis such as the one undertaken here, placing the subject under study in its historical context is critical. Thus, the history of financial regulation since the great depression is crucial in understanding the context of the GFC. This is true because the political and economic forces at play during the 20th century demonstrate the ongoing struggle between actors who forward either a strong regulatory or free market approach to monitoring the financial sector of the economy.

A myriad of regulations were implemented following the 1929 market crash, many of which were designed to stabilize the economy and renew investor confidence. (Prins, 2014) The Glass-Steagall Act is one such piece of legislation that restricted services that could be offered by banks, as well as other financial institutions. Also, the Great Depression led to the growth and strengthening of the accounting profession and set the profession on its way to its golden age (Zeff, 2003; Huber 2013). It is with this in mind that I explore the history of financial regulation in the United States and provide an empirical background for my thesis.

1.3.1 1913 The Federal Reserve Board established

The history of the Federal Reserve Board (FRB) begins with the banking crisis of 1907. The public accounting profession was a scant twenty years old at this time and certified public accountants had only been granting licenses for a decade by the time of this banking crisis. (Carey, 1969; Huber 2013; Zeff, 2003) Much like the 2007 GFC, this event was caused by a bubble, followed by a bank being allowed to fail, followed by a massive infusion of capital. In the 1907 scenario, J.P. Morgan provided the resources to the market (however twenty five million dollars in fact had actually been deposited by the Treasury Secretary Cortelyou) (Tallman and Moen, 1990). The end of the Crisis heralded Morgan, in the press, as a savior. (Hansen, 2014) Questions still remain regarding the accuracy of those claims in light of how well his firm benefitted from the crisis. In any event, top politicians, as well as the public grew concerned with the power wielded by the "money trusts" and discussions began in congress regarding the establishment of a central bank system modeled after Europe's system. For example, Senator Nelson Aldrich of Rhode Island made several trips to Europe to learn about their central banking structure (Wicker, 2005).

In late 1910, Senator Aldrich met secretively with a small group of leading bankers for what has been dubbed the "hunting trip" on Jekyll Island in Georgia. This meeting is where the Aldrich plan was created that became the foundation for the FRB. The Federal Reserve Act (FRA) (the final incarnation) would not become law until after the 1910 elections, which shifted the majority power in Washington from republican to democrat. While the ousted senator Aldrich disliked the FRA, many of the republicans still in office in 1913 found continuity between the two plans, even noting

that large portions of the text were verbatim matches. (Kolko, 2008) Prior to the FRA, J.P. Morgan had served as the lender of last resort, as demonstrated during the 1907 bank panic. The passage of the FRA represented a significant shift from the Adam Smith based Laissez-Faire policies that had to this time directed monetary policy. This shift reflects the political influence of the progressive movement (Bateman, 2005). Miller and O'Leary (1987) note that the progressive era can be viewed as period focused on the politics of efficiency. The passage of the FRA represents an instantiation of the concept that the economy needed expert government officials to protect the interests of citizens, because the citizens were no longer capable of achieving the level of expertise required to optimize efficiency (Miller, O'Leary, 1987). The FRA required that all national banks become members of the reserve system through the purchase of nontransferable stock. This section does address the details of all thirty-one sections of the law. However, it is important to note that the Federal Reserve is charged with the following tasks, as a result of the FRA: formulating and executing monetary policy, supervising and regulating depository institutions, providing an elastic currency, assisting the federal government's operations, and serving as the banker for the United States government (Place NY fed Cite here).

Over the years the role of the FRB has expanded through the enactment of additional regulations and laws. The FRA established the Fed as the bank of last resort and shifted that role away from the handful of bankers that had previously served that function. The passage of the FRA began the move to more regulation of the financial system through the establishment of a central banking system and ended the cyclical crisis that plagued the country during the prior century.

1913 also saw the passage of the sixteenth amendment, which allowed for the federal government to tax income. This change in policy is observed to be the hallmark of the birth of the accounting profession because of the increased demand for accountants it generated. (Carey; 1969) As will be demonstrated, increased regulation in the banking sector is frequently correlated with the growth of the importance of accountants and the market's reliance on their expertise.

1.3.2 1933 Glass-Steagall and the Formation of FDIC

Financial crises tend to produce additional regulation, and the regulation resulting from the Great Depression represents the prototypical case of this phenomenon (Veron, 2012; Komai and Richardson, 2011). While the FRA laid the ground work for the central banking system, it did little to prevent financial crises as can be seen by the Great Depression that began in 1929 and persisted throughout the thirties. In response to this, congress passed various legislation aimed at protecting investors and stabilizing the financial system. The Securities Act of 1933 required corporations to provide substantial information to potential investors, including audited financial statements. The Securities Exchange Act of 1934 required firms listed on the stock exchange to have annual audited financial statements (Carey, 1969; Chow, 1982). These two pieces of legislation changed both the demand for certified public accountants, as well as set the profession on the course to establish generally accepted accounting practices and generally accepted auditing standards (Zeff, 1966; Carey, 1969). Another key example of this type of fundamental shift in regulation is found in the Glass-Steagall Act of 1933 (GSA)—which is, in fact, a subset of the Banking Act of 1933. This law defined the parameters under which the banking industry could

operate and limited the breadth of services in which financial institutions could engage (Benston, 1989).

Senator Carter Glass had been attempting to address issues that he had identified as key to stabilizing the US banking system and had submitted various bills in the years prior to the GSA being adopted. The addition of Henry Steagall to the legislation led to the establishment of the GSA. Both men were democrats, and the fact that both chambers of congress and the white house were all controlled by the democratic party made it possible for significant banking reform to come to fruition. In mid-June of 1933 the act was signed, marking a significant change in the banking system (Wicker, 2005). According to its sponsors, the act was supposed "to provide a safer and more effective use of assets of banks, to regulate interbank control, to prevent the undue diversion of funds into speculative operations, and for other purposes (Hendrickson, 2001).

The GSA contained various provisions to protect the public and investors. The first provision was the creation of the Federal Deposit Insurance Corporation, which protected bank deposits up to a predetermined limit. The second key provision is that it established rules against banks being investment firms. Five provisions of the GSA enumerate these restrictions. Section 19 prevents federally chartered banks from buying or selling securities, except under very limited exceptions. Section 20 of the act disallowed bank affiliation with firms whose primary purpose was trading securities. Section 21 created the bright line that if a bank did trade securities it could not take deposits. And finally, section 32 disallowed officers and directors of banks from holding advisory positions at investment firms, whose primary function was trading securities. (Hendrickson, 2001; FDIC, 1998)

Although the FDIC was formed with the passage of the GSA, it played a limited role in banking prior to the Federal Deposit Act of 1950 (Sprauge, 2000). Next I discuss the creation of the FDIC and its influence on financial regulation.

1.3.3 1950 the Federal Deposit Insurance Act

The Federal Deposit Insurance Corporation was born out of the passage of the Banking Act of 1933 (also referred to as the Glass-Steagall Act). In 1950, with the passage of the Federal Deposit Insurance Act (FDIA), the amount of insurance provided for each individual account was doubled from \$5,000 to \$10,000. Also the FDIA separated it from the GSA and made it its own functioning entity. The purpose of the Act was primarily to maintain consumer confidence and establish an additional method of addressing failing institutions. Prior to the FDIA, bank regulators facing a distressed bank had two choices liquidate the firm through bankruptcy and payoff the depositors, or purchase the failing entity and seek external firms to purchase the failed firms interest. However, the passage of the FDIA of 1950 introduced a third option that would remain untested for more than two decades after the law was established. The FDIC was granted the potential to provide funds through loans and government investments in the troubled bank to support them during difficult times via Open Bank Assistance (OBA) (Sprague, 1986; FDIC, 1998). Prior to 1971, the FDIC had only used the two methods provided by the 1930's legislation to meet their obligations to depositors in failing banks. This is likely due to the FDIC's desire to mitigate the usage of the insurance funds resources.

During the 1970's, only four banks received open bank assistance from the FDIC, and only one of these banks held more than \$1 billion in assets. In each of these cases

the FDIC board had to justify how these institutions met the "essentiality" requirements of the FDIA. Section 13(c)(4)(A) of the Act provides the agency with broad latitude in its efforts to keep institutions from failing, provided the board finds that the institution meets the vague requirement of being "essential to providing adequate bank services in the community" (Sprague, 1986)(FDIC, Ch5). This provision is the lynchpin to whether or not OBA is to be extended to a given entity on the ropes and has become the foundation of future bailouts.

The period between 1933 and 1972 is known as the "golden age" of accounting (Huber, 2013), and represents the profession's growth in power and status in the United States. During this period all corporations, and especially banks relied on the profession for both consulting and auditing services. This period also loosely coincides with the golden age of capitalism, which consists of the post-World War II expansion era beginning in 1945 and continuing through the early 1970's (Marglin and Schor, 1991).

1.3.4 Prior Banking Collapses

This section examines the major financial crises of the twentieth century to contextualize the scale of the GFC, as well as, to provide insights into the relationship between prevailing regulatory theory and its impact on crisis resolution.

The Panic of 1907

One hundred years before the GFC, the United States experienced a loss of confidence in the financial sector that resulted from a slowing economy, the growth of less regulated financial intermediaries, and the response to a failing financial firm. The Panic of 1907 resulted from the following factors: the slowing economy, decreased liquidity in the financial sector, insufficient regulation of the financial sector, Loss of

public confidence in certain financial firms, and revelation of the interconnectivity of the financial sector (Tallman and Moen, 1990).

Slowing Economy

The strength of the economy waxes and wanes based on normal business cycles and exogenous events. During this period, the economy was struggling with the post San Francisco earthquake of 1906, which killed up to 3,000 and displaced over fifty percent of the 400,000 inhabitants of the city. (Franklin, 2005) This event combined with a significant amount of real estate speculation (Johnson, 1908), and the discovery of financial institution interconnectivity (Tallman and Wicker, 2010). These conditions led to a tightening of money and created stress on the financial institutions.

During this period there were three basic types of financial institutions: national banks, state banks, and trust companies. The first two were the most regulated and required to have capital reserves of twenty-five percent. Also, they had access to the New York Clearing house—a private lender of last result under the guidance of J.P. Morgan. Trust companies were a relatively new construct and were regulated loosely at the state level. These firms, like modern investment banks, were less regulated and required lower capitalization rates. When the economy slowed, the trust companies were the least prepared to handle the additional stress that resulted from the loss of market liquidity. The trusts companies' limited capitalization and lack of lender of last resort (The NY Clearing House) placed them in greater jeopardy than the banks (Moen and Tallman, 1992; Tallman and Moen, 1990).

Because trust companies were under less regulation than their banking rivals, they were able to offer greater returns than the banks prior to the collapse. The higher

rates return offered by trust companies are an indication of inherent risk. However, these institutions grew rapidly in the decade before the panic reflecting that the public may not have recognized the magnitude of the risk of this innovation (Frydman et al., 2013).

The first financial institution to face crisis was Mercantile National Bank. Senior members of management were involved in trying to corner the market on copper by purchasing significant shares in United Copper. The plan was based on a pump and dump scheme, where the goal is to drive up prices and then sell at the inflated price. However, the bottom fell out and Management was forced to make good on its margin. Mercantile was able to get relief from the bank runs that this behavior caused because it was a bank and had access to the clearing house. There were two major requirements from the clearinghouse to receive the aid. First, the men responsible for the debacle had to pay back their loans for the securities. Second, they had to resign from the board of the bank. To meet their obligations they had to sell off their other securities, because they lacked liquid resources to cover the obligations. This drove the market further down into collapse (Prins, 2014).

The men responsible for the copper fiasco also controlled eight other banks and two trust companies. They were forced to resign their positions of control, but the damage was already done in the eyes of the public. The next institution to face runs was Knickerbocker Trust, although not directly controlled by those responsible for the pump and dump; their association with senior management at Knickerbocker was enough to threaten the market. Knickerbocker was not able to benefit from the clearinghouse because it was a trust company and Morgan believed that the market could handle its failure. Also, the banks had no appetite to rescue the trust companies because of their

rivalry. However, after Knickerbocker collapsed, it became evident that the other trust companies would need to be protected by the clearinghouse (Prins, 2014).

In relation to the recent crisis, Knickerbocker is Lehman and the first rescued trust company, The Trust Company of America (TCA) would be Goldman Sachs. TCA was rescued shortly after Knickerbocker's failure because of close ties held with JP Morgan. The New York Times touted Morgan as the savior of the financial sector, even though it would be later revealed the financial bailout was actually provided by the federal government (Pujo, 1912). These events can be seen as precursors to the policy of bailing out too-big-to-fail financial institutions. In response to this panic, congress established the Federal Reserve System in 1913 through the Federal Reserve Act (FRA). The government never wanted to rely so significantly on the private sector to function as the lender of last resort. The FRA is only 31 pages long and establishes the foundation of the central bank (St. Louis Fed, 2014).

The role of accounting increased during the 1910's because of the revenue act of 1913 and the passage of the sixteenth amendment, the desire for improved cost accounting and corporate efficiencies, and the increased market driven demand for audited financial statements. (Huber, 2013) As a result of the panic and its impact on the economy, the role of accounting greatly increased as well as the establishment of federal intervention/oversight in the financial sector, through the establishment of the FRB.

1929-1939 The Great Depression

The Great Depression began in 1929 and resulted in more financial institution failures than any other period in the nation's history. Nearly five thousand banks failed during the depression. As a result of the depression, significant financial legislation was passed to prevent further collapses. The great Depression and its causes has been the topic of extensive research. A simple search of Google Scholar reveals more than 1.4 million hits on "Great Depression causes." As such, only a brief overview is provided.

The 1920's represented a period of technological expansion in American industry, which led to rapid expansion in the economy during the decade. Because the wages of the wealthy significantly out paced that of the average workers. Americans went from owning 8 million automobiles in the beginning of the decade to nearly three times as many by 1929. Americans had traditionally purchased only homes on credit However, with the rise in demand of all kinds of consumer goods, along with retailers desire to increase sale, led to people purchasing all kinds of goods on credit for the first time in the country's history. Retailers offered loose credit to foster market share growth (Eichengreen and Mitchner, 2004).

The "roaring twenties" saw conveniences like refrigerators, washing machines, and vacuum cleaners lead to more leisure activities like listening to the radio and going to the movies. Radio provided a conduit for advertising that had never existed before, the opportunity to create demand on a national demand. As Americans consumed more, production increased. By the end of the decade, this artificial demand could no longer be sustained. Manufactures began to have surplus inventories, which in turn lead to layoffs (Olney, 1999).

The use of credit to expand quality of life was not limited to the working class. The investment class grew and began to purchase more and more on margin and when the market began to contract, was not able to meet their obligations. The Fed's tight monetary policy was designed to reduce speculation but was unsuccessful because of other sources of credit. Even though these sources charged high interest rates investors believed the record growth in the market would continue indefinitely, not unlike the assumptions made prior to the GFC. The market crash in 1929 and subsequent bank runs were not the cause of the depression but instead reflected the weaknesses in the market fundamentals (Olney, 1999).

When Franklin D. Roosevelt took office in early 1933, the depression was still raging and people looked forward to his new deal to revive the economy. Part of this plan included the Banking Act of 1933, commonly referred to as the Glass-Steagall Act (GSA). At only fifty-one pages in length, it established a separation between commercial banks and investment banks that would govern the markets for the next sixty-six years. The GSA also created the Federal Deposit insurance Corporation. This provision provided insurance for depositors in case the banks failed, and effectively ended the need to run on banks in times of crisis. An externality of this provision was the future establishment of the doctrine of too big to fail (Sprague, 1986).

1980's and 1990's

The 1970's established the use of the FDIC's Open Banking Assistance (OBA) provision through its limited usage, mostly confined to banks that met some social need to the community (Sprague, 1986). This would change in the following decade. Throughout the 1980's and into the early 1990's, The FDIC utilized the OBA provision

in less than eight percent of the failures they encountered. In the vast majority of bank failure scenarios, the agency either liquidated the assets and paid the depositors, or sought the purchasers for the troubled bank.

In 1980, First Pennsylvania Bank became the largest bank to date to receive an OBA bailout from the FDIC and received \$500 million in aid from the FDIC. As the agencies talks with the bank progressed, the board came to the conclusion that it met the essentiality requirement. However, Sprague (1986) does not reveal the ultimate justification for the determination. It is reasonable to assume that the fact that it was the largest bank in Philadelphia, and the twenty-third largest in the nation were significant factors in making the determination. Perhaps this event represents the planting of the seeds of too-big-to-fail that would in time grow to a climate of expectation of federal support in times of trouble within the financial sector.

If First Pennsylvania Bank represents the seed of too-big-to-fail, then Continental Illinois National bank embodies the fruition of that ideology. As the seventh largest bank in the country in 1984, its failure would have proved devastating to the market. After the turmoil it was determined that nearly 180 banks relied on Continental and would have likely faltered or fell as a result of it's unwinding. It became apparent that Continental's existence was essential and OBA needed to be provided. They were too-big-to-allow-to-fail and thus became too big to fail. This concept, described as a potential threat in open congress by Congressman Stewart McKinney in 1984, has shaped the financial sector's strategies since that time.

The savings and loan (S&L) failures of the late 1980's led many to question where the auditors were and how so many institutions could be in dire straits with no recognition of their weakness observed by the profession. In the wake of the

crisis, the seventh largest accounting firm filed bankruptcy, other firms were banned from auditing financial institutions and others were required to engage in additional education before being allowed to continue auditing this sector (Stiner, 2010).

The massive economic impact of the failed S&L's contributed greatly to the fall from grace that the accounting profession experienced during this period. (Huber, 2013) In fact, Huber believes that as a profession, Accounting no longer deserves that designation because of the impact of the events of the past forty years coupled with loss of control and autonomy this and subsequent scandals imposed on accountancy.

The 2000's

The new century was heralded by fears of Y2K, hope for the new economy (dot-com), the devastation of 911, and the corporate scandals that changed the face of accounting forever. As the turn of the century approached the profession was in its heyday, with regards to exploding revenue-generating ideas. Leading up to the change over from 20th century to the 21st century led many to fear the possible repercussions to the market and industry discussions regarding unlimited liability concerns appeared in practice literature contemporaneously. While these fears later proved to be exaggerated, in comparison to observed results, they do reflect the shifting confidence in the profession.

The economic impact of 911 combined with the corporate scandals of firms like Enron, MCI, Parlamat, Arthur Anderson, HealthSouth and others proved devastating to the profession. These events led to the government's intervention into the profession in unprecedented ways. New regulation and the creation of the PCAOB reduced the self-control and self-regulation of the profession to window dressing and greatly reduced

the influence of the AICPA. (Huber, 2013) However, like previous crises, new regulation increased the power of the accounting industry, as demand for more accountants follows increased regulation (Huber, 2013).

1.3.5 The Global Financial Crisis—A Chronological Analysis

The Federal Reserve Board's (FRB) timeline of relevant events in the Global Financial Crisis (GFC) lists key events that led to the passage of the Emergency Economic Stabilization Act of 2008 (Public Law 110-343). The analysis presented here examines many of those events and how they were perceived at the time through articles in the media (FRB-S, 2014). The purpose of this analysis is not to affix blame to specific parties, but instead is intended to provide context for the events that ultimately led the largest financial bailout in American history, as well as, led to the most sweeping financial legislation in history (White House, 2014). It also led to requirements that corporate activities related to mining in countries embroiled in political conflicts be disclosed separately.

Determining the beginning of the GFC is difficult and contestable. Some would say it began with the passage of Gramm-Leach-Bliley in 1999. This law rescinded many of the safeguards established during the Great Depression. However, because this event and others between then and the passage of the Emergency Economic Stabilization Act of 2008 may have been contributing factors, they did not represent the proximate causes. This review chooses to examine events based on the FRB timeline, in order to focus on agreed upon events and avoid unnecessary controversies.

During the February of the first quarter of 2007, The Federal Home Loan Mortgage Corporation (FHLMC), known as *Freddie Mac*, announced that would no

longer be buying risky subprime mortgages. This action signaled the turmoil in the housing market caused by falling housing prices and increasing default rates at the time (NYT-BAJAJ, 2007). More proceedings occurred in the second quarter of that year. On April 2, 2007, New Century Financial Corporation announced filing Chapter 11 bankruptcy. This came only two months after it reported experiencing difficulties. New Century was the largest private provider of subprime mortgages. These mortgages are offered to people with less than excellent credit histories. This action led to the firing of thirty two hundred employees. Like the case with Freddie Mac, this is the result of a softening housing market and prior lax credit standards that were offered to buyers.

The month of June began with Standard & Poor's and Moody's downgrading over one hundred bonds backed by second-lien subprime mortgages. Subsequently, many AAA were also downgraded, further demonstrating the turmoil in the market (Ng and Simon, 2007). Bear Stearns announces on June seventh that it will suspend redemptions of shares in its High-Grade Structured Credit Strategies Enhanced Leverage Fund. This action enrages its investors and only goes to demonstrate the deepening of problems in the market (Week-Goldstein, 2007). The month concluded with the Federal Open Market Committee (FOMC) maintaining the Federal funds rate at 5.25%. The FOMC reported that moderate economic growth and limited inflation would persist. The Market noted that based on the Fed's forecast, it was unlikely that reductions in the federal funds rate would be on the near horizon (Thoma, 2007).

The third quarter experienced twice as many announcements as the previous two quarters combined. On July eleventh, Standard and Poor's placed over six hundred securities, backed by subprime mortgages, on credit watch. At the time of the announcement, these securities represented about 2% of the \$565 billion

in U.S. residential mortgage backed securities. According to the ratings agency, things are expected to get substantially worse because of falling housing prices and tighter lending standards (Christie, 2007). Two weeks later, Countrywide Financial Corporations warns of it is facing in the contracting housing market. This is a shocking event because Countrywide is considered a conservative lender is starting to sink. Their stock drops to a three-year low. Market investors move toward bear market mindset. Even though the stock market is setting record highs. Commentators begin asserting that the housing market is in free-fall (Stack, 2007). At the end of July, Bear Stearns seizes the assets in the formerly announced struggling fund. A major investor in Bear Stearns notes that "is no longer a Bear Stearns problem but a market problem." At the beginning of the year Bear Stearns was the largest underwriter of mortgage-backed bonds, this year they have fallen to number two, behind Lehman Brothers (Onaran, 2007). In the first week of August, American Home Mortgage Investment, the second largest behind New Century, filed chapter 11 bankruptcy. Two other firms announced that they were suspending originations. So far this year, fifty lenders have filed for protection (NYT-AP, 2007).

In the second week of August, the FOMC announced that it would maintain the federal funds rate of 5.25 percent. Signaling that it expected continued moderate growth in the market and no significant expectation of inflation. BNP Paribas, France's largest bank, halts redemption on three funds, because of "the complete evaporation of liquidity in certain segments of the U.S. securitization Market", according to a statement from the company. Expectations of other firms taking further mark-to-market losses mount (Boyd, 2007).

On the sixteenth, Fitch downgrades Countrywide from A to BBB+, only two notches above junk status. Moody's lowered it to only one notch above junk rating. (Moyer, 2007) The next day the FOMC lowers the primary credit rate, the short-term rate typically charge for secure financial institutions, to fifty basis points above the federal funds rate of 5.25 percent. The Fed noted in a statement, "Tighter credit and increased uncertainty have the potential to restrain economic growth going forward." This was seen as a surprise move by the market and was well received by the market with a 300-point gain in the Dow Jones Industrial average (Peters and Bajaj, 2007). In September, The Exchequer of the Bank of England authorizes additional liquidity support of Northern Rock, England's fifth largest bank. This is seen as a global recognition of the credit squeeze impacting European markets. Several days later the FOMC lowered both the federal funds rate and the Primary funds rate by fifty basis points, acknowledging that things are getting worse and was intended to assist the market in recovering sooner (Reed, 2007; La Monica, 2007).

Early in October, three of the largest firms in the financial sector announce their intentions of establishing an \$80 billion liquidity conduit. Citigroup, Bank of America, and JP Morgan Chase believe that a private Master Liquidity Enhancement Conduit is necessary and will solidify the asset-backed commercial paper market. Treasury secretary Paulson applauded the idea of private sector solution. The news failed to boost Citigroup's stock price (Pittman, 2007). The Month concluded with the FOMC lowering both the federal funds rate and the primary credit rate another twenty-five basis points to 4.50 and 5.0 respectively. This was done by the fed in recognition of the danger in the housing sector and the intensifying housing market correction. The

government also reported that GDP grew by 3.9 percent for the third quarter, ahead of expectations (La Monica, 2007a).

Freddie Mac posted larger than expected losses on November twentieth. These losses are attributed to market-to-market issues related to deteriorating mortgage credit, caused by the housing market woes. In addition, Countrywide's shares plummeted to a fifty-two week low. Also, Goldman Sachs and Lehman Brothers are considering reducing their dividends by fifty percent. The banks are continuing to feel the effects of a shrinking credit market and a falling housing market (Movers, 2007). December begins with President Bush admitting the problems in the housing sector. He also claims, "Solid fundamentals in other areas." Five days later the FOMC again lowers both rates by twenty-five basis points. Analysts expect further decreases going into 2008 because of growing concerns of a looming recession (Torres, 2007). The following day the FRB establishes the Term Auction Facility in hopes to encourage lending in the market (Rusli, 2007).

The challenges facing the housing sector and the economy as a whole persist into 2008. Over 400 firms either failed or went into receivership by the end of 2010. During this period, the government, investors and financial firms continued to make moves designed to alleviate the deepening damage caused by the falling housing sector and loss of confidence. On January 18th, Bank of America (BoA) agreed to purchase Countrywide in a straight stock transfer. BoA cited it was the right thing to do, because they had been able to endure the housing slump. Some wondered if buying Countrywide, a firm whose value fell 79% during the previous year, was worth the potential benefits of gaining access to Countrywide's retail clients and making BoA Americas largest lender. Although they acquired Countrywide for only \$4 billion

in stock, most analysts believe that the true cost will be significantly higher. By the time all was worked out and legal costs were revealed, it would end up cost BoA \$40 billion (WSJ, 2012; Ellis, 2008). Four days later, The FOMC lowered the two key rates by 75 basis points to 3.5 and 4.0 respectively. The Fed attributed the cuts to tightening credit and broader financial conditions and softening employment concerns. Secretary Paulson noted that the measures were intended to restore confidence in the markets as well as the U.S. economy. Future cuts are anticipated, as well as, further expectations of a widening recession. There is also discussion of an economic stimulus plan to help right the economy (La Monica, 2008). Just two weeks later, the FOMC lowers the rates again by 50 basis points to 3 and 3.5 percent. These cuts, and the expectation of further cuts in the weeks and months to come, are seen as signals of the growing threats in the housing market and the economy as a whole (Isadore, 2008).

By mid-February, President Bush had signed the Economic Stimulus Act of 2008 into law. This legislation called for checks to be sent out to taxpayers in amounts varying of \$600 per single filers and \$1200 for those who filed joint returns. In addition, a \$300 credit was added for each qualifying dependent. This law aimed to put money in the hands of over 130 million Americans, to encourage them to add consumer driven economic activity. Also, during this period, England took Northern Rock, under state ownership because of its inability to meet its obligations. Eventually, Northern Rock would be divested into the ownership of Richard Branson's Virgin Money (BBC, 2008).

On the 7th of March 2008, The Fed increased both the time to repay and the available funds to help financial firms remain liquid. Four days later they established the term Securities Lending Facility (TSLF), which allowed financial institutions to put toxic assets on the government's balance sheet in exchange for Treasure notes. This

allowed financial institutions 28 day borrowing against mortgage-backed securities. The question is raised what if the banks cannot redeem these loans at the end of the 28 days, won't the Fed just role them over and effectively treat it like an equity stake (Reuters-Winkler, 2008).

By the middle of March, JP Morgan Chase agrees to purchase Bear Stearns for \$2 per share. Only one-year prior, Stearns shares were trading at \$170 per share. The Federal Reserve agreed to provide up to \$30 billion in support for Bear Stearns less liquid assets. The price of the firm reveals the magnitude of the problems at Bear prior to the sale. Like the prior events, this only further goes to show how much credit has dried up and the depth of the spiraling housing market (Sorkin, 2008; Ellis and Luhby, 2008). The FOMC announces a decrease in both the federal funds rate and the primary credit rate of 75 basis points to 2.25 and 2.50 percent respectively. Ethan Harris chief economist at Lehman notes that inflation is not a major concern and that the economy is probably actually in a recession and the beginnings of an economic slowdown (Andrews, 2008).

During the second quarter of 2008, the FOMC lowered the federal funds rate to 2.00 percent and the primary credit rate to 2.25 percent. Also, the FOMC expanded the list of eligible collateral for TSLF loans to ease credit in the market, as well as, increased TAF funds from \$50 billion to \$75 billion. These events occur on the backdrop of first quarter of only 0.6 percent. This level of growth is perceived, as a sign of a pending recession (Trading Economics, 2008).

In June the Federal Reserve Board the BOA purchase of Countrywide Financial Corporation. BOA shareholders, and others, have concerns with the black hole they are purchasing. It is a \$4 billion dollar that eventually could cost BoA upward to \$40 billion

(Morgenson, 2008; NYT, 2012) Also in June, Standard and Poor's downgrades the two largest bond insurers, AMBAC and MBIA, from AAA to A and warn that future cuts are likely because of weakening market conditions. There is concern of their ability to write further insurance for bonds (Reuters-Johnson, 2008). The month concludes with the FOMC Leaving the federal funds rate and the primary credit rate unchanged.

Concerns that the economy will enter a period of stagflation rise. Stagflation is when there is slow economic growth, yet prices begin to climb. The current economic conditions caused some to worry that the economy was heading in that direction (NBC, 2008; McKinnon, 2011). The third quarter began with the FDIC closing IndyMac Bank on July 11, 2008. The FDIC has guaranteed \$18 billion of the \$19 Billion of the bank held in deposits. The government Agency replaced the CEO as well. The failure of IndyMac, led to an investor panic that greatly affect Fannie Mae and Freddie Mac. However, market watchers predicted that the government would intervene (Clifford and Isidore, 2008). On July 13, 2008, The Fed offered to provide a backstop for Freddie Mac and Fannie Mae. Even as concern mounted that they might not be viable, Senator Chris Dodd and various analysts assured that the two institutions were on strong footings. Senator Schumer also reiterated that the federal government would stand behind them. Presidential hopeful, John McCain, also noted how vital these GSE's are to Americans and "that it must not fail." Both firms' values were down over 65% on the year as they held about 50 percent of the \$12 trillion U.S. mortgages. It is clear that the political class was seeking to downplay fears in the markets (Kopecki, 2008; Luhby, 2008).

Two days afterward the SEC prohibited naked shorts on Freddie and Fannie, as well as, several other investments. The suspension was for thirty days, while the SEC considered new requirements and potential limitations. This was a major restriction

by the government on short selling and is unprecedented in recent years (Scannell and Strasburg, 2008). The month concluded with President Bush signing the Housing and Economic Recovery Act of 2008. The purpose of the law was to shore up the two GSE's and make available financing to homeowners at risk of foreclosure. The Act provided a temporary rescue plan for the firms and introduces a new stringent regulator designed to guide them as they go forward (Sahadi, 2008; Dealbook, 2008).

In August the FOMC voted to leave the two key interest rates unchanged despite the market turmoil, according to Sung Won Sohn of California State University. Others noted that the challenges in the economy were not the result of the Fed rates being too high, instead the markets were frozen because of the crisis of confidence, according to economist Michael T. Darda (Andrews, 2008). In early September of 2008, the Federal Housing Finance Agency (FHFA) placed Fannie Mae and Freddie Mac in government conservatorship. In addition, to the temporary takeover of the two GSE's, the government implemented several steps to bolster its balance sheet by purchasing equity and mortgage and establishing a new lending facility for the GSE's and Federal Home Loan Banks. Secretary Paulson noted that failure of these firms would be harmful to growth and Job Creation (Ellis, 2008).

By the middle of September the economic storm began to rage. On the 14th, the Federal Reserve loosened the requirements for collateral in its lending and increased the TSLF offerings to \$150 billion. The next day, AIG was deemed too-big-to-fail and was rescued with the government pouring \$85 billion into the firm. Interestingly, also on the 15th, Lehman Brothers filed chapter 11. The government told them that they would not be bailed out and that it was up to Wall Street to solve its problems. The impact of this failure was felt in economies around the world. This day also saw the announcement

of a plan for BoA to purchase Merrill Lynch in an all-stock deal valued at \$50 billion. Lehman was unable to find a suitor to prevent its demise and the government had no appetite to rescue the firm started in 1844. The results of this day led to the Reserve Primary monetary fund falling below one dollar. The Treasury promised to guarantee money market losses up to \$50 billion in efforts to enhance market confidence and restore the net asset value of one dollar (MollenKamp, Craig, Ng, and Licchetti, 2008; Wearden, Teather, and Treanor, 2008; Henriques, 2008).

Two days later, on the 17th, the SEC temporarily blocked short sales on financial stocks. This action was mimicked around the world. SEC Chairman, Christopher Cox that every weapon in their arsenal would be used to combat market manipulation. Some allowances were expected for short selling of financial stock for hedging purposes. Several commentators and analysts wondered publicly how effective the ban implementation would be (Bajaj and Bowley, 2008; Scannell, 2008).

The following days saw extraordinary regulatory measures taken in response to the spiraling economy. On the 19th, the Federal Reserve Bank injected \$180 billion into the ailing money markets, in an effort to stabilize short-term rates. Other nations worked in conjunction with the Federal Reserve to this end. A former chief economist for the International Monetary Fund suggests that the total bailout would likely cost 5 to 10 times that which has already been spent. This would make the projected total upwards of \$1 to \$2 trillion. The Fed has offered to lend an unlimited amount of money to finance the purchase of high-quality asset backed commercial paper. The firms currently are carrying about \$230 billion of this commercial paper (Saltmarsh, 2008; Luhby, 2008).

Twenty-four hours later, the Treasury Department submitted its rescue plan requesting access to \$700 billion to shore up the failing economy. With this news, investment banks filed to be classified as bank holding companies so that when and if such funds became available, they would be eligible to request funds (Politico, 2008; Prins, 2008).

The month ended with Washington Mutual being seized by the Office of the Thrift and it was then sold to JP Morgan Chase. The \$307 billion asset firm was bought for \$1.9 billion. Final costs were expected to be substantially greater. The holders of \$30 billion in preferred stock and debt were not expected to get any relief. Wachovia Corporation faced similar problems with a tentative deal between the FDIC and Citigroup to take over the failing Wachovia. The initial attempt of the TARP rescue failed on the 29th (Dash and Sorkin, 2008; Weisman, 2008).

On October 3rd, Congress passed and the President signed the Emergency Economic Stabilization Act of 2008, which featured the \$700 billion Troubled Asset Relief Program. Also on the third, Wells Fargo quickly purchased Wachovia in a bid that did not require the FDIC to backstop any losses. The U.S. stock market closed down almost 160 points. The Treasury was expected to immediately begin buying distressed assets with the TARP funds. And in the weeks and months that followed, firms from the financial sector, the automobile sector, and others requested financial relief (Lepro, 2008; Hitt and Solomon, 2008).

1.3.6 Conflict Minerals and Dodd-Frank

During the GFC, awareness of the human rights abuses in the Democratic Republic of the Congo and potential links between those atrocities and mining of certain minerals in the region being used to finance the violence. Various legislative approaches were unsuccessfully attempted in 2008 and 2009 to reduce American dependence on these minerals. The 2008 bill sought to ban importation of two minerals identified as contributing to the conflict in the Congo. By 2009, the term "conflict minerals" was both the legislative term, as well as, the advocacy term used to refer to the raw minerals from which tin, tungsten, tantalum, and gold are derived. Humanitarian groups, like the Enough Project, identified these as the minerals that were used to finance the longstanding violence in the region. The 2009 initiative sought to require companies that use "conflict minerals" to disclose their country of origin and mines from which they originate and whether they contribute directly or indirectly to the problems in the region. Senator Sam Brownback introduced bills in those years and submitted the 2009 bill as an amendment to Dodd-Frank late in the legislative process.

This move to require corporate disclosure of mineral usage and origin, as a means to affect social change in the region ("help prevent the exploitation of such minerals by illegal armed groups"¹) expands financial disclosure beyond the traditional scope of informing stakeholders of relevant financial aspects of corporate activities. Dodd-Frank's title XV section 1502, related to conflict mineral disclosure, instead expands the scope of corporate disclosure to include altering corporate behavior in an attempt to affect social change a distance of 7,000 miles outside of the United States. The conflict minerals provision does not prevent corporations from resourcing its minerals from the region or the offending mining sites, instead it requires them to establish a

^{1.} S.891—Congo Conflict Minerals Act of 2009

chain of custody and report the impact on the region caused by using those sources.

This is established as describing them as "DRC conflict free" or "not DRC conflict free."

Conclusion

This review of events is intended to provide a backdrop of the circumstances that eventually led to the passage of the Dodd-Frank Act, which according to the White House is "the most far reaching Wall Street reform in history" (White House, 2014). It is not the purpose of this study to evaluate the causes of the crisis or to assign blame for its inception. Instead the goal is examine the process in which a fundamental shift in accepted regulation theory and practice evolved within the government and how it shaped the final legislation, focusing specifically on mandating requirements regarding conflict mineral disclosure.

Arnold (2009) notes that accounting research failed to predict the GFC, as well as failed to identify the risks building in the market place. She identifies two primary causes of the weakness in accounting research to address the challenges facing the profession with respect to banking matters. First she highlights the methodological gap between research and "accounting in action" (Hopwood, 1978). The second difficulty is a theoretical one and centers on the issue of understanding linkages between the micro level relationship of accounting and regulation and its impact on the macro environmental dynamics related to the political environment in which it exists (Arnold, 2009).

In the wake of the crisis, and in response to the sweeping changes, accounting researchers have begun to examine the causes and impact of the crisis as well as some aspects of the accounting profession's role (Laux and Leuz, 2009a; Laux and Leuz,

2009b; Bengtsson, 2011; Watts and Zuo, 2012). Arnold (2009) notes that the opacity of the profession makes it difficult to acquire large-scale data sets that would render such examination easier. Also she notes that the academic paradigm that focuses of hits in top journals mitigates unique thought and reduces researchers to seek to optimize their probability of successful publication to ensure tenure and advancement in academia. These factors highlight the need to expand research methodology beyond the hegemony of current academic accounting research and explore accounting issues with a broad array of methodologies to address issues that are not best address via typical statistical modeling. All methodologies should be embraced and rigorously tested to broaden the relevance of accounting research. In this study, I utilize an Actor-Network Theory (ANT) approach to study the development of conflict mineral disclosure legislation embedded in the broader legislation of the Dodd-Frank Act.

2 THEORY

2.1 Actor-Network Theory

Before attempting to understand the role and usefulness of Actor-Network
Theory (ANT) in accounting is important to understand the theory generally and how
it has been used in research. This section examines ANT in the context of its place in
sociology as well as highlights its essential characteristics. While ANT is not restricted
in its origins to one individual, this examination shall focus primarily on its definition
and methodology as championed by its primary scholar, Bruno Latour.

Harmon (2009) begins his analysis of Bruno Latour's contributions to theory and research by describing how, in Latour's early life, a strict Jesuit education and fondness for Nietzsche prepared him for his work in the sciences. These early experiences in school and after led Latour to come to the conclusion that inanimate objects are just as capable of creating "power-hungry" facts as human actors. His personal revelation that both human and non-human actors can work in the formation of alliances in the process to establish facts eventually led him to using the word *actants* as a means to distinguish it from the term actor as typically employed in sociology, which can refer to individuals, groups, organizations, governments or societies of humans. Throughout Harman's book on Latour (2009), Harmon, like Latour, uses the two terms synonymously without distinction. This is further exhibited in Latour's later work where he takes great care to distinguish the ANT definition of actor, as actant in *Reassembling the Social* (2005), and then after doing so, uses the terms interchangeably. In fact, he uses actant only fifteen times and actor 445 times, without implication of a differential meaning attached (Latour, 2005). This review of Latour follows his convention of using the terms

interchangeably, noting that both usages refer to the ANT meaning of both human and nonhuman actors.

Latour (1988) recounts the significance of an epiphany he came to at age twenty-five that "nothing can be reduced to anything else." This can be seen as a major departure from the assumptions of traditional scientific research that through an extensive process of reductionism, some small subset of factors that can explain all others. This belief leads him to eventually declare that the process of following ANT is a slow and arduous trek that requires great attention to the journey. This declaration can be contrasted with the use of enormous data sets that track a relatively limited set of variables that are assumed to be proxies for specific constructs (actors) that are believed to be at play in the phenomenon being observed. In this work by Latour, *The Pasteurization of France* (1993), four basic tenets that will become embedded in ANT emerge (Harmon, 2009; Latour, 1988).

First, actors (actants) are real and exist in time and space. These actants need not be human to exercise agency. This assumption means that children are actants, as are computers, accounting numbers, cosmic strings, the media or politicians. Other philosophers, like Aristotle, would take exception to giving such a high standing to nonhuman actors and would advocate a distinction between natural and artificial substances. ANT sees such a distinction as invalid because of the notion of irreduction. The idea of separating people from accidents and interactions with things seems innately artificial and in violation of the notion of irreducibility.

Second, a cornerstone of ANT is this concept of irreduction. Actors are what they are. Their innate characteristics are visible and they engage based on those attributes.

For Latour, an actant does not have an inner substance and a revealed exterior, but

instead is what it is to the core. For example, a 1967 Mustang is the same car whether you are five feet away or five hundred feet away, or even if the car is in the garage with the door closed. How these actants come to form links is called translation by Latour (1988).

Third, agencies of linking one actant with another are referred to by Latour as translation (Latour, 1988). He defines translation as a misunderstanding between actants that leads to the alignment of the actants. ANT argues that these translations lead to temporary alignments that converge and exist until individual self-interests divide them. All actants represent events that yield an impact on the other actants they encounter. Latour designates the conduit of association as being that of a mediator. By this ANT sees the relationship as being adversarial with each actant jostling for its own unique translation to gain acceptance.

Fourth, the strength of each actor as a mediator is not an endowed characteristic of the actor by virtue of an innate virtue of its composition, but instead is the result of its ability to form alliances. For example, when a researcher posits a new theory or discovers a new finding it may gain acceptance and generate a following that leads to its acceptance as fact. Or, it may be met with significant resistance and never build the following of supporters necessary to garner the attention required to be elevated beyond being just another possible explanation of a phenomenon. There is no special agency given to its systematic acceptance because of its authorship. Instead, as an idea becomes more accepted by other actors, it occurs because the alliances being formed are possible because each supporter makes an interpretation of the message (translation) that not only strengthens its acceptance as fact, but also reshapes it. Continuing with the analogy of the published research, as other actants cite the original, they employ

the results in ways different than the first actant anticipated. Thus, as alliances are formed translation results (Latour, 1987, 1988). In accounting research, the most cited ANT source is *Science in Action* (1987) (Justesen et al., 2011). This book established the groundwork and basic methodology that has been predominantly used in ANT based accounting research.

Latour's *Science in Action* provides the basis for the majority of ANT research. It has been cited about twice as many times as any of his other works. This phenomenon is also consistent in ANT-based accounting research, where it has been cited more than four times as often as any of his other works. Based on its relative importance in sociologically based accounting research, this section examines Latour's rules of methods and principles, as presented in this seminal work.

Rules of Methods

First, as the title *Science in Action* suggests, this method should be employed to study only relationships that are in flux and evolving into an established black box, or to deconstruct such "black boxes" when controversies arise that challenge them. According to Justesen and Mouritsen (2011), deconstructing black boxes represents the majority of the ANT based research in accounting. Second, in order to be able to draw meaningful conclusions of quality, efficiency, objectivity or subjectivity, analysis of its later transformations are the key to insight and not examination of intrinsic characteristics of the actors. Third, settlement of controversies lead to changes in the representation of nature, and as such, precludes nature from being the causative source for the settlement of controversies.

Fourth, because of rule three, societal stability is achieved through the settlement of controversies. Thus, society cannot be employed in the explanation of how and why controversies are resolved. This rule encompasses the notion that actors need not be human to be enrolled in the settlement process, and that no special agency status is placed on humans. This rule means that all actants both human and nonhuman are on a flat horizon, with no intrinsic distinction being recognized.

Fifth, technology and science are not easily disentangled and instead are codetermined and intertwined in their formation. This comingling prompted Latour to prefer the usage of the term techno-science to describe all that is involved in developing science. Based on this understanding, Latour cautions that remaining undecided, regarding the forces that shape what is considered techno-science, requires one to make a long list of the possible heterogeneous actors involved in doing the work.

Sixth, when confronted with the claim of irrationality, instead of addressing it as a rule of logic being violated, or as resulting from some set of predefined social factors, it should be investigated based on angle and direction of the displacement, and length of the network. In other words, it is more useful to examine the impact of actors upon each other instead of meaningless claims of irrationality.

Seventh, only after a slow and methodical examination of the alliances that have been forged and broken, and as much as possible of the process and results are gathered, should cognitive factors be employed to describe that which is still unknown.

Principles

In addition to the seven rules of method offered by Latour, he presents six guiding principles that have aided a substantial amount of ANT based research over

the past twenty-five years (Justesen and Mouritsen, 2011). The first principle deals with causation. It states that the future of facts and machines is meted out by future users and as such are the consequence of prior collective action and not the cause of said action. The second principle addresses how scientists and engineers speak as representatives of those they have enrolled and modified, as well as those that have been further enrolled by the enrolled. This is done to increase the acceptance of the facts they promote. The third principle states that science, technology and society are not what are actually examined, but instead stronger and weaker associations are what are observed. Because of this, gaining understanding of facts and technologies is the same task as gaining understanding of the relevant people. The fourth principle deals with the magnitude of the esoteric content of science and technology. The greater the esoteric content the greater the reach outside the scientist/engineer realm. Science and technology are a subset of techno-science, according to Latour. The fifth principle notes that irrationality is always the claim espoused by those trying to build a network to displace another one. Harder facts are seldom needed to displace other facts, but instead facts are typically displaced by stronger alliances/networks. The sixth and final principle, offered in *Science in Action*, affirms that the history of techno-science is best viewed as a history of disparate resources strewn across networks in order to facilitate the establishment of action at a distance.

According to the Justesen and Mouritsen (2011) review of ANT in accounting through 2008, these rules and principles have guided the majority of the works citing Latour. They advocate that researchers begin updating their research methodology to incorporate the notable insights gained over the past two and a half decades to further advance the potential for new contributions, both methodologically and substantively,

to accounting research. Now that the foundations for ANT have been laid, a synopsis of the advances in ANT, as well as, the methodology described in Latour's handbook for ANT, *Reassembling the Social* is presented.

Accounting and ANT 1988-2008

Actor-Network Theory entered the accounting research stream as a result of an interest in examining research topics through a sociology lens in the early 1980's. Burrell and Morgan (1979) influenced European accounting researchers more than those in North America (Justesen and Mouritsen, 2011). Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life neatly packaged sociological research into four designated boxes that made choosing a research lens relatively accessible for accounting researchers. The four paradigm lenses offered by the authors included: functionalist, interpretive, radical-structuralist (Late-Marxist), and radical humanist (Early Marx) (Burrell and Morgan, 1979). Much of the impact this book had on accounting research was the exposure to paradigms other than the functionalist view that has dominated accounting research since the 1960's. This early sociology based research initially appeared in *Accounting*, *Organizations and Society (AOS)*. Before long, new interdisciplinary journals appeared that were willing to accept interesting new ideas and methodologies. These journals: Management Accounting Research (MAR), Critical Perspectives on Accounting (CPA), and Auditing & Accountability Journal (AAAJ), and AOS also would prove to be the most receptive to ANT-inspired research (Justesen and Mouritsen, 2011).

The majority of ANT accounting research to date relies significantly on the works of Bruno Latour and his early work, *Science in Action* (1987) (Justesen and Mouritsen,

2011). Although John Law, Michel Callon, John Hassard, and others have also made major contributions to ANT development and usage, accounting research has focused more on Latour's early works (Justesen and Mouritsen, 2011). The earliest citing's of Latour's work appear in Hines (1988) and Pinch et al. (1989).

In the early 1980's, authors found opportunities to examine accounting research questions from different lenses than that of the dominant positivist approaches that were being increasingly employed in North American research at the time. The early pioneers that utilized Burrell and Morgan as a framework to promote the Structuralist, Humanist, and Interpretivist lenses posited by Burrell and Morgan. In 1982, Tinker et al. critiqued the hegemonic position that the positive theories that form the basis for much of accounting research are no less normative than those that use more radical approaches to accounting research. From this point on, authors have employed a growing array of theories and methodologies to address research questions in nearly every area of accounting research (Justesen and Mouritsen, 2011).

The following year, *AOS* published articles providing new and radical approaches to accounting research. Cooper (1983) applied Burrell and Morgan's framework to management accounting, as it was, how it could have been, and how it could be, focusing on the omission of issues of power and conflict, nestled in the top half of the 2X2 matrix (sociology of radical change versus sociology of regulation). The horizontal axis of the matrix assumes a continuum between the objective and subjective views of social science. This and other works stress the importance of social factors in explaining accounting phenomena, instead of assuming them as constant, as is the typical approach in positive accounting research (Cooper 1983). Boland and Pondy (1983) note that a naturalistic interpretive lens should be included in the field of

accounting research in order to capture dynamics and understandings that are omitted when accounting research is only executed from the functionalist/positive perspective and assumptions. This research, along with Tomkins and Groves (1983) and its critiques paved the way for the eventual inclusion of ANT-inspired research of the next decade and following.

Latour released *Science in Action*, in 1987, and as early as 1988 accounting researchers began citing his earlier work *Laboratory Life* (1979). The earliest accounting research to cite Latour includes Hines (1988), Pinch et al. (1989), Robson (1991,1992), Miller (1990,1991), and Preston (1992). These works, along with select other later works represent seminal papers in ANT-inspired accounting research.

Hines (1988) only briefly mentions Latour in her reference to a constructed reality. This article also cites Foucault, which foreshadows a long history of combining and blending these two research lenses that would emerge. Pinch et al. (1989) presents an analysis of clinical budgeting in the interesting sociological context of a drama. What makes it interesting is its inclusion of a tape recorder and video recorder as actors in the drama. This represents an early attempt at looking to include nonhuman actants, as Latour defines them, in the process of how scientific innovation is generated. Pinch et al. also note Latour's work in the paper, acknowledging his influence in their construct. This work also began a notable stream of ANT-inspired literature focused on national health system budgeting.

According to Justesen and Mouritsen (2011), sociology based research drawing on Latour came into its own in the 1990's through seminal works like Robson (1991,1992), Miller (1990, 1991), Dimaggio and Powell (1991), Preston et al. (1992), Chua (1995), Power (1996), Young (1994, 1995) and others. This tradition has continued into

this century with seminal works by Chua (2001, 2004), Lowe (2001, 2004, 2004a, 2004b), Briars and Chua (2001), and Justesen and Mouritsen (2011). Each of these works is discussed in the context of contributions made to ANT-inspired accounting research.

Although ANT is not specifically identified in Robson's (1991, 1992) work, many of the key ideas that define it are present in this research. This study has been cited over 250 times and has also been cited outside the accounting literature. The paper introduces the idea that the accounting discourse and practices that are frequently perceived as being neutral actually have social impact in arenas of the political, economic, and social discourse through the process of translation as defined by Latour (Robson, 1991). This research examines the genesis of the standard setting process in the United Kingdom and is different from other historiographical work, like that of Zeff's work covering the same events, in that it considers the events through Latour's lens of translation. This work represents an example of the proto-type that much of the future ANT research will follow. That is, the research begins with an existing structure, accepted practice, or theory and examine it by opening up the "black-box" to reveal the translations that explain its origins and meanings.

Robson (1992) further explores how ANT can be applied to accounting research to gain insight into how the foundational assumptions became inscribed. This particular study examines the move to the dominance of quantification and a sociology of science approach for opening the black box of those underlying assumptions. Robson (1992) paper contributes to the ANT literature by introducing the methodology of Science in Action to the accounting literature. This is evidenced by the over 400 citations it has received since publication.

Some of the early papers drawing on ANT have become the foundation of this stream of literature and yet are indirectly responsible for limiting its advancement in accounting literature. For example, Miller (1990, 1991) has been cited over 300 times in the literature and draws on Latour's Science in Action as its foundation. Also, it marries ANT with Foucault in a way that will grow in usage over time. Miller (1990) examines accounting and its intersection with government, in an historical context from a sociology of science point of view. Both the 1990 and 1991 works focus on opening "the black box" of established accepted practice. Both of these early works represent a push back against the dominant functional/positivist paradigm found in accounting research.

Preston (1992), Chua (1995, 2004), and Briars and Chua (2001) further the usage of Science in Action and its concept of translation. Also, these works create a stream of ANT research into accounting and public healthcare. The concepts of examining historical events through a Latourian lens and incorporating multiple social theories, like Foucault and Habermas are continued during this period. Chua (1995) employs a form of translation from ANT that rejects the idea of nonhumans having agency and thus should be explored as actors. A significant body of research followed that continued this tradition of relying on multiple social theories instead of allowing ANT to succeed on its own merits.

Lowe (2000, 2001, 2004a, 2004b, 2004c) begins the century striving to incorporate non-human actors into his research as well as shifting away from applying ANT to historical events, instead seeking to apply it to an emerging case in the healthcare sector. Lowe (2001) can best be viewed as an overview of how ANT has been employed to date as well as a call for how it should be further explored to incorporate more of

the principles offered by Latour—specifically the importance of human and nonhuman actors in examining accounting research. The 2004 works, by Lowe represent a contextualization of ANT within the sociology of scientific knowledge research in accounting.

While a significant body of research has incorporated multiple social theories, not everyone in academia is convinced that an eclectic approach to theory usage is appropriate. Humphrey and Scapens (1996) argue that pluralism in theory choice leads to more relevant research. While authors Young and Preston (1996) disagree and note that "theoretical promiscuity", the borrowing of elements of various theories, risks violating the underpinnings of the theories the are promoting. While much of the ANT research has taken theoretical a la carte approaches, there is a strong case to be made for Young and Preston's position. This does not negate the relevance of multi-paradigm research; it only serves a cautionary warning using multiple theories to explain an observed phenomenon.

Justesen and Mouritsen (2011) provide a comprehensive listing of ANT in accounting, as well as, the basic attributes of prior research and recommendations for future ANT inspired studies. They note the over-reliance on *Science in Action* and the hesitation to mature into utilizing advances in the theory that have enriched it and are apparent in other fields of study. Justesen and Mouritsen's call to incorporate Latour's later works is the motivation for basing this research on Reassembling the Social (2005). Several graphs demonstrating the frequency of cites of Latour's works, by year and title, are provided in Justesen and Mouritsen (2011) and have been updated here to demonstrate both the continued interest in ANT as a methodology (Figure 2.1) as well as to highlight the increased reference to *Reassembling the Social* (Latour, 2005) (Figure

2.2). It should be noted that *Science in Action* (Latour, 1987) still dominate the cited Latour works in the journals examined.

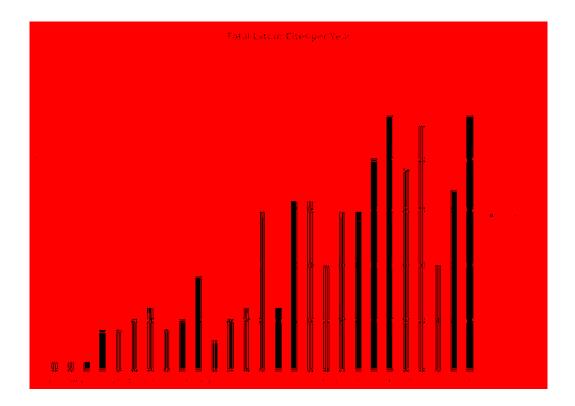


Figure 2.1 Total Latour Citations per Year

An important shift that started in 2000 has been noted (Evarts, 2011) between early ANT and post 2000 ANT. The differences represent an evolution of theory in such a way as to address the critiques that came to light. While other disciplines grew in their usage of more modern ANT literature, the accounting literature continued and continues to employ the more fundamental aspects of ANT as revealed in *Science in Action*. The four journals examined by Justesen and Mouritsen (2011), demonstrate that Latour's 1987 work is cited more than all of the post 1990 works combined.



Figure 2.2 Total Citations by Title

According to *Reassembling the Social*, Latour (2005) notes that "ANT has been confused with a postmodern emphasis on the critique of the 'great narratives' and 'Eurocentric' or hegemonic standpoint." He believes that such a view of ANT is misleading. He notes, "Dispersion, destruction and deconstruction are not the goals of to be achieved but what needs to be overcome. It's much more important check what are the new institutions, procedures, and concepts able to reconnect the social." His concerns regarding ANT being used to deconstruct established technologies and institutions in the context of hegemonic forces is consistent with much of the utilization of ANT in accounting research. In contrast to accounting research, a more generalized examination of ANT across disciplines that *Science in Action* reveals, according to Google scholar, has been cited 19,189 and *Reassembling the Social* has been cited 10,429

times. Other notable Latour works, *The Pasteurization of France, We Have Never Been Modern, Aramis, Pandora's Hope,* and *Politics of Nature,* have been cited 3,100, 10,531, 2,247, and 4,631, 2,591 times respectively. These data show that, in general, *Science in Action* has been cited twice as often as any of Latour's works. However, it should be noted that *Reassembling the Social* is the next most cited Latourian work, with more than half as many cites, and has only been in print for a decade.

A recent example from the accounting literature (Picard, 2015) cites both *Science in Action* and *Reassembling the Social*, as well as works by John Law and Michel Callon. This study provides a good description of ANT as an ontological motivation and epistemological framework for the study. However, it continues the tradition of the STS literature of examining a historical event and attempting to open the "black-box." Picard further notes that "the objective is to reopen ideas that are taken for granted (black-boxed) by following traces left behind by actors' new associations in order to uncover support network that was built in the process (Pickard, 2016, p. 81)." While this is a legitimate use of ANT and is supported by a rich body of literature, it tends to flout the innovations that have occurred within ANT during the past twenty-five years.

ANT provides a strong ontological (theoretical) foundation for social research that grew out of examining issues related to science and technology studies. Over the past three decades, ANT as expanded its dispersal into many other areas, including accounting research. Authors, like Justesen and Mouritsen (2011), have traced ANT through the accounting literature and suggest that a broader spectrum of accounting research topics could benefit from ANT, if researchers actively embraced the advancements in ANT since the 1990's. This is supported by the paucity of citations in the accounting research to Latour's works after *Science in Action*.

2.2 Research Questions and Hypotheses

Central Questions:

ANT, and its commitment to irreduction, is similar to other qualitative approaches. *Reassembling the Social* is best viewed as an epistemological guide to how to frame issues of inquiry, within the ontological context of ANT. The book is an introduction that defines the thought process for the methodology of Actor-Network Theory. Because of its alignment with ethnomethodology (Latour, 2005), and the limited procedural structure of ANT, qualitative methodology is invoked as a bridge to translating the global methodology of ANT into an instantiable research protocol (Gonzalez, 2013).

Qualitative research approaches, like ethnography, share similar central principals with ANT. Both ethnography and ANT are useful for examining complex sets of factors in order to address broad spectrum questions. Unlike quantitative research, the goal is not to reduce the phenomenon down to a limited manageable set of variables in order to test tightly defined hypotheses with a priori expectations clearly defined (Tatnall and Gilding, 2005). Instead, qualitative research begins with central questions that are broad and exploratory in nature. Central questions in qualitative research are structured in the form of "What is the broadest question I can ask in this study." Creswell (2013) provides some useful guidelines for structuring central questions and performing qualitative research.

According to Creswell, qualitative research should be limited to one or two central questions, because of the broad nature of central questions. Each central question should be followed by a limited number of sub-questions of interest. The

questions should be related to the specific strategy of investigation. In contrast to causal questions, which are associated with quantitative research, qualitative research questions should address "what" or "how" ideas. Central questions should be limited in scope to a single phenomenon or concept. Creswell (2013) recommends employing exploratory verbs, based on the type of qualitative research study. Some examples he provides include: discover (grounded theory), seek to understand (ethnography), explore the process (case study), describe the experiences (phenomenology), and report the stories (narrative). This is in direct contrast to the directional words common to quantitative research like: affect, influence, impact, determine, cause, and relate.

Because qualitative research is not structured around a series of a priori structured testable hypotheses, it is reasonable and typical for the research questions to evolve and change throughout the study as the design emerges. This is definitely typical with ANT, as the primary objective is to follow the actors where they lead. It is best viewed as a recursively iterative process that is antithetical to the assumptions made in structuring quantitative research where research questions are set in stone prior to the collection of data and remain unchanged throughout the research project (Latour, 2005).

ANT, as proposed by Latour, lacks a clearly defined structure for executing research, and can be seen more as an overarching set of principles that are intended to direct the researcher along a path of understanding. In an effort to add structure to the process, Creswell (2013) is employed through the use of a sample prototype for this research. Here is his sample script for a qualitative central question:

_____ (How or what) is the _____ ("story for" for narrative research; "meaning of" the phenomenon for phenomenology; "theory that explains the process of " for grounded theory; "culture-sharing pattern" for ethnography;

"issue" in the "case" for case study) of _____ (central phenomenon) for ____ (participants) at ____ (research site).

Based on this model, central research questions and related sub-questions have been formulated. The first central question is intended to address the changes in the regulation of the financial sector, based on the events of the global financial crisis. This is relevant to accounting in that the nature of the information reported, the regulatory mandates impact on the financial sector, and the effectiveness of the communication of this information (transparency) to relevant stakeholders, all have accounting implications. These concerns are encapsulated in the first central question:

Central Question 1

How were the early actors enrolled in the process of financial regulation change for the financial sector, specifically in the context of conflict minerals disclosure as defined in the Dodd-Frank legislation?

This over-arching question led to the formation of a related sub-question that are intended to contextualize the emergence of actors interested in conflict mineral reporting during the GFC. The sub-question addresses the historical motivations of the implementation of this new regulation as related to conflict minerals.

Seldom does change occur in a vacuum, but instead result from a set of circumstances. This leads to the first sub question:

Sub-question 1

What motivated the efforts to pursue new regulation regarding conflict mineral disclosure?

Another area of interest is understanding the actions that are believed to have caused the interest in conflict mineral reporting. Whether or not these practices were causal in nature is not germane to the formation of the regulatory shift. From an ANT perspective, the formation of a consensus belief ends with the "facts" being black boxed and accepted as truth, because the network no longer debates or questions the underlying assumptions. Based on this, the second related sub-question is derived:

The first central question and the related sub-questions address issues related to contextualizing financial regulation theory and its translation during the course of the GFC. The second central question and subsequent sub-questions proposed address the instantiation of the artifact (Dodd-Frank) that reflects the changes in financial regulation theory and practice.

Understanding the formation of consensus is a paramount concern in ANT research (Latour, 2005) and predicates the second central question. As mentioned before, the prior questions posited address the changes at the theoretical level related to financial regulation. However, equally and perhaps more interesting, are the inscriptions and resulting artifacts that emerge, and become a part of the Actornetwork. (Latour, 2005; Sarker et al, 2006)

The second central question and related sub-questions posited reflect the goal of gaining understanding through "following the actors" (Latour, 2005) and the artifacts they generate. The central question formally states this objective:

Central Question 2:

How did the various actors influence the scope and content of the conflict minerals reporting standards established because of the Dodd-Frank Act?

From this overarching question a series of sub-questions emerge that highlight the objectives of ANT framework. Because ANT is dedicated to following the actors through the process of alliance building and consensus formation, it follows that the sub-questions would relate to exploring this process and its evolution. These questions address actor emergence, the role of nonhuman actors, the process of translation, and the establishment of artifacts.

The first sub-question examines the emergence of actors at the formative stage of discussion of the need for new regulation. In the initial stages of discovery, frenetic activities ensue as potential actors seek to identify the problem and mobilize the nonhuman actors.

Sub-question 1

- A. Which actants/actors initially emerged in the process of establishing the additional regulation of the financial sector?
- B. How did they mobilize support for their position?

As the actors scrum to enlist support, according to ANT, certain actors will be more successful at building the alliances necessary to shape the conversation and affect change. The next question addresses this process and posits the question as subquestion two:

Sub-question 2

Which actors were most successful in directing the changes initially?

Before the rules, theories and ideas can be "black-boxed (Latour, 1987)," tests of strength occur and shape the final disposition of the innovation (in this case legislative regulation). Although the initial Dodd-Frank legislation was passed in 2010, substantial

portions of the law still are undefined. Because of this, actors continue to enlist aid in its development. The third sub-question examines the evolutionary flow of the process of translation and the trials of strength proposed in ANT. It is formally offered as:

According to ANT, the true area of interest is in that of following the mediators. Based on this it is significant to delineate the relevant mediators from the less significant intermediaries that serve only to transport the message. Sub-question four articulates this query as:

Sub-question 3

Which aggregates were intermediaries and which ones were mediators?

Traditional sociologic approaches typically view actors as "puppets controlled by social forces," whereas, Latour (2005) envisions outcomes as unpredictable variations with surprising "aliens" popping up. Building actor-networks is considered a messy process, involving many mediators and intermediaries that potentially vacillate in their importance and role in the process. Sub-question five articulates this question in the following manner:

Sub-question 4

Did the roles observed in sub-question 3 remain constant over time?

The final sub-question addresses the continued relevance of the conflict minerals provision of the Dodd-Frank law, from an ANT perspective. Because the regulations mandated by the law were left to the SEC to establish, the enlistment continues and the translation process is still garnering mediators to establish the final black-box. This last sub-question addresses the changes since the initial legislation was signed and is formalized as:

Sub-question 5

How is the regulation still evolving?

The above central questions and the subsequent related questions are examined utilizing the methodology discussed in the next chapter.

3 RESEARCH METHODOLOGY

Chapter three provides the operationalization of Actor-Network Theory to investigate the research questions defined in the previous chapter, including the method of data collection, and the methodology based on *Reassembling the Social* (Latour, 2005), as well as that described in other Latourian works. Discussion of limitations of the data collection techniques is also examined.

3.1 Overview of Current Actor-Network Methodology

It is important to understand how ANT methodology differs from other sociological methodologies that have been applied to prior accounting regulation research. A stream of accounting research has looked at the profession's role in standard setting from the PAC contribution and lobbying point of view. This research has included some variables that look to tease out the impact of social factors on explaining the outcomes (Roberts et al., 2003). Latour refers to research that seeks explanation of events based on a set of a priori factors that are considered to be intrinsic to the actor and thus should provide some explanatory power and value as sociology of the social and notes that although it is the dominant direction in sociology at the time, it is divergent from the original intent of sociological research. He instead advocates, what he refers to as sociology of associations. This form of sociology is known as Actor-Network Theory and successful research in this area follows a basic set of assumptions, according to Latour (2005). The first expectation is that actors, that is mediators that have an effect on the fate of technology, can be either human or non-human. Some accounting research that has claimed membership in the ANT sphere has rejected

the agency of non-human actors, like Chua (1995, 2001), but this is a key element of Latourian ANT research and relevant for inclusion in the corpus of ANT research.

The second test of its membership in the corpus of ANT research is how the social is evaluated in the work. "If the social remains stable and is used to explain a state of affairs, it's not ANT." (Latour, 2005) It may be interesting, but it is not ANT, according to Latour. A third condition for ANT membership relates to the objective of the research. If the objective is to examine the reassembling of the social than it likely meets this criteria. In practical terms, ANT is useful for examining emerging innovations as they occur, as opposed to deconstructing those that have been established. Latour notes that sociology of the social, that uses established accepted variables to explain constructs of the accepted landscape, is reasonable and useful in a great many circumstances. However, for innovations that are unfolding, a sociology of associations is Latour's prescribed methodology (ANT). In Reassembling the Social, Latour (2005) establishes a three-phase methodology for conducting ANT research. The first phase, deploying controversies about the social world, addresses five types of uncertainties that need to be considered to let the actors define the social. This will define the paths of the actors as well as provide insight into the types of actors relevant in understanding the phenomenon. After the controversies have been explored, the second phase in Latour's process, stabilization, is where the limitations and boundaries are established. The final stage in the ANT methodology, composition, represents the assemblages the actors form that establish the collective.

3.2 Determining Relevant Actors

Unlike other accounting research lenses, ANT research uses terms and notions of what is an actor and how power is defined, created, and maintained, that are unique and perhaps even hostile to the views held in other lenses. This section begins with examining the characteristics of actors—and more specifically discusses attributes associated with actors in the context of the legislation arising from the GFC. Then, the subject of power is addressed, in an effort to clarify the identification of relevant actors.

As mentioned previously, actors are not intermediaries. In the context of ANT, to be considered an actor (or actant, these terms are used interchangeably by Latour), more must be done than being a conduit of effort. In practical terms, this means that to be an actor means that translation must occur, which is consistent with the idea of actors as mediators. Actors are not guaranteed their status throughout the evolutionary process, but instead are only an actor as long as it is acting and affecting associations.

Actants need not be human to have agency. In the context of the GFC legislation dealing with conflict mineral disclosure, every actor with potential agency may be relevant. For example, ANT affords no more importance in consideration to politicians, stock markets' accounting standards, the media, unemployment statistics, or bank failures. Because actors can be human and nonhuman and can enter and leave the process at any time based on the success of their actions, it is impossible to identify an a priori list of actors to plug into some statistical based modeling approach to explain the ongoing changes in the regulation.

According to Actor-Network Theory, power is neither intrinsic nor stable. It is not an innate characteristic, but instead is negotiated through the enlistment of support.

This view of power can be viewed as an extension of what it means to be an actor, which is power can be viewed as the successful enlistment of others through mediation. This point of view towards power is consistent for both human and nonhuman actors and also reflects the challenges in a priori identification of actors.

The identification of actors requires the arduous labor of following the actors through the evolving process of change. Latour's *Reassembling the Social* (2005) defines five types of uncertainties that address the deployment of controversies. These uncertainties, when examined, reveal the actors and traces their social connections, which are the connections of non-social elements.

The first uncertainty is that of group formation. Groups do not spontaneously appear; they are either formed or refreshed. As such, they need spokespersons to define them. In contrast to what Latour refers to as sociology of the social, sociology of associations acknowledges that the researcher is a participant in the existence, decay, or disappearance of the group, because the researcher is also a social member. As mentioned earlier, actors only serve as mediators, which is they provide some form of translation in the process.

The second uncertainty is that action is overtaken. Action never takes place on its own, but instead is the interplay between actors. It is typically unclear the origin of the action, because of the presence of other agents that are acting and being affected by other actors. This is because the social is yet to be defined. The action is still in play and the iterations of enlisting support are revealing the actors and their movements.

The third uncertainty, the agency of objects, relaxes the constraint of agency being possessed uniquely by persons. While some accounting authors (Chua, 2003) omit this assumption, it is critical to ANT to accept non-corporeal actors' role in

establishing the social. Latour uses the example of Newtonian gravity to illustrate an example of this type of actor. In accounting, fair value accounting might be a viable example, appropriate to investigating the GFC.

The fourth uncertainty in the deployment of controversies is understanding, the differences between matters of fact, versus, matters of concern. The confusion over what are matters of fact versus matters of concerns originates in the false dichotomy of nature and social. Latour claims that this division implies that there is a "real" nature out there and a constructed "social" outside of nature. ANT articulates a false dichotomy between "realism" and "constructivism." To Latour, and other ANT originators, constructivism represents "a renewed attention to the number of heterogeneous realities entering into the fabrication of some state of affairs." In other words, constructivism in ANT should be seen as a synonym for an increase in realism and not one for social constructionism, as defined as a made-up reality.

The fifth, and final source of uncertainty, is that of writing down risky accounts. This uncertainty acknowledges the role of the research as a mediator that is deployed as much as any other actor in the process of translation. This uncertainty highlights the importance of the textual representation in conveying what is transpiring and how the social is forming.

Latour (2005) uses the description of 'risky accounts' to describe the challenges introduced through the examination of the many traces left behind by the actors' movements throughout the actor-network. The written account of this tracing reflects the increased proportion of mediators to intermediaries observed and accounted for in the account. Also, contributing to the use of the term 'risky account' is the understanding that even in the midst of slowly and methodically collecting data and

observing relationships, much is missed or lost in the reams of data collected. The best that an ANT researcher can hope for is to strive to write an accurate account of the actors' movements, is faithful in its representation, is interesting, and objective in examining actors' relationships from various frames of reference.

In the context of the conflict mineral regulation included in the Dodd-Frank Act, the above uncertainties highlight the need for careful analysis of the inscriptions (textual manuscripts) generated by the potential actors, keeping in mind that the artifacts created may, in fact, become actants in the process. Also of importance is the fact that just because an actant is mediating at a given point in time does not mean that it shall continue to maintain that role throughout the process. Likewise, an intermediary does not transform the input to a modified output, however, if at some future iteration it is able to cause such a translation, it then becomes an actant. Latour reduces the process as follows to assist in understanding the deployment stage: groups are made, agencies are explored, objects play a role, identifying matters of concern is useful, and without good textual accounts the social cannot be revealed.

3.3 Data Sources

Because ANT research ontologically rejects the a priori identification of actants, epistemologically an inductive methodology is necessitated. As such, a comprehensive list of possible inscriptions (data sources) is not feasible. Instead, it seems more productive to begin with a list of potential data sources, with the realization that some may turn out to be irrelevant, and other significant ones may be discovered along the way, as the actors movements are traced.

Because the final votes on legislation, as well as, regulatory modifications are implemented at the governmental level, congressional records and departmental statements are logical potential sources of data. Prior to legislative votes, public discussion—through corporate white papers and media interaction—has been observed to shape legislation. Prior accounting research has examined the use of lobbying and PAC contributions to influence legislation. In light of *Citizens United v. the Federal Elections* Committee decision, where the Supreme Court ruled that money equals speech, analyzing corporate financial involvement seems a reasonable source of germane data. This information is available via the Center for Responsive Politics.

Other potential sources include Lexis-Nexis for media references intended to shape the discussion and ultimately transform the policy. In addition to the more traditional data sources mentioned so far, video sources of news media especially that of cable news may represent a fertile source of data. Because of the 24-hour news cycle impact of cable news, it is reasonable to postulate the potential inscriptions available from that type of source. In general, all of the data used for this study requires what Latour refers to as "slowciology" (Latour, 2005), in that it had to be hand collected and painstakingly analyzed.

3.4 Keeping the Social Flat

Latour describes ANT research as a three-part process. The first step, discussed above, is to "deploy the actors own world-making abilities" (Latour, 2005). The next step is that of stabilization of controversies, which Latour describes as letting "the actors clean up their own mess" (Latour, 2005). The third step, composition of the collective, is discussed later.

This section, keeping the social flat, provides a methodological framework for observing the actors resolving (stabilizing) their controversies through the three steps just delineated. ANT research frequently employs ethnographical methodologies for data collection, organization, and analysis (Law, 2004). This is consistent with ANT and other closely related forms of praxeological research (Reckwitz, 2002). Praxeology refers to the family of practice theories that include ANT, practice-based approach, and Activity theory, Garfinkle's ethnomethodology, and Butler's performative gender studies. Examples of praxeological ethnographies are common and exemplified by authors such as Bruno Latour (1986, 2010), John Law (2004), and Gibran Gonzalez (2013). Law (2004) articulates the ANT view regarding methodology in social science research. His book highlights the limitations of strict adherence to a specific methodology.

While authors like Latour, Law, and others highlight the assumptions of empiricism and positivism. Law (2004) articulates these in his analysis of Merton's (1973) vision of science. Law observes that Merton's sociology of science posits the following scientific ethos: 1. Science should be universalistic, in that it should represent a testing of a priori ideas based on observation and previously confirmed knowledge.

2. It should demonstrate neutrality, in that it should not be based on local social, political, and personal opinions. 3. Scientific research requires an inherent skepticism, that is, trust is not a component of research. 4. Research needs to be communal, as demonstrated through the publication of findings. After articulating the core attributes of science/social science research, Law (2004) describes some of the challenges to this approach. First, Law observes that to be successful in research a great deal must be taken on trust, which calls into question the commitment to consistent skepticism.

Also questioned is the primacy of empirically confirmed and logically consistent statements that are disentangled from sociology or psychology. In contrast, ANT began as a response to these limitations. Law refers to it as the ethnography of science. The chief advantage of the ethnographic approach is that it acknowledges the messiness of practice. Instead of representing a reductionist approach that seeks to apply Occam's Razor to all matters of inquiry, ethnography of science accepts the proposition that parsimony is not always the most effective axiom in understanding a phenomenon. The following section elaborates the characteristics of research methodologies and their relationship to ethnography.

Ethnography

As mentioned previously, a substantial body of ANT research has been conducted using the principles of ethnographic research. This section discusses the methodology and how it was applied in this research. First, I begin by examining what is ethnography and elucidate its major characteristics. Second, the benefits of ethnography is discussed. Third, issues related to data collection is explored. Fourth, the antecedent stage of ethnographic research is presented. Fifth, the stages of conducting ethnographies is enumerated. Sixth, managing the vast trove of data gathered is addressed. Finally, the potential pitfalls associated with ethnography will be considered.

First, understanding what ethnography is and how it relates to ANT is necessary to understand why it has been chosen as the methodological approach. Hammersley and Atkinson (2007) address this topic by demonstrating why naturalism and positivism both miss the mark at describing the reflexive relationship between the

world and social research seeking to better understand it. The following paragraphs examine the characteristics of positivism and naturalism in the context of ethnographic research.

Positivism

Positivism, specifically logical positivism reached its zenith in the 1930's and 1940's, according to Kolakowski (1972). In accounting research, the move to positivistic research can be traced to the 1960's, Ball and Brown (1968) and beyond, to its current state of favor in North American research. Previously, qualitative and quantitative research coexisted in both social science research, as well as, in accounting research. In both cases, as time progressed, the epistemological chasm between these paradigms grew more immense (Hammersley and Atkinson,1989).

Positivism is used in many contexts, and as such will be limited in definition here to three basic principles outlined by Keat and Urry (1975), Giddens (1979), and Cohen (1980): 1. Social science research shall be logically patterned after the model of physical science research. This means that positivistic social research, like physical science research, is most appropriately conducted by recording quantitatively measured manipulated variables to identify the relationships between them. 2. The concept of universal laws in relation to the findings of research. This tenet represents the belief that through deductive analysis of the statistical results of the research has a high probability of generalizability to a variety of other situations. Generalizability is of paramount importance to practitioners of positivism. 3. Researcher neutrality. Epistemologically and ontologically, priority is given to directly observable phenomena. Metaphysics that address more nebulous and intangible relationships are typically dismissed as

nonsensical. To ensure adherence to this principle, substantial importance is given to the Popperian falsification (Popper, 1957). This fits hand in glove with the importance of reliable quantitative measurement as a proxy for sound neutral observation. Under this paradigm of social research, the researcher develops a priori hypotheses to test, establishes criterion for the study and defines variables that represent the constructs of interest, and then draws conclusions based on the statistical findings of the study. This can be seen as an isomorphic transfer of the scientific method that is common to the natural sciences to social research.

Naturalism

In contrast, naturalism purports that the natural world should be studied in its natural state, much like the methodology employed by Dian Fossey, when she performed her famous gorilla research that motivated the movie *Gorillas in the Mist*. A key element of this view is the importance of the researcher adopting an appreciation of the social world under investigation. According to Matza (1964), a commitment to true nature of the phenomenon under observation.

In contrast to positivism, naturalism clings to an adherence to belief that reality exists in the empirical world and great care should be exhibited to faithfully capture that; and that methodology is only of concern as to how it assists in capturing that reality. Also, naturalism holds that social phenomena are different than natural phenomena, because the social world cannot be explained or understood through causal relationships. Instead, each event is unique and can be understood in terms of the events under observation. For example, a given stimuli will evoke different responses in different subjects based on there unique prior experiences. Naturalists see

diminished value in trying to establish causal relationships, because the best that could be observed is how a majority of people responded to a given phenomena. Without immersion into the events of interest, no meaningful understanding of the motivations of the individual participants, and thus explaining why something occurred is significantly hampered.

Based on the above description of positivism and naturalism, it should be clear that positive researchers find it difficult to harmonize their worldview of research with that of researchers entering into the social setting of an ethnographic study as a non-neutral participant observer. In a manner dedicated to observe the participants directly through conversations, observations or written texts, without the goal of testing an a priori set of hypotheses via quantitatively measurable empirical observations through statistically significant replicable tests that could later be potentially falsified through further study.

In contrast, naturalists rely on ethnography as the primary methodological approach to inquiry. This is logical, based on the naturalistic view that reductionism leading to an over-simplification of the complexities inherent to all aspects of social activity is counter productive and detrimental to the understanding of research objective.

ANT, like naturalism also frequently utilizes ethnography as a primary methodology, but does not necessarily embrace all of the tenets of naturalism. For example, ANT rejects the natural/social split, but instead notes that scientific inquiry is not as objective as it purports and is constructed through the building of associations that establish actor-networks that lead to the construction of established scientific fact. While naturalist decry methodology, social research, including ANT require a

methodological framework to explain how the interpretations of the observations were derived. All research consists of data collection, which also implies exclusion, and analysis of the data. The next section discusses the steps required to conduct an ethnographic study.

Data Collection

There are three categories of ethnographic data. They consist of observational data, interview data, and archival data (Sangasubana, 2011). Archival data is expected to provide the primary basis of data gathering for this project. Archival data, in this context is not the typical archival that typically is thought of in accounting research. Instead from an ANT/ethnographic point of view, it refers to the examination of text documents, called artifacts in ANT (Shiga, 2007). In this setting, documents like congressional reports, white papers, magazine articles, Internet articles, and news programs are likely to enrich the tapestry of data required to trace the translations that inform the establishment of the body of regulations known as Dodd-Frank. The next step in ethnography is collecting and managing the data that is collected.

Ethnographic research is known for generating a surfeit of data that needs to be managed and categorized in order for meaningful insight and conclusions to be drawn. As mentioned earlier, this process is inductive and recursive and any knowledge to be gained can only transpire through a commitment to shed preconceived notions and biases (Roper and Shipira, 2000). According to Hammersley and Atkinson (2007), it is common practice to initially organize data and notes chronologically and later examine the data to establish categories that assist in making the data manageable and also identify patterns, actors, relationships, roles, repeated phrases and concepts, as well as

other possible classifications that may present themselves relevant during the process (Sangasubana, 2011; Hammersly and Atkinson, 2007).

Roper and Shapira (2007) suggest 5 strategies for ethnographic analysis. The first strategy is coding descriptive labels. This strategy suggests applying descriptive labels and is consistent with that outlined above from Hammersley and Atkinson. According to ANT, great care needs to be taken before discarding potential data. It is important to go slow and follow the actors. The goal from an ANT perspective is to preserve as much richness as possible. The second strategy is that of sorting for patterns. From an ANT point of view, the goal should be to identify the process and actors involved in translation. The third strategy is to identify outliers. In positive research, such data is frequently deleted or "winsorized (Teoh and Zhang, 2011)." In ethnographic research, outliers are embraced and need to be noted and potentially researched further (Sangasubana, 2011). The fourth strategy is generalizing constructs and theories. The purpose of this strategy is to demonstrate how the findings of this study relate to other findings and theories in order to make sense of the results. ANT According to Law (2007) is dedicated to the goal of explaining how relationships are formed as opposed to trying to explain the whys of the social as usually sought in sociological research. ANT sees relationships as being tenuous and temporally fragile and thus difficult to explain in terms of stable agents and frameworks. The final strategy posited by Roper and Shapira is that of memoing with reflective remarks. This strategy is useful for providing the researcher insight into observations, concerns, biases, areas of further interest/concern, and opinions. This is important because ANT also acknowledges that the researcher is part of the study and not an objective impartial referee. As such, it is necessary for the researcher to acknowledge this fact and its implications. The next

section addresses three common concerns related to controlling quality in ethnographic studies.

Quality concerns

The first concern is reactivity. This refers to the degree in which the presence of the researcher influences the actors. The goal is to come to a familiarity with the setting and issues, so that the researcher's presence is as innocuous as possible.

Second, reliability is important to ethnographies, as it is to research in general. This relates to both internal and external consistency. Internal consistency is achieved when behaviors are recorded consistently over time and in various contexts. External consistency is achieved by verifying and cross checking data with other sources, much like cross checking audit data with outside sources. Reliability in this type of research is contingent on insight, cognizance, breadth of inquiry, and diversity research perspectives.

The third concern is validity. Ecological validity is primary importance to ethnographic research. Ecological validity refers to the degree that the data described reflects the phenomena being investigated. ANT sets as its primary objective the task of following the actors where they go. And, Latour's call for slowciology reflects the prime directive of faithful representation of the world under review. There is an old saying in art, "draw what you see, not what you think you see" (Shirley, 2012). This exemplifies in the fact that ANT is a material-semiotic methodology concerned with the interplay between the natural and symbolic aspects of reality.

Chapter 4 provides the result of an in depth analysis of the data. Followed by Chapter 5, which discusses the conclusions and limitations of the study.

4 RESULTS

This project began as an examination of the development of the Actor-Network necessary to solidify the passage and implementation of Dodd-Frank. Based on these objectives, research questions and sub-questions were posited to direct the initial path of inquiry. Like many exploratory studies, the path only becomes clearer through the iterative process of reflection and adaptation to the data that unfolds.

Latour (2005) likens ANT research to mapping the coastline for the first time and notes the importance of keeping track of the undulations in shore shape and acknowledges the slow and arduous task it presents. As data collection began, and the magnitude of mission became clearer, it became necessary to sharpen the focus of the research. The broad scope and diversity of issues of the law in its entirety, made it unmanageable in complexity and in scope for a single study.

Instead, following the principles outlined in Creswell (2013) of limiting the focus of central questions to a single phenomenon, it became clear that the focus should be limited to investigating an aspect of Dodd-Frank that intersects most closely with accounting concerns. After continual study of the 849 pages of the law, Title 15 section 1502, pertaining to conflict minerals emerged as that central focus. Conflict minerals, like the other issues addressed in Dodd-Frank, originated out of other drafted or proposed legislation. However, public company requirements to disclose activities related to conflict minerals became law only after passage of Dodd-Frank. This section of the dissertation applies the Latourian ideals discussed in the methodology chapter to this evolving issue.

According to the second uncertainty of ANT (Latour, 2005), identifying the origin of action is frequently difficult, because all that can be observed are the outcomes and artifacts generated during the formative state of flux of associations still in play. While the exact origin of interest in the challenges facing the Democratic Republic of the Congo is difficult to pinpoint, however, the building of networks can be traced.

With regards to Section 1502 of Dodd-Frank, which includes regulation on conflict minerals, this building of networks can be viewed as a series of stages of development. Examination of the data reveals that specific periods in the process emerge. The establishment of such periods is by their very nature an instantiation of the first uncertainty outlined by Latour regarding group formation. One of the tenets of the first uncertainty is that the researcher is part of the process and is an actor, when and if, such participation serves to alter or modify the association process. However, the fact that Latour notes that the researcher is not outside of the research does not negate the importance to strive faithfully to trace the connections between actors, in all of their complexity, and lay aside, that which does not participate in the translation process. This research approach requires an understanding that all associations come at a cost, are fragile, and exist for only a brief temporal period.

As implied above, Section 1502 can be viewed through the lens of transformation through various stages. I define the first period as the legislation period. In this phase, many actors seek to direct the narrative to build support for the specific matters of concern. This phase consists of various legislative attempts and culminates in the passing of Dodd-Frank. This does not necessarily represent the establishment of a black-box, as Latour defines as the end of discussion and acceptance as fact. The

associations established prior to and leading to the inclusion of conflict minerals in the 2010 passed version of Dodd-Frank represent this period.

The second stage of transformation is that of rule-development. During this phase actors representing diverse interests work to establish associations to shape how the Securities Exchange Commission (SEC) will interpret the relevant section of Dodd-Frank. Each actor must build associations to move the rule development process along. After Dodd-Frank was passed, the establishment of implementation guidelines and compliance oversight was delegated to the SEC. Whenever the SEC is tasked to establish rules, they provide an opportunity for concerned parties to comment. The comment letters provide great insight into the actions of potential mediators and intermediaries. The Commission received nearly 40,000 form letters (petitioners), and an additional 575 letters and meeting memos from other actors, that reflect the evolution of group formation for this phase of the rule setting. This phase consists of the time between the passage of Dodd-Frank (2010) and the release of the SEC's final rule in 2012.

The third and final phase is that of implementation of the standards outlined in the SEC's final rule, and how the various actors move to shape interpretation of the reporting requirements. While the prior phases established reporting requirements, this phase reveals ongoing tests of strength, of the actors, as well as demonstrates that action is still in play. Because the new rule has never been exercised before, associations continue to be forged and tested as the implementation is challenged. This period consists of the time between 2012 and 2016.

4.1 Legislative Phase

In 2002, the preliminary connections between rapes, murder and war in the Democratic Republic of the Congo (DRC), and the intersection with various natural resources was articulated (Vlassenroot and Romkema, 2002). The following year an article appeared in *The Guardian* (1/08/2003), noting that cannibalism had returned to the region. The author notes that if hunters returned to camp empty handed, they were at risk of being killed and eaten. From a legislative point of view, these stories (and the public pressure that ensued) led to the banning of "blood diamonds." The Clean Diamond Trade Act of 2003 regulated the importation of diamonds with the goal of banning diamonds whose mining fuels conflict in the country of origin (govtrack.us, 2003).

4.1.1 Initial Actor-Network Activities

The events prior to the Dodd-Frank network building activities are examined in order to acknowledge the artifacts that were generated and available during the network building phase associated with section 1502 of the act. In 2006, Congress established the Democratic Republic of the Congo Relief, Security, and Democracy Promotion Act of 2006—the four original cosponsors of the bill were Senators Barak Obama (D), Sam Brownback (R), Richard Durbin (D), and Mike DeWine (R). The objectives of this law centered on using a series of financial incentives and requirements to motivate and help the DRC reduce its sexual abuse and trafficking problems, as well as to strengthen and stabilize the government as a democratic nation. Again, this legislation is an example of an artifact of prior network building related to the Congo.

Both the 2003 law and the 2006 law passed through the Senate with unanimous consent and received broad bipartisan support in the House of Representatives. The actors that advanced these legislative actions were able to establish strong enough connections between disparate actors in order to build a network at least durable enough to reach that objective. Some of the actors that were enrolled were politicians, media outlets, Congolese victims, and rape and murder statistics. This is an abbreviated list of actors, which is intended to demonstrate the kinds of actors involved in network building. For example, the original sponsors of the two bills contain none of the same actors. However, both pieces of legislation began with bipartisan associations. While these observations do not cause or explain future ANT developments, they do provide opportunities for post-hoc comparisons. The Congo related legislative attempts and actions that followed the 2006 law form the foundation of the actor-network building process that eventually lead to section 1502 being included and passed as part of Dodd-Frank.

In December of 2005, two senators, Sam Brownback, a Republican from Kansas, and Richard Durbin, a Democrat from Illinois, visited Goma, Congo. While this can be viewed as part of the 2006 law network, it also can be seen as the interaction between the following actors: The Congo, 22 year old Nzigire, the 4 million Congolese people who died in the war, Senators Obama, Brownback and Durbin, and the one thousand daily war deaths that were occurring (Finley, 2005). A simple Google search of images of the Congo reveals a glimpse of the beauty and complexity of the Congo, its climate, its geography and its people. The interaction of the environment, the politicians, and a simple woman named Nzigire, who was given the opportunity to share her story of the horrors of gang rape and the devastation visited upon the people in the region.

These actors, along with the statistics of total deaths, daily deaths, and human rights violations including rapes, worked as non-human actors to form the initial network necessary to enlist future actors and intermediaries (Latour, 2005) necessary to pass the Democratic Republic of the Congo Relief, Security, and Democracy Promotion Act of 2006 with broad bipartisan support.

Both the 2003 and the 2006 laws had stated goals of encouraging reform in the region. In ANT terms, this can be viewed as an attempt at action at a distance. In this case, the physical distance is over 7,000 miles away. While the actors were effective in building the network strength needed to pass the two laws (artifacts), the intended objective of managing the problem at a distance proved ineffectual, as the violence continued unabated (Meger, 2010). A substantial body of literature exists articulating that the Congolese war, beginning in 1998, represents a culture of rape "on a scale never seen before" (Nolen, 2005). Holmes (2007) notes that over 32,000 rapes were registered between 2005 and October of 2007 and that that number likely captures less than fifty percent of all incidents.

Starting as early as 2002, various actors concerned with the plight of the Congo worked to enlist other actors to effect change. By highlighting the impact that the war had on endangered Gorilla populations, the impact of mining of diamonds and coltan to fund the violence, and the magnitude of the violence, potential actors sought to enlist support that would facilitate action at a distance.

Section 1502 of Dodd-Frank has a legislative history that originates prior to the machinations of that legislation. Actor-Network Theory notes that locating time-zero of the building of an actor-network is typically problematic, and this is true in this case as well. However, it is not impossible to trace early actions based on the artifacts that are

generated. The move to regulate certain minerals originating from the DRC culminated in a first attempt at federal legislation in 2008. The next section examines the early actors and network building attempt.

4.1.2 Early Conflict Minerals Legislative Attempts

In 2007, John Prendergast, an activist who had served as the National Security Council director for Africa, founded the Enough Project as a joint nonprofit organization with the Center for American Progress. The expressed purpose of the project according to the website is "to end genocide and crimes against humanity." Not on Our Watch: The Mission to End Genocide in Darfur and Beyond (Cheadle and Prendergast, 2007) represents an artifact of the following actors/intermediaries: activist John Prendergast, Academy Award nominated actor Don Cheadle, Democratic Senator Barack Obama, and Republican Senator Sam Brownback. The two senators penned the introduction to the book as well as publicly denounced the violence in their political discourse while seeking the presidency in 2008. In late May of 2008, Senators Brownback-KS (R) and Durbin-IL (D) introduced the Conflict Coltan and Cassiterite Act of 2008 (S. 3058). This Act was structured similarly to the 2003 Diamond Act, in that it called for a ban on the importation of stated minerals until such time that the DRC had resolved its serious human rights violations. This legislation only had two original sponsors, and was unable to secure any others, prior to it dying in committee (congress.gov, 2008).

According to Congress.gov (2008), the proposed act was read twice and referred to the Committee on Finance. The act never left committee and never became law. While the bill was able to build support among activist groups and others, only the original sponsors attached themselves to the bill. Senators Brownback and Durbin

lacked the ability to enlist others in their group formation efforts. Perhaps, this failure to gain additional support can be understood because the other members of the Senate lacked the direct interaction with the human and non-human actors that influenced the sponsors' commitment to group formation. The two politicians lacked the ability to generate associations with the other senators similar to those that resulted from traveling together to the region. John Prendergast, who had strong associations with the actors in Africa and Washington D.C., continued to speak out on behalf of the suffering people in Africa, also enlisting celebrities as ambassadors for the group. Concurrently, the sponsoring senators sought political means for group formation. Even though the legislation was unsuccessful, the process of group foundation continued to evolve, as further legislative work began being developed to address the role of minerals funding the violence in the region.

After the 2008 initiative to ban specific minerals from the Congo region that potentially were funding the violence and conflict in central Africa, work by Senator Brownback, Senator Durbin, and Senator Feingold continued towards generating legislation that would attract broader based support. The Congo Conflict Minerals Act of 2009, was introduced on April 23rd, 2009 by Senator Sam Brownback, with the support of two original co-sponsors. Over its legislative history, senate support grew to 22 co-sponsors. The bill garnered bipartisan support. Nineteen Democrats, two Republicans and two independents endorsed the bill. The changes in the legislative framework of the bill (translation) demonstrates the actors engaging in the process of group formation and the social is constructed through the work of actors.

The Congo Conflict Minerals Act of 2009 represents a shift in the approach posited by the previous year's legislative attempt in that instead of seeking to outright

ban minerals from the region, it sought to "monitor and stop commercial activities involving the natural resources of the DRC (the minerals columbite-tantalite [Coltan], cassiterite, wolframite, and gold) that directly contribute to illegal armed groups and human rights violations in the eastern region of the DRC." A second departure from the 2008 bill is that of amending the Securities Exchange Act of 1934 to require certain users of designated minerals to demonstrate to the SEC, through annual disclosure, the sourcing information of their minerals. The purpose of these provisions, as stated in the bill, are for the expressed purpose of mitigating the sexual and gender based violence in the region.³

On the House of Representatives side, HR 4128- Conflict Minerals Trade Act was introduced by Congressmen Jim McDermott, Frank Wolf, and Barney Frank (Congress.gov, 2010). The house bill required a higher level of disclosure and additional federally funded assistance regarding the generation of lists of products covered and acceptable suppliers (Whitney, 2015).

HR 4128 was lobbied by 21 groups seeking to shape, weaken or kill the bill. Determining which actors supported each of these objectives is difficult, because the lobbying disclosures only note the issues being lobbied. However, third party commentary is useful in revealing the positions of some of the actors. For example, the Enough Project demonstrated support for the impact of conflict minerals, starting before any legislation was proposed. Because it is under the auspices of the Center for American Progress (CAP), it is reasonable to infer that as a lobbying actor, the CAP was advocating for the legislation. Similarly, the Enough Project stated that Research in

^{2.} Congress.gov S.891—Congo Conflict Minerals Act of 2009

^{3.} S.891—Congo Conflict Minerals Act of 2009

Motion (RIM) and Motorola were also instrumental in the eventual passage of conflict minerals regulation.

In contrast, actors like, the National Association of Manufacturers, the National Mining Association, and the U.S. Chamber of Commerce, are later documented as being highly critical of the legislative efforts. The two legislative efforts of 2009 were both lobbied by 16 of the 21 actors that lobbied HR4128. Concern for the challenges facing central Africa led to early attempts at actor-network formation.

Tracing the movements of the actors from the 2003 Diamond law through the 2009 conflict minerals attempt reveals associations being forged by various groups during the preliminary group formation. Actors formed alliances and associations by employing nonhuman actors to enroll other actors to their group. For example, Senators Brownback and Durbin, Congressmen McDermott, Wolf and Frank, along with activists like John Prendergast, used statistics, narratives, and images pertaining to the magnitude of the violence in the DRC, to increase alliance strength for increased regulation to promote human rights issues in the DRC. In contrast, groups like the National Association of Manufacturers utilized estimated implementation costs as a primary concern.

4.1.3 Dodd-Frank

The period of 2009-2010 represents the culmination of the pre-Dodd-Frank period, up to and including the passage of the Act. Tracing the actors' movements during this period requires investigating the associations that form, as well as translations that evolve. Latour notes that groups require spokesman or spokespeople to build cohesion. More actors being added to the group lead to more translations,

whereas, more intermediators lead to potentially stronger bonds. For example, if a politician receives 10,000 signatures on a petition from constituents that endorse a single point of view, the signatories represent intermediaries and not actors—because they did not lead to a modification of the point of view. In contrast, if 50 politicians receive support for that point of view, but each one highlights significant areas of concern that need to be addressed to obtain that support, then the 50 politicians and those that shaped their point of view are candidates for being actors. This two-year period was traced to locate the actors and find the inscriptions that they have left behind (Latour, 1999)

Beginning with inscriptions left behind as a result of lobbying activity by searching Center for Responsive Politics website, OpenSecrets.org, for lobbying reports containing 'conflict minerals' in their filings. The search resulted in a list of 97 clients (potential actors) that sought to influence the legislative process. This list reveals that between 2006 and 2016 that the term Conflict minerals is mentioned by lobbying entities as many as 64 times for the Information Technology Industry Council and as few as once for 16 potential actors. This is where the process Latour refers to as following the actors begins to take shape as a means to gain an understanding of the process of building consensus. Without further investigation, the tempting allure of drawing inferences between number of mentions of conflict minerals and the magnitude of the influence of the actor seem intuitive. However, this is antithetical to the slow and methodical approach required according to ANT (Latour, 2005). Instead, the data collected regarding the actors' lobbying is cross-referenced against public disclosures made during the proximal referent period, regarding alliances, positions, and concerns. The lobbying and disclosure forms frequently lack positional statements, but instead

contain a laundry list of issues lobbied, what period the lobbying took place, and how much financial resources were dedicated to the endeavor.

Using the data available through the Center for Responsive Politics, each of the 97 potential actors was cross-referenced against S. 3058 (2008), S. 891 (2009), H.R. 4128 (2009), and H.R. 4173 (became Dodd-Frank). Forty-one of these potential actors were found to have engaged in lobbying these bills. This type of data is not articulated in a manner that leads to clear relationships between lobbying, positions taken, and magnitude of lobbying per issue.

Lobbying disclosures, as required by law, require that the information provided meets a basic set of criteria. The disclosure forms state the client, the amount of the lobbying income or expenses, the quarter of the year affected, and issues and agencies addressed. Also, working as a limiting force is the lack of cross referencing between issues and clients. The lookup of 'conflict minerals' that yielded 97 resulting clients, as well as number of mentions of the term 'conflict minerals', does not provide an effective means of ascertaining the context of those mentions in the data. Because of this, and the goal of tracing the associations, these firms were cross referenced by the bills mentioned above to better understand the application of lobbying resources. It quickly became apparent that the complexities of H.R. 4173 (fifteen titles and 849 pages) was more confounding than useful in determining an interest in conflict minerals. This is likely related to the fact that title XV section 1502 was added as an amendment just prior to passage of the bill and after discussion on the floor⁴. Most of the disclosures that specifically noted H.R. 4173 and conflict minerals also noted one or both of the

^{4.} Congressional Record—Senate (April 30, 2010-May 29, 2010)

2009 bills as well. Because of this, some uncertainty exists as to the completeness of the lobbying firms list. However, even with this limitation, a meaningful point of departure is achieved.

The 2008 bill only yielded two documented lobbying actions and the political support of the two original sponsors. This, along with the thirty six media articles found in 2008 suggests that the issue was not well formed in terms of a policy initiative at this time. The media stories about the conflict in the Congo described the violence of war, the scars of the rape culture, the corruption related to "blood minerals" and "blood Coltan." At this point a common vocabulary has yet to be employed and enrollment is still very preliminary. The only lobbying on S. 3058 was by Niotan Inc, a processor of the minerals, and by the Center for American Progress, the parent of the Enough Project. The artifacts of their lobbying disclosures represent early tracings of the issues that would emerge as the process continues.

In 2009, various actors begin to align in the use of consistent descriptors, like the term conflict minerals. Both H.R. 4128 and S. 891 have the term "conflict minerals" in the name and address the issue of human rights violations. The Brownback bill (S. 891) even more explicitly addresses "those affected by sexual and gender based violence...," which show an evolution towards the wording used by the Enough Project. When Senator Brownback introduced S. 891, he stated:

The issue of rape in the Congo is quite possibly the worst in the world. We used to call it a "tool of war" but now it's not even due to the war. Because it has been taking place there for so long, it has nearly become an accepted behavior and one where impunity reigns free. Last year I spoke with Dr. Mukwege from Panzi Hospital in the city of Bukavu in the South Kivu Province of Congo. Panzi

Hospital is the leading treatment hospital of rape and sexual violence survivors in Congo. Dr. Mukwege sat in my office and told me of how he was seeing as many as 10 new rape survivors who needed treatment a week.

He then pulled out a map and circled the areas where majority of his patients were coming from and explained that those areas were the key mining areas for coltan and cassiterite in South Kivu. He said that rebels controlled these areas because of the mineral wealth and that with their control of these areas came their lawlessness and with lawlessness came the impunity of rape. Rape, displacement, insecurity, forced labor, child soldiers, curable illnesses left untreated, and deaths of 1,500 people a day are only a few of the human indignities directly and indirectly surrounding this struggle for control of the minerals in eastern Congo.⁵

Comparing that to the testimony of John Prendergast before the Senate committee on Foreign Affairs in May of 2009:

... this hearing on a difficult topic and an extraordinary challenge for the international community: how to end the scourge of sexual violence in the Democratic Republic of the Congo and Sudan. These two conflicts are characterized not just by appalling death tolls—nearly 8 million and counting since 1983—but also by widespread crimes against humanity. Indeed, heinous crimes against women and girls occur with numbing regularity in Congo and Sudan, where rape has become the tool of choice of many of the armed groups as a means to control, subjugate, humiliate, intimidate, and ethnically cleanse.

So let's be absolutely clear: measures to deal with rape as a weapon of war in isolation will fail and fail miserably. If we truly want to end this scourge we must

^{5.} Congressional Record—Senate Vol. 155, Pt. 8

move from managing conflict symptoms to ending the conflicts themselves. ... In my 25 years of working on African conflict resolution, Congo is by far the most complex war I have witnessed. But one of the biggest drivers of the conflict—and on in which most Americans are unknowingly but directly involved—has long been clear: competition over the extraordinary natural resource base. If we don't address the economic roots of violence, we will only be finding temporary respites from the logic of continued war and exploitation.

Conflict minerals

Sexual violence in Congo is often fueled by militias and armies warring over "conflict minerals," the ores that produce tin, tungsten, and tantalum—what we call the "3 Ts"—as well as gold. Armed groups from Congo, Rwanda, and Uganda finance themselves through the illicit conflict mineral trade and fight over control of mines and taxation points inside Congo.

But the story does not end there. Internal and international business interests move these conflict minerals from Central Africa around the world to countries in East Asia, where they are processed into valuable metals, and then onward into a wide range of electronics products. Consumers in the United States, Europe, and Asia are the ultimate end-users of these conflict minerals, as we inadvertently fuel the war through our purchases of these electronics products.⁶

From these speeches several similarities in content begin to emerge.

Brownback: Because it (rape) has been taking place there for so long, it has nearly become an accepted behavior and one where impunity reigns free.

^{6.} Senate Committee on Foreign Relations, May 13, 2009 (https://www.foreign.senate.gov/imo/media/doc/PrendergastTestimony090513p.pdf)

Prendergast: These two conflicts are characterized not just by appalling death tolls—nearly 8 million and counting since 1983—but also by widespread crimes against humanity.

Both of these statements highlight the longstanding nature of the conflict and the magnitude of human rights violations. The senator's comment notes that it is nearly acceptable behavior in the region and the violence is met with impunity. Prendergast notes that in addition to the "appalling death tolls", there are also widespread crimes against humanity. Brownback also noted:

Rape, displacement, insecurity, forced labor, child soldiers, curable illnesses left untreated, and deaths of 1,500 people a day are only a few of the human indignities directly and indirectly surrounding this struggle for control of the minerals in eastern Congo.

This portion of Brownback's testimony describes a variety of crimes against humanity, as well relates them to "the struggle for control of the minerals in eastern Congo." Prendergast offers similar causalities for the problem in his testimony:

Sexual violence in Congo is often fueled by militias and armies warring over "conflict minerals," the ores that produce tin, tungsten, and tantalum—what we call the "3 Ts"—as well as gold. Armed groups from Congo, Rwanda, and Uganda finance themselves through the illicit conflict mineral trade and fight over control of mines and taxation points inside Congo.

In this example, Prendergast delineates the specific elements, "the 3T's—as well as gold," that are fueling the conflict, hence the term—"conflict minerals." This association between actors is not something to be explained by traditional social predictors, like party affiliation. John Prendergast is a co-founder at the Enough Project,

under the auspices of the Center for American Progress and served on the National Security Council under President Clinton. In contrast, Senator Brownback is a very conservative republican that sought the republican nomination in 2008. Instead, both actors appear to be enlisted in a network that emanates from their respective time in the Congo, and the associations made there.

The testimonies of the actors above, along with their experiences in the Congo, reveal how the artifacts of the violence, including death and rape statistics, were enlisted to promote the advancement of legislative efforts to mitigate future suffering in the region. This represents an example of Latour's third source of uncertainty, the agency of non-human actors. These actors and others motivated actor-network formation for both supporters of a legislative solution, as well as, those seeking to mitigate one. The enlistment of these violence related artifacts are dominant at the legislative phase and is reflected in HR 4128 and S 891 and appear to be taken for granted at the later phases of the process.

H.R. 4128, the Conflict Minerals Trade Act, was introduced by Congressman

Jim McDermott (D-WA). Congressman McDermott had previously lived in the DRC

and provided psychiatric services in the region at that time. Senator Brownback,

Congressman McDermott, John Prendergast, and celebrities—Ben Affleck, George

Clooney, and Don Cheadle (A partial list of visitors), had all travelled to the region prior

to the adoption of section 1502. The interaction between the visitors and what they
encountered moved them towards shaping and supporting the potential legislation.

Although the pre-2010 legislative attempts did not build strong enough coalitions in
time to pass the measures, the efforts did pave the way for the eventual inclusion into
Dodd-Frank.

The difficulties encountered in 2008 and 2009 led Senator Brownback and Congressman McDermott to move towards inclusion in the respective senate and house bills that became Dodd-Frank. This represents the process of translation (Latour, 2005). In this case, the supporters of regulating conflict minerals were willing to allow the manifestation of that potential regulation to be altered, in order to affect the closest approximation of that goal. The initial stated purpose of Dodd-Frank was to reform Wall Street and to protect consumers. The inclusion of section 1502, the associations made to expand those objectives to include concern for the DRC, required the limited network consisting of the conflict mineral actors and their intermediaries to forge associations with those establishing the Dodd-Frank network under an expanded definition of "improving accountability and transparency in the financial system, to end too big to fail, to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes" (Senate, 2010).

According to Cook (2012), the two bills, S 891 and H.R. 4128, are companion bills—meaning that once the Brownback bill was added to the senate version of the Dodd-Frank act, both bills were included in the conference deliberations. The Brownback bill was added on the twelfth of May, and eight days later the senate passed the bill, sending it to conference to be reconciled with the house version. Then, the completed bill was signed by President Obama on July 21, 2010.

While in conference, the Brownback provision served as the bas text for section 1502 and H.R 4128 served as a companion bill (Whitney, 2015). While the final law does not include many of the provisos of H.R. 4128—like providing corporations with a list of approved smelters or imposing penalties for firms that engage in using such

minerals, it does require firms that are covered by the regulation to certify the conflict status of minerals used in their products. In contrast, S. 891 amends the Securities Exchange Act of 1934 to require the SEC to establish rules consistent with the objectives of the act, and to require firms covered under the act to annually disclose 3TG mineral country and mine origins. With the expressed purpose of discouraging sexual and gender based violence in the DRC region (Congress, S891).

The final version of section 1502 is approximately five and one half pages long and establishes a framework for implementation. Section 1502 does not explicitly enumerate the rules that corporations will need to adhere to in order to maintain compliance. The SEC, through an amendment to the Securities Act of 1934, was ordered to promulgate regulations regarding the reporting requirements related to minerals originating in the DRC and adjoining region, within 270 days of the enactment of this subsection. These requirements include a certified audit as a critical component of the due diligence process in determining the origin and chain of custody for these minerals. If an independent audit is determined by the Commission to be unreliable, then the certification requirement will not be considered fulfilled. Products can only be listed as being "conflict mineral free" if the product does not contain those identified minerals that have either directly or indirectly financed or benefited the armed groups in the region. Section 1502 goes on to require that information be presented to the public via their website where they state the conflict status of the minerals used in their products. The remainder of section 1502 relates specifically to issues between the state department and the DRC, intended to resolve the conflict issues and identify the areas of concern to promote peace (PL 111-203, 2010).

The results of legislative phase are now examined in the context of central question one and the related sub question. Understanding these events in the context of ANT is facilitated by reflecting on these results through the perspective of the five uncertainties presented in *Reassembling the Social* (Latour, 2005). Central question one, *How were the early actors enrolled in the process of financial regulation change for the financial sector, specifically in the context of conflict minerals disclosure as defined in the Dodd-Frank legislation?*, requires investigation into mapping the enrollment process of the actors in the legislative phase that established an Actor-Network capable of moving this change in reporting framework, regarding conflict minerals, through both houses of Congress, and eventually being signed by the President of the United States.

Tracing the actors through this process provides insights into the related subquestion as well. Recalling back to central question one, the sub-question states, *What motivated the efforts to pursue new regulation regarding conflict mineral disclosure?* The results of the legislative phase are now analyzed through the ANT lens of uncertainties.

Beginning with central question one,each of the sources of untertainty is addressed. Latour's first source of uncertainty is that of group formation and this is reflected in this legislative phase through the analysis above that discusses the various legislative attempts. The results enumerated above demonstrate the actors movements and delineates the mediators (actors) from the intermediaries, with the mediators actually contributing to the translation process, and the intermediaries, including the eventual cosponsors of the various bills, echo the positions defined by the mediators.

The second source of uncertainty is that action is overtaken. This uncertainty aknowledges that action is in itself a surprise that cannot be easily explained by some coexistent social that intrinsically exists to explain the actions of the actors. Latour

claims that an actor is made to act by the interactions with many other actors, leading to translations through what appear to be chaotic interactions, reminiscent to the movements of bees in a hive. This second uncertainty applies to the sub-question, in that trying to understand the move to pursue new regulation regarding conflict mineral disclosure requires a web of actors, each with differing understandings of the end objective, jostling to build the alliances necessary to change the disclosure policy to include conflict minerals, in a manner consistent with the actors' unique undertanding of how to best meet that objective. An example of this is the various iterations of legislative attempts and methods advocated to regulate conflict minerals during this period. The first attempt sought to outright ban importation of conflict minerals, another sought to provide lists of approved sources and products that would be governed, with respect to conflict minerals, and finally, the conflict minerals provision of Dodd-Frank established a set of reporting guidelines that were intended to facilitate change in the region through requiring U.S. corporations to disclose if their mineral sourcing contributes to death and rape in the Congo.

Latour's third source of uncertainty is the most controversial examined thus far. Objects having agency has been controversial to some researchers (Chua, 1995), but is essential to the ANT method of research. In the case of the legislative phase, the analysis presented above highlighted how artifacts such as prior legislative attempts, human rights violations reports and statistics were enlisted and deployed to enlist additional actors into the network to advance acceptance of the move to increased disclosure.

The fourth uncertainty, according to Latour, is that of matters of fact versus matters of concern. In latourian terms this uncertainty addresses constructivism, the mobilization of actors towards an assemblage that faces the risk of failure. Throughout

the legislative phase, this is demonstrated in the multiple congressional attempts that failed to build a case for conflict mineral disclosures, before a successful bill could establish a strong enough network to be enacted. In this case, it was done by translating the disclosure reform into the context of providing additional consumer protection as defined by preventing the public from contributing to the violence in the Congo.

Based on the law as described above, it is apparent that the next phase in this process of consensus building is the promulgation of conflict mineral rules by the SEC. Section 1502 required that the SEC issue its final rule by April of 2011. The final rule was issued on August 22, 2012. The Commission accepted comment letters during this period and received comments up to and including the date of the ruling.

When the Commission receives petition letters, or letters that are boiler-plate in nature, those letters are grouped together and assigned a type. Regarding conflict minerals, eleven of these types of letter were received. The largest three of these forms were accompanied by thousands of copies. Types C, D, and H consisted of 12,292, 13,660, and 9,686, respectively. The originators of these letters represent actors, in the Latourian sense of that word. In contrast, the more than 35,500 signatories are mere intermediaries for those positions.

Including the petition letters, there were 456 distinct comment letters provided prior to the Security Exchange Commission's issuance of a final rule regarding Section 1502 reporting. The following section examines the process and actors involved in influencing the SEC pronouncement. The final rule provides some insight on how it evaluated the comment letters that were provided, and how it shaped the thinking of legislator-actors in reaching a final position on the issue. By tracing the SEC's records

back to the underlying commenters, further understanding can be gleaned regarding the actors and the associations that they formed along the way.

4.2 The SEC Rule Development

This section of analysis discusses the interaction between the various actors, including the SEC, and how those interactions culminated in the adoption of the final SEC rule on the implementation of section 1502 of Dodd-Frank. During the interim period between the signing of Dodd-Frank on July 21, 2010 and the release of the final rule from the SEC on August 22, 2012, the SEC accepted comment letters, allowing concerned parties to comment on the proposed rules, in order to guide the decision making process of the SEC (SEC.gov).

Over 450 comment letters were received during this window and over 120 meetings between actors and the SEC occurred to discuss related concerns. The Commission's ruling on August 22, 2012 promulgated the regulations mandated in the Dodd-Frank Act. The 356-page pronouncement did more than outline the requirements of the, but it also, with great specificity, related the comment letters to why and how the ruling was achieved. This section of the analysis examines these interactions through the lens of ANT.

A variety of approaches could be employed to examine the interplay between the actors throughout the SEC ruling phase of the process. For example, the comment letters could be examined based on the order received by the Commission. Another approach would be to examine the significance of the comment letters based on how many intermediaries they represented or based on how many interactions the actors had with the SEC. In the end, the decision was to follow the credo offered by Latour,

"You have to follow the actors themselves (Latour, 2005, p. 22)." So, with this in mind, it was decided to follow the actors as enumerated throughout the final ruling by the Commission, and examine how the actors interacted to strengthen and define their networks and to ultimately shape the final ruling.

A three-pronged approach was implemented to facilitate this task. The first prong was to identify and read all of the comment letters. This action reflects the first step the SEC engaged in to understand the concerns of the actors. The second prong to read the SEC ruling and extract all of the footnotes highlighting those comment letters. The final prong involved rereading the ruling with the intent of extracting the key portions of the comment letters cited, whether through specific quotation or summation, depending which was necessary to capture the influence of the actors on the final was ruling. As this approach was performed in the sequential order found in the ruling, the analysis presented here reflects that arrangement.

The SEC began by explaining that the Congress chose to require firms to disclose information related to conflict minerals because it would "enhance transparency" and "also help Americans make more informed decisions." This concept received diverse support from groups including: the Social Investment Forum and Interfaith Center of Corporate Responsibility (SIF), Calvert Investments (CALVERT), the General Board of Pension and Health Benefits of the United Methodist Church (METHODIST), the State Board of Administration of Florida, TIAA-CREFF, Catholic Relief Services (CRS), the Enough Project (ENOUGH), and various senators and congressmen. As the discussion of the elements of the Commission's ruling are examined it will become apparent that the associations that form for each element are unique and fragile representing alliances that are not always obvious or stable.

Originally the comment period was scheduled to end on January 31, 2011. However, groups including: Advanced Medical Technology Association, Aerospace Industries Association, American Association of Exporters and Importers, American Automotive Policy Council, Business Alliance for Customs Modernization, IPC-Association Connecting Electronics Industries Joint Industry Group, National Association of Manufacturers, National Electrical Manufacturers Association, National Foreign Trade Council, National Retail Federation, Retail Industry Leaders Association, Semiconductor Equipment and Materials International, TechAmerica, USA*ENGAGE, and U.S. Chamber of Commerce (Dec. 16, 2010) ("Advanced Medical Technology Association et al."); Jewelers Vigilance Committee, American Gem Society, Manufacturing Jewelers & Suppliers of America, Jewelers of America, and Fashion Jewelry & Accessories Trade Association (Jan. 10, 2011) ("JVC et al. I"); National Mining Association (Jan. 3, 2011) ("NMA I"); National Stone, Sand Gravel Association (Jan. 13, 2011) ("NSSGA"); Representative Spencer Bachus (Jan. 25, 2011) ("Rep. Bachus"); Robert D. Hormats, Under Secretary of State for Economic, Energy, and Agricultural Affairs, and Maria Otero, Democracy and Global Affairs (Jan. 25, 2011) ("State I"); and World Gold Council (Jan. 7, 2011) ("WGC I") submitted letters seeking an extension of the comment period. The WGC I letter offered three reasons an extension should be granted. First, "the Proposed Rules are complex and contain many provisions which could have significant consequences for the gold mining industry." Second, "the Proposed Rule relating to Conflict Minerals (Section 1502 of the Dodd-Frank Act) proposes to deem gold mining companies as "manufacturers" of conflict minerals." Finally, "the Proposed Rules were released during a very busy time of year for the WGC's member companies." These sentiments were echoed in the "Advanced Medical

Technology Association et al." letter. The second letter noted two reasons for seeking a 30-day extension. The first was "given the complexity of the changes required, many companies do not believe the current deadline provides sufficient time to provide meaningful and complete comments to the SEC." the second reason is a variation of the third offered by the WGC, "a third of the comments period corresponds with a time of the year when many companies are closed for the holiday season or employees are out on leave." These and the other comment letters supporting extension offer the commission concerns of complexity and availability as motivations for extension. Other actors presented reasons to expedite the process.

In contrast to those seeking an extension in time, a variety of petition letters were sent to the Commission (original authorship not provided to the SEC), recommending that the commission should keep the "LEGISLATION STRONG," and "promptly issue strong final regulations." Using the "Wayback Machine" at archive.org, some of the original sponsors of the petitions were derived. Letter "C" as designated by the Commission appears to have originated with the Enough Project and Letter "D" from Raise Hope for the Congo. Further inquiry also revealed that Raise Hope for the Congo is an Enough Project Campaign and that both are in fact subset of the Center for American Progress. Also of interest, is that petition letters "E" and "H" appear to have originated from Amnesty International. This represents an interesting innovation for these actors. By having individuals join petitions online that are not signed and by having related entities solicit them, additional actors are created from the perspective of

^{7.} WGC

^{8.} Form letters

^{9.} Id.

the Commission. As these letters are referred to uniquely by the SEC, it is clear that they see them as distinct. Also, one instantiation of letter "H" was signed by a citizen and that letter was also recorded as a unique comment letter. As the final rule did not follow until August of 2012, the comment period was clearly extended, in order to allow all affected parties to comment. The Chamber of Commerce petitioned the commission with four comment letters, with the initial request in December of 2011 through its final request one month before the Commission released its ruling. Even though most of the industry groups sought to extend the comment period, many of them stated that they supported the objectives of Section 1502. For example, the Chamber of Commerce noted that "it "supports the fundamental goal, as embodied in Section 1502...," 10 and the National Association of Manufacturers (NAM) commented it's "support the underlying goal of Sec. 1502 to address the atrocities occurring in the 'Covered Countries.'"11 The American Bar Association similarly noted that it ""supports and endorses the humanitarian efforts to end the armed conflict in the eastern Democratic Republic of the Congo."12 However, most of these comments of support also included language designed to alter or modify the language of the rule as initially proposed by the Commission (SEC, 2012).

The SEC observed that they received a few letters seeking to dissuade the Commission from implementing rules of any kind, as well as opposition to the Conflict Minerals Statutory Provision. Charles Blakeman in his comment letter to the SEC objected to enacting rules because "the issue with Dodd-Frank is that it is the nuclear

^{10.} Chamber

^{11.} NAM—Comment letter (11/01/2011)

^{12.} American Bar Association (ABA)—Comment letter (6/30/2011)

option that demonizes minerals instead of criminals."¹³ He went on to state that "Dodd-Frank has burned down the entire mining industry in the Congo in hopes that their scorched earth policy will catch a militia group in its path."¹⁴ Another commentator that was opposed simply stated that "To me it borders on stupid, It would be exceedingly difficult form many retailers to verify, expensive for all, and add another wonderful playground for lawyers."¹⁵ The Commission notes these dissenters, as well as, highlights that these opinions were submitted by only submitted by a few concerned commentators. In the end, the Commission was not swayed from ruling.

Consistent with the Blakeman argument, AngloGold Ashanti Limited (AngloGold), Competitive Enterprise Institute (CEI), Bureau d'Etudes Scientifiques et Techiques (BEST), Fédération des Enterprises du Congo (FEC), IPC – Association Connecting Electronics Industries (IPC), ITRI Ltd. (ITRI), London Bullion Market Association (LBMA), and others warned that implementing these rules could lead to a de facto boycott or embargo of conflict minerals from the Covered Countries. This idea was offset by comments offered by the Enough Project and International Corporate Accountability Roundtable (ICAR), which posited that the rich supply of minerals from the region makes it impractical for the "world markets to ignore." ICAR observed that "the downturn stems from a six month suspension of mining and trading activities imposed by the Congolese government and an overly restrictive interpretation of

^{13.} Charles Blakeman—Comment letter (10/01/2011)

^{14.} Id.

^{15.} Edward Lynch—Comment letter (12/2010)

^{16.} Enough Project—Comment letter (3/02/2011)

Dodd-Frank by industry associations."¹⁷ Other concerns brought to light during the comment process include issues related to the first amendment and adverse impact on U.S. Employment. After considering all of the comments, the final rule reflects changes from the proposed rule reflecting some of the concerns presented.

The SEC began their proposal seeking to define "conflict minerals." The initial definition began with cassiterite, columbite-tantalite (Coltan), gold, wolframite, or their derivatives, or any other minerals or their derivatives determined by the Secretary of State to be financing conflict in the Covered Countries (the DRC and surrounding countries)(Dodd-Frank, 2010). Commenters argued that the derivatives of the conflict minerals columbite-tantalite, cassiterite, and wolframite should be limited to tantalum, tin, and tungsten, respectively. The comment letter from IPC reflects the concerns shared by a variety of the commentators. It states, "Tin, tantalum, tungsten and gold are the economically significant derivatives of these metals." Another issue regarding the definition of conflict minerals that commentators responded to was the use of the term conflict minerals.

The SEC notes that "a number of commentators" recommended that the term conflict minerals should be selectively used, because of potential reputational harm that firms could face from the stigma attached to the four named minerals in the law. Commentators that demonstrated concerns related to this issue included issuers and associations like; advanced Medical Technology Association, Barrick Gold, Cleary

^{17.} International Corporate Accountability Roundtable (ICAR)—Comment letter (8/24/2011)

^{18.} IPC—Comment letter (11/01/2011)

^{19.} SEC Final Rule

Gottlieb Steen & Hamilton LLP, National Association of Manufactures, Niotan Inc., National Mining Association, Jewelers Vigilance Committee et al., and others. An example of this is seen in the comment letter from Niotan. They suggest that "As important as it is for the rule to be fair and comprehensive, it is also vital that the parties complying with the rule not incur incidental and undeserved reputational damage for doing so."²⁰ Niotan suggested that instead of referring to the exhibit report as a "Conflict Minerals Report," 21 it might be more appropriate to call it the "Report on Minerals Sourced from Central Africa."²² The Jewelers Vigilance Committee, in its joint letter to the SEC commented, "We are very concerned that the unintended negative consequences of the Commission's proposed implementing rules, as currently drafted, will be to incentivize reputable members of the fine jewelry industry to source newly mined gold and tungsten directly from known, reliable sources outside of the African continent..."²³ They go on to state, "that this is necessary to avoid the highly stigmatizing effects of having to provide a 'Conflict Minerals Report'..."²⁴ Other commentators responded to the SEC with similar concerns. The SEC considered these concerns in their ruling, the Commission ultimately decided to "continue to use the term 'conflict mineral' to refer to columbite-tantalite, cassiterite, gold, wolframite, and their derivatives, and any other mineral or derivatives determined by the Secretary of State to be financing conflict in the Covered Countries whether or not they actually

^{20.} Niotan—Comment letter (1/30/2011)

^{21.} Id.

^{22.} Id.

^{23.} JVC et al.—Comment letter (3/02/2011)

^{24.} Id.

financed armed groups. Continuing, the commission noted that issuers that performed due diligence demonstrating that their conflict minerals did not finance or benefit armed groups may denote there products containing such minerals as being "DRC conflict free."

After addressing the definition of conflict minerals and the potential ramifications of the proposed usage of the term, the Commission examined the issue of who should have to file a report under the final rule. This became the foundation of step one in the three step process established by the Commission (Figure 4.1). Many of the commentators, including both human rights organizations and industry associations, informed the Commission that they believed the final rule should apply to a broader scope than just SEC filers. These commentators stated that the rule should apply to filers, private companies, individuals, smaller filers, and foreign private issuers. The primary concerns given included excluding non-filers would put filers at a "competitive" disadvantage by increasing their costs (SEC, 2012)."25 In contrast, other commentators, Like Howland, posited that non-reporters would likely have to "provide the same [conflict minerals] information to their customers who will need the information for their reports."²⁶ Sponsors of the bill and humanitarian groups, generally supported the broadest interpretation of who should be required to report. The issue of requiring foreign private issuers to comply with the final rule received the broadest support from groups as diverse as AngloGold, World Gold Council, Global Witness, the State Department, Catholic Relief Services and others.

^{25.} SEC Final Rule

^{26.} Howland Green—Comment letter (1/27/2011)

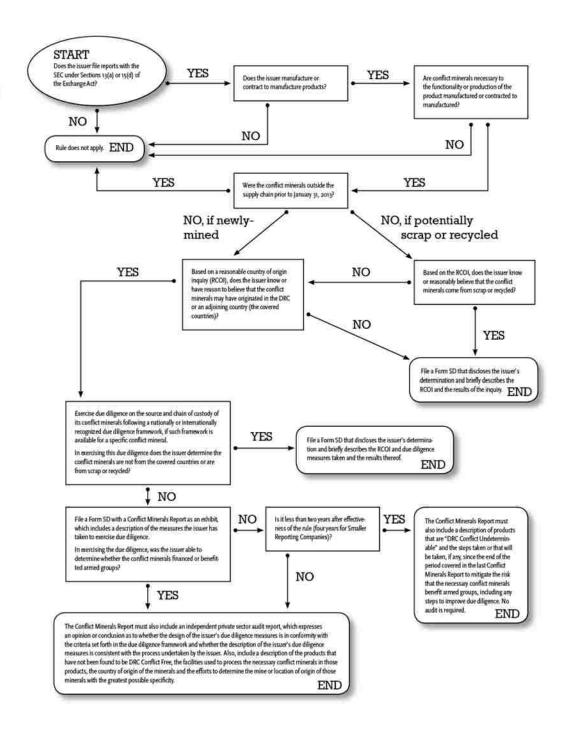


Figure 4.1 SEC Final Rule: Three Step Process
SEC final rule flowchart (https://www.sec.gov/rules/final/2012/34-67716.pdf)

Because of the constraints structured in the law and the comments that were received, the Commission's final rule in this area includes all filers regardless of size, as well as foreign private issuers. Following in the path of who is covered under the Conflict Minerals Statutory Provision, the SEC addressed the definition of manufacture and contract to manufacture products containing conflict minerals. The Commission, however, did limit the filing of conflict minerals reports to only reporting firms.

The next decision tree question in the determination of who is required to file is the definition of what it means to "manufacture" or "contract to manufacture", as section 1502 of Dodd-Frank left that to the determination of the Commission. The SEC bifurcated the responses to this issue between the defining of "manufacture" and "contracted to manufacture." As such, the responses will be examined accordingly. First, the issue of should a definition be set forth by the Commission as to the definition of what it means to be a manufacture is addressed. Some respondents suggested that the SEC should not define the term in their final ruling. For example, the American Bar Association (ABA), informed the commission that "We concur with the Commission's decision not to define the term 'manufacture' but instead to permit companies to rely on the common understanding of the term."²⁷ The ABA went on to encourage the Commission to "...not include mining issuers as manufacturers." Support for not defining the term "manufacture" was supported through comment letters received from Global Witness, the New York City Bar (NYCBar), the State Department, and United States Steel. Global Witness is "a non-profit organization that runs pioneering campaigns against natural resource-related conflict and corruption

^{27.} ABA—Comment letter (6/30/2011)

and associated environmental and human rights abuses." Like the letter from the ABA, Global Witness also "...supports the Commission's proposed definition of "manufacture..." So, Support for the SEC's proposed rule of not specifically defining the term because, "the term is generally understood." However, not all manufacturers and human rights groups agreed with this position. Manufacturing associations like the National Association of Manufacturers, Metalsmiths, NMA, and the WGC argued that the Commission should define the term. Groups like the American Association of Exporters and importers (AAEI), AngloGold, CTIA-The Wireless Association (CTIA), NEI, RILA-CERC, and TriQuint Semiconductors, also supported the definition of the term "manufacture." In addition to these commentators, various humanitarian and advocacy organizations also presented comments favoring specifying a definition of "manufacture." These commentators include, the International Corporate Accountability Roundtable (ICAR), the Enough Project, Earthworks, and a multistakeholder letter from the Columban Center for Advocacy and Outreach (Columban Center et al.), cosigned by various advocacy and religious groups.

From an Actor network perspective, it is important to trace the actors as they move to define the terms and policies established in the final rule, because at the conclusion of the process the results will be "black-boxed" into accepted facts. Some of the Actors, AngloGold, BCE Inc. (BCE), Canadian Wireless Telecommunications Association, (CWTA), NAM, NCTA, NMA, RILA-CERC, and WGC, recommended that "manufacture" follow the North American Industry Classification System Definition, because it would limit the definition to entities that "engage in the mechanical, physical,

or chemical transformation of materials, substances, or components into new products from raw materials that are products of agriculture, forestry, fishing, mining, or quarrying."²⁹ The goal being to restrict the definition to restrict the definition to exclude mining activities and retail activities. These restrictions would reduce the number of firms covered under the act for reporting purposes.

Other Commentators that advocated definition of 'manufacture', recommended broadening the definition. Columban Center et al. and others advocated for a definition stating that "Manufacturing should be defined inclusively so that all products that may contain or use conflict minerals in their production would be subject to the reporting rules." The Enough Project suggested an even broader definition, suggesting that the definition reflect the language of the U.S. Controlled Substances Act, and include "the production, preparation, assembling, propagation, combination, compounding or processing of a drug or other substance, either directly or indirectly or by extraction from substances of natural origin." This definition would include every stage of the supply chain for products including even trace elements of conflict minerals, as well as products that might have been extracted as impurities or used up in the manufacture of products, without leaving any trace in the final product. This would include polymerization aids and catalysts. The commission also sought comment on the definition of "contract to manufacture."

NAM and SEMI favored a strict guideline for "contract to manufacture" to be limited to issuers that explicitly specify the inclusion of conflict minerals in the product. The ABA recommended a definition based on "a sufficient level of influence,"

^{29.} NAM (3-02-2011)

^{30.} Enough Project—Comment letter (3/2/2011)

involvement or control over the process to be able to control, in a meaningful manner, the use, of conflict minerals, or to evaluate and influence the use of conflict minerals." While this definition does not perfectly map to the NAM one, it does capture the concept of loci of control in the use of conflict minerals. Other concerns related to "contracting to manufacture" were discussed that focused on the implications for sellers of product containing conflict minerals. AT&T stated that "a mobile phone service provider asserted that it should not be considered contracting to manufacture its mobile phones even though it specifies to its manufacturers that the phones must be compatible with their networks and have certain cosmetic design requirements."31 In contrast, AxamTrade suggested that even "generic products should be held to the same standard as branded products and that the final rule should avoid using any definitions that create a perverse incentive for an issuer to work with special purpose entities designed to follow the technical requirements of the law but evade its intent."32 Based on these and other comments received by the Commission, the final rule was established for both "manufacturing" and "contracting to manufacture", as related to Section 1502 of Dodd-Frank.

The Commission stated that the final rule "applies to any issuer for which conflict minerals are necessary to the functionality or production of a product manufactured or contracted by that issuer to be manufactured." They decided not to define specifically the definition of "manufacture" because the meaning is "generally understood." They did however give guidance assistance that revealed

^{31.} AT&T—Comment letter (3/9/2011)

^{32.} AxamTrade—Comment letter (2/10/2011)

^{33.} AT&T—Comment letter (3/9/2011)

that the definition is broader than the NAICS definition bought not as broad as the suggested comments advocating the inclusion of "importing, exporting, or sale of conflict minerals." The Commission also chose not to specifically define "contract to manufacture," because "although we believe this concept is intuitive at a basic level, after considering comments and attempting to develop a precise definition, we concluded that, for "contract to manufacture" to cover issuers operating in the wide variety of the impacted industries and structured in various manners, any definition of that term would be so complicated as to be unworkable." Similar to the previous issue, the Commission provided guidance based on the comments received.

For "contracting to manufacture", the proposal originally stated that the rule would apply to "an issuer that does not manufacture a product itself but that has "any" influence over the product's manufacturing..." Based on the comments from the ABA, AT&T, Davis Polk and others, the Commission was persuaded that approach was "overbroad' and 'confusing' and would impose on such an issuer 'significant,' 'unrealistic,' and 'costly' burdens. "Instead, the final ruling chose to exclude issuers that do no more than; specify or negotiate contractual terms with a manufacturer for a product that do not directly relate to the manufacturing of the product, affix its brand or logo or label to a generic product, or servicing, maintaining or repairing a product by a third party. The commission was also not persuaded by the argument for a threshold of "substantial control" over the contracting process. The SEC also specifically responded to the NAM comment suggesting the very limited approach that "the final rule should apply only to issuers that explicitly specify that conflict minerals be included in their

^{34.} Earthworks—Comment letter (3/2/2011)

products."³⁵ The final ruling settles for a nebulous guidance of "sufficient control", which seems to be consistent with the overall conclusion of the commission not to define either "manufacture" or "contract to manufacture" is highly specific terms.

The third question in the decision tree related to step one of the three-step process is "are conflict minerals necessary to the functionality or production of the product manufactured or contracted to manufactured?" The SEC notes that the provision from 1502 provides "no additional explanation or guidance as to the meaning of 'necessary to the functionality or production of a product." The proposed rule also provided no guidance on the issue, but did instead request interested parties to comment.

Like with the previous opportunities to comment on defining the scope of coverage, this issue also brought comments both in favor of defining "necessary..." as well as those advocating the avoidance of such a definition. Several interesting developments arose regarding this issue. First, both potential manufacturers and advocacy groups provided support explicit definition. These supporters of such a definition were in conflict with the Commission's proposal to not define the term, but instead to give illustrative guidance indicating the SEC's intent. The commentator's that sought definition, typically also shared their thoughts on potential guidelines for such a definition. For example, CRS requested that "'necessary to the functionality or production of a product' be defined broadly enough that it encompasses use necessary to the economic utility and/or marketability of that product." In another comment letter, from the Enough Project Multi-Stakeholder Group (MSG), support was given

^{35.} NAM—Comment letter (3/2/2011)

^{36.} Catholic Relief Services (CRS)—Comment letter (2/8/2011)

advocating that necessity is achieved if "the conflict mineral is intentionally added to the product, the conflict mineral is used by the person for the production of a product and such mineral is purchased in mineral form by the person in the production of the final product but does not appear in the final product, the conflict mineral is essential to the products use or purpose, or the conflict mineral is required for the marketability of the product." While there was great support for defining the "necessary," commentator's like NAM opted for a significantly more restrictive definition than that recommended by advocacy groups. NAM believed that the definition should be restricted to "the conflict mineral is intentionally added to the product and the conflict mineral is essential to the product's basic function." NAM further clarified that "basic function" be included as a restrictor for "necessary". Also, NAM recommended excluding "Conflict minerals that are included in a product and contribute to the product's economic utility but are not essential to its basic function." In this case, the commentator cited tools and equipment as examples of products that provide economic utility but are not essential to basic function of the end product.

Also related to the definition of "necessary" is the inclusion of a de Minimis exception designed to provide exclusion for products that fell below some stated measure of conflict minerals, based on total manufacturing costs or percentage of total weight. Another possible exclusionary guide could be the rank of the issuer in its industry, based on conflict mineral use.

After considering the comment letters in the context of section 1502, the Commission decided that only products that actually contain conflict minerals should

^{37.} NAM—Comment letter (3/2/2011)

^{38.} Id.

be included under the provision of "necessary." Furthermore, if conflict minerals were intentionally added by the issuer, or by a subcontractor further down the supply chain, is enough for such product to be included in the definition of "necessary." The Commission did not agree with the commentators that wanted to limit the definition of "necessary to the functionality" of the product to only include the basic function of the product. The SEC noted that a cell phone performs many functions beyond making calls, and that if the conflict minerals contained within were necessary for any of those functions that would meet the functionality requirement for conflict minerals reporting purposes.

Although the Commission was not swayed by the various issuers attempt to limit the definition of "necessary to functionality," it did take to heart recommendations to exclude tools and machines used to produce a product, as well as to limit "necessary to production" to only those products that actually contain at least trace amounts of the conflict minerals. The impact of this part of the ruling is that it only requires, from a production perspective, conflict minerals that are used as catalysts and other extraneous ways to be reported on if the final product ends up containing some amount of the conflict minerals.

The SEC did not side with industry regarding the inclusion of some form of de Minimis threshold in the final rule. The commission agreed with the various advocacy organizations that including such a provision would undermine the intent of the legislation. So with regards to defining "necessary", the Commission decided that the cases articulated by issuers best captured a practical approach for determination "necessary" as defined by the minerals being contained in the final product. However

they were not persuaded by the demarcation of "basic function" or being above some de Minimis threshold.

The final decision tree question for step one of the Commission's three step ruling addresses the location of the conflict minerals in the supply chain before a specified date. This issue did not originate with a proposed rule by the SEC. However, the Commission did request comments related to existing stockpiles of conflict minerals. This issue received nearly universal support for excluding stockpiled conflict minerals from the final rule. This particular issue received support from advocacy groups, such as, the Enough Project, Earthworks, ICAR, and the Enough Project led MSG. Also, supporting this position were issuers including, NAM AngloGold, LBMA, SEMI and others. While there was variation in how to define the specifics of how to define which minerals should be demarcated as stockpiled minerals, and when the exclusionary period should terminate, the near unanimity on this issue demonstrates the benefits of tracing the actors, instead of searching for social factors to explain actors' behaviors. ANT is useful for discovering nuances and motivations of specific actors that more traditional quantitative social approaches. The comment letters suggested wide variation in how to define the exclusion period for stockpiled conflict minerals. These proposed solutions focused on stage of production and intended cutoff date. The earliest cutoff date suggested was for conflict minerals outside the Covered Countries by July 15, 2010, from Earthworks and SIF. In contrast, Charles Blakeman proposed a 24 month "grace period", so issuers could sell off warehoused conflict minerals already in the supply chain. The final rule agreed that stockpiled conflict minerals should be excluded from the reporting regime, as long as they were "outside the supply chain" prior to January 31, 2013. Further guidance was given defining "outside the supply

chain."³⁹ The commission required that these conflict minerals need to have been smelted or fully refined, in the case of gold, before that date, or must be located outside the Covered Countries prior to that date. The final rule was not as strict as some of humanitarian groups had desired, nor was it as loosely defined as Mr. Blakeman advocated.

The above discussion concludes the elements of the first of the Commission's three-step process for conflict minerals. This section examines the issues addressed in the Commission's final rule for step-two of the process, related to the determination of the origin of conflict minerals used in products. This section deals with "Determining whether conflict minerals originated in the Democratic Republic of the Congo or adjoining countries and the resulting disclosure (SEC, 2012)."

For issuers that have determined that they meet the above definition of manufacturing or contracting to manufacture products containing conflict minerals that are necessary to the functionality of the products, the next question that must be answered is do the conflict minerals used originate from the Covered Countries. If it is determined that they originate in those countries, then the issuer must file a Conflict Minerals Report regarding those minerals. Also, such issuers are required to make that report available on its website. The process of determining country of origin is the next subject that the Commission sought comment.

The proposed rule recommended that the determination of country of origin be based on issuers making a "reasonable country of origin inquiry." The SEC acknowledged that this standard of determination, while not absolute, is consistent

^{39.} SEC Final Rule

with other regulations, such as the Foreign Corrupt Practices Act (FCPA). Except for a few respondents that advocated against including a "reasonable country of origin" from the final rule, there was broad diverse support for this approach. One commentator, Charles Teggeman, wrote "I do not believe that a 'country of origin' inquiry meets the intent of the rule."40 Instead, he advocated using "the country where the chip [product] is fabricated (infused) rather than the location where its conflict minerals were mined or smelted." The Business Roundtable (Roundtable) argued similarly in that it (the Conflict minerals Provision) "does not impose any obligation on an issuer who determines that the conflict minerals did not originate in the Covered Countries to make any disclosure beyond that fact, nor does it specify how the issuer is to determine that the conflict minerals did not originate in the Covered Countries." However, diverse commentators like, AAFA, AngloGold, ArcelorMittal, Barrick Gold, Boeing, the Chamber of Commerce, Cleary Gottleib, CRS, Enough, Global Witness, LBMA, NAM, Methodist Board, MSG, NYCBar, sponsors Senator Durbin and Congressman McDermott, and many others. This issue received some of the broadest and most diverse support of any of the areas commented on in the proposed rule. As with other areas receiving broad general support, this too was met with variation on how the Commission should define "reasonable."

Sponsoring members of congress suggested that it should be equivalent to the due diligence required for the Conflict Minerals Report. Catholic Relief Services advocated for defining the "reasonable country of origin" in based on established international standards. Whereas, industry groups sought enrolling the Commission's

^{40.} Griffin Teggeman (Teggeman)—Comment letter (12/16/2010)

alignment to a general definition of "reasonable", and that the Commission provide limited guidance. This is exemplified by AngloGold's comment letter to the SEC stating, "...the Commission should not issue rules that extend the burdens on, and the costs to, issuers beyond the mandate expressed in the plain meaning of the statutory language..." The National Association of Manufacturers "agreed with the SEC's approach in not defining a single process for country of origin inquires... We do believe the SEC should provide some generic guidance on the approaches..."⁴¹

The Enough Project, in its fourth letter to the SEC, provided direction on the guidance on defining reasonable country of origin as "more than a passive acceptance by the filer of information provided by their suppliers," that would "require sufficient investigation by an issuer to support reasonable cause to believe in the conclusion."⁴² This group, in an earlier letter to the SEC, along with other humanitarian groups and industry representatives, including the MSG they facilitated, recommended that the Commission provide guidance on this issue, but did not articulate such language. The MSG innovation appears to be an effective means employed by the Enough Project to broaden its impact by forming another actor to influence the Commission.

In contrast to the Enough Project's position of not relying on the claims of those further down the supply chain, many respondents defended such a policy. Business Roundtable commented that "those issuers who receive reasonably reliable assurances from their suppliers that their conflict minerals did not originate in the DRC countries or are 'DRC conflict free should be found to have satisfied their reasonable country

^{41.} NAM—Comment letter (3/2/2011)

^{42.} Enough Project—Comment letter (11/2/2011)

of origin inquiry..."⁴³ The IPC offered a similar position. It stated, "IPC encourages the SEC to provide non-binding guidance as to what would constitute a reasonable country of origin inquiry standard... the SEC permits and encourages issuers to rely on reasonably reliable representations from their suppliers." ⁴⁴

The SEC noted that it took into account the many comments they received related to this issue and decided to apply a modified version of the proposed rule. It sided with the position requesting that advocated not strictly defining the term or the process. They also decided to follow NAM's directive to provide general standards governing the inquiry. The Commission also agreed with the acceptance of suppliers' statements of conflict free status if the minerals come from certified sources. According to the Commission, "The revised approach does not require an issuer to prove a negative to avoid moving to step three, but it also does not allow an issuer to ignore or be willfully blind to warning signs or other circumstances indicating that its conflict minerals may have originated in the Covered Countries." The SEC noted that this position is consistent with the OECD guidance as requested by the Enough Project.

The third step in the determination process is reached only upon a positive determination of steps one and two. This section examines the proposed rules, comments, and final rulings, related to the directives for due diligence and the nature of the Conflict Minerals Report. Section 1502 requires issuers that determine necessary conflict minerals originate in the DRC or surrounding countries must file a Conflict minerals report. Also required is "an independent private sector audit" (IPSA) that the

^{43.} Business Roundtable—Comment letter (3/2/2011)

^{44.} IPC—Comment letters (3-2-2011, 11/1/2011)

^{45.} SEC Final Rule

issuer "shall certify the audit... that is included in such report." As with other areas of the final rule the Commission initiated a proposal, sought input and determined a final rule that incorporated the mandates of the law and the issues addressed in the comments.

The commission proposed and sought comment on four aspects of step three; the content of the Conflict Minerals Report, the due diligence standard in the CMR, the independent private audit (IPSA) requirements, and recycled and scrap minerals. Each of these are addressed in the context of the proposed rule and the actors' responses to shape the final ruling.

The SEC proposed a multifaceted proposed rule for the content of the CMR. The rule proffered by the Commission would require covered issuers to exercise due diligence, with regards to the "source and chain of custody" of conflict minerals of uncertain origin determined through step two of the process (SEC, 2012). The CMR would include the due diligence measures employed and the resulting conclusions drawn. This report would then be subjected to an IPSA in accordance to established guidelines. According to the Commission, the certified audit "would constitute a critical component of due diligence (SEC, 2012)."⁴⁷ In addition to the certified audit, the issuer would be required to certify the audit as interpreted to mean that it certifies that it obtained an IPSA. If the due diligence reveals that either the conflict minerals in question are from the Covered Countries, or the issuer is "unable to determine that its conflict minerals did not originate in the Covered Countries", then the Commission's proposed ruled required that said minerals be reported as "not DRC conflict free." The

^{46.} SEC Final Rule

^{47.} Id.

final rule, as proposed, would also have required issuers to include the audit report as part of the body of the CMR.

The humanitarian advocacy actors, as well as Congressional ones, provided support for requiring conflict minerals of indeterminate origin being required to be described as not DRC conflict free. Congressional support was also offered supporting this position. A letter received from ICAR et al. noted, "Companies should not be allowed to report that the minerals in their products are of indeterminate origin; rather, if companies fail to determine the origin of the minerals in their products, they must describe them as 'Not DRC-Conflict Free.'"48 Similar responses were stressed by other advocacy groups. However, other actors and members of Congress promoted a contrary position. Cleary Gottlieb defended their position on indeterminate conflict minerals, noting that "issuers that are unable to determine the origin of their conflict minerals... be permitted to classify their products differently, such as 'May Not Be DRC Conflict Free." ⁴⁹ They and others held that an indeterminate classification would be more accurate than 'Not DRC Conflict Free." Congressman Bachus requested for the creation of a temporary classification of "indeterminate origin" for inconclusive conflict minerals. Other commentators demonstrated "First Amendment" concerns related to compelled "speech that is not of a commercial nature." 50

The commission's final ruling incorporated the comments it had received, as well as, sought to hold true to the requirements of the law. The rule mandates that issuers that determine, based on the reasonable country of origin inquiry, their products

^{48.} ICAR et al.—Comment letter (7/29/2011)

^{49.} Cleary Gottleib—Comment letter (3/22/2011)

^{50.} Tiffany —Comment letter (2/22/2011)

contain conflict minerals from covered countries, must provide a Conflict Minerals Report. This report must describe the steps of due diligence the performed on the source and chain of custody of said minerals. This due diligence also need to reflect if the minerals are from scrap or recycled sources. In situations where the issuer is required to obtain a certified independent private sector audit, that audit is integral to the concept of due diligence as mandated by the rule. For the first two years of implementation of the ruling (four years for smaller issuers), three possible conclusions are permitted; "DRC conflict free", "not DRC conflict free", and "DRC conflict indeterminable."51 Issuers that reach any of these conclusions are required to submit a CMR demonstrating the due diligence steps taken to mitigate the use of conflict minerals used to advance the violence in the region. The issue of a required CMR IPSA generated significant response from the accounting profession, industry associations, and advocacy groups. In fact, the IPSA requirements represent the only issue that the accounting actors provided direct commentary, as articulated in the Ernst & Young comment letter stating, "Our comments are limited to the aspects of the proposal related to the independent private sector audit requirement."52

The SEC proposed rule for the IPSA was general in nature, accept that the CMR must include such an audit. The Commission noted that the Government Accounting Office would establish the specific standards governing the audit, as required under the Conflict Minerals Statutory Provision. The broad scope of this proposed rule motivated commentators to seek clarification of the standards governing such an audit.

^{51.} SEC Final Rule

^{52.} Ernst & Young—Comment letter (03/02/2011)

The AICPA proffered five non-mutually exclusive audit objectives that could represent potential directives for such an audit. This actor described them as follows:

- "An audit of whether management's description of procedures and controls performed in their due diligence process are fairly described in the Report..."⁵³
- 2. "An audit of whether the due diligence process (procedures and controls) designed by management and described in the report was in conformity with a recognized standard of due diligence..."54
- 3. "An audit of whether the due diligence process in the Report was designed against a standard of due diligence and whether those procedures and controls were effective in achieving certain control objectives asserted in the Report." 55
- 4. "An audit of whether management's assertions regarding the source and chain of custody of the conflict minerals appropriate..." 56
- 5. "An audit of whether the products included in or excluded from the Report were appropriate."⁵⁷

The AICPA informed the Commission that the final three objectives would be "the most challenging and costly." ⁵⁸ KPMG noted four possible objectives that are close to one, two, four, and five, of the objectives described by the AICPA. Deloitte

^{53.} AICPA—Comment letter (03/01/2011)

^{54.} Id.

^{55.} Id.

^{56.} Id.

^{57.} Id.

^{58.} AICPA—Comment letter (03/01/2011)

comments on objectives are consistent with one, three, four and five of those of the AICPA. Grant Thornton (GRANT) also noted that "it was silent as to the subject matter of the engagement; that is the objective of the audit..." ⁵⁹ All of the accounting actors made remarks similar to this offered by GRANT, "We believe that reporting directly on management's assertion(s) or the completeness and accuracy of the Conflict Minerals Report would be difficult and costly given the subjectivity of the subject matter and the extent of the audit procedures necessary to obtain sufficient appropriate evidence." ⁶⁰

Other concerns regarding the IPSA also were addressed by the actors in their comment letters. First, the issue of the type of audit engagement that would satisfy the IPSA requirement drew advisement from various actors. The proposed rule, as interpreted by some of the actors, offered issuers the choice between "Attestation Engagements or Performance Audits." The AICPA informed the Commission of the differences between these two types of audits. With regards to attestation audits, "Attestation standards have a standardized reporting structure which would allow for greater comparability among audit reports." This actor then contrasted performance audit by noting "that a performance audit provides reasonable assurance that the auditor has obtained sufficient, appropriate evidence to support the conclusions reached, the performance audit report is less standardized than a report under attestation standards." Also, attestation engagements require licensed accountants to

^{59.} Grant Thornton—Comment letter (03/02/2011)

^{60.} Id.

^{61.} SEC Final Rule (2012)

^{62.} AICPA—Comment letter (03/01/2011)

^{63.} Id.

perform the audit. In contrast, such licensure is not required for performance audits. The AICPA notes that, "This might allow the auditor to provide further explanations in the auditors' report than under the attestation standards; however, comparability among reports would be reduced."64 These comments collectively appear to neutrally describe the advantages and disadvantages of each type of audit. This position is further supported by the AICPA's comment stating, "Because these two 'audits' are very different in terms of their scope and report, we recommend that the SEC's final rule be clear which type of audit is acceptable and who may perform these audits."65 The commission received comments from the Board of Environmental, Health & Safety Auditor Certifications (BEAC) advocating "the use and standard of Performance Audits as the appropriate standard for the Conflict Minerals report audit."66 Another commentator, Hileman Consulting, echoed BEAC's position. NAM recommended that "It is possible that one way to minimize the expense to companies is to allow companies the choice of either [attestation, or performance] audit."⁶⁷ This position is reflected in the comments of E&Y and Deloitte. However, GRANT assumed the position that "a performance report is less standardized... differences in the application of, and the reporting under, the two approaches could be significant, potentially causing confusion and misunderstanding among the users of the audit report."68

^{64.} Id.

^{65.} Id.

^{66.} BEAC—Comment letter (10/31/2011)

^{67.} NAM—Comment letter (11/01/2011)

^{68.} Grant Thornton—Comment letter (03/02/2011)

After addressing the types of audits that could meet the requirements of the CMR. The Commission described the concerns expressed by commentators regarding auditor independence. The AICPA advocated that the "SEC should make it clear that the external financial statement auditor would not be precluded from performing such an engagement." Ernst & Young agreed that, "the SEC should make clear that the external financial statement auditor would not be precluded from performing such an engagement." KPMG cited concerns that if the OECD Guidance were the standard of independence either chosen by the issuer or required by the Commission, then "that independence principle's prohibition on the auditor having provided any other service for the auditee company within a 24 month period could significantly limit the pool of auditors." Deloitte provided commentary consistent with that of the other actors with regards to defining auditor independence. Other commentators, like the International Conference of the Great Lakes Region (ICGLR) advocated defining auditor independence according to ISO 17021 international standards. The SEC issued its final rule, after considering the comment letters relating to the IPSA requirements.

The final rule related to IPSA requirements addressed the auditing standards, auditor independence, and audit objective in the context of proposed regulation and modifications adopted in response to the arguments defended by the various actors. First, the rule established that the Generally Accepted Governmental Accounting Standards (GAGAS) are the basis for either attestation or performance audits conducted to meet the CMR requirements. Because of this standard, attestation engagements

^{69.} AICPA—Comment letter (03/01/2011)

^{70.} E&Y—Comment letter (03/02/2011)

^{71.} KPMG—Comment letter (03/02/2011)

require licensed CPAs, and performance audits allow for auditors outside the sphere of CPA licensure. The Commission also notes that unless the GAO issues additional formal pronouncements, the required CMR audits must comply with GAGAS standards (SEC, 2012).

Second, the issue of clarifying the definition of auditor independence led to commentators seeking and offering guidance on the specific meaning of the term in this context. The Commission determined that under Rule 2-01 of Regulation S-X "it would be inconsistent with the independence requirements." The SEC did note that auditors that provided both financial and CMR audits would be required to disclose CMR audit fees in the "All other Fees" category. While actors petitioned the Commission to determine whether it would accept attestation or performance audits, implying that there should only be one type of CMR audit, the commission elected to adopt the option of choice, as advocated explicitly by actors such as NAM.

Third, actors demonstrated concern over the objective(s) of the audit. The SEC sided with the commentators that sought the clear statement of the objective of the IPSA audit. The objective of the audit "is to express an opinion or conclusion as to whether the design of the issuer's due diligence framework as set forth in the Conflict Minerals Report, with respect to the period covered by the report, is in conformity with, in all mater respects, the criteria set forth in the nationally or internationally recognized due diligence framework used by the issuer …"⁷³ The audit is also expected to evaluate the consistency of the due process described in the report with the due diligence process

^{72.} SEC Final Rule

^{73.} Id.

as executed. This standard of objective represents a hybrid of the first two objectives articulated by the AICPA and other accounting actors.

Various accounting actors, and others, informed the Commission of concerns related to difficulties and costs related to certain possible objectives. The SEC, in its ruling noted some of these. For example the audit does not require an opinion to be offered for the entirety of the CMR, only those aspects previously described. Also, it is not the responsibility of the IPSA to attest that products are either "DRC conflict free" or "not DRC conflict free." The Commission addressed an understanding that the rule allowed for the audit objectives to be met in a "cost effective manner"⁷⁴

The final aspect of step-three addressed by the Commission relates to recycled and scrap minerals. The proposed rule suggested that recycled and scrap minerals should be treated differently than conflict minerals obtained as original minerals, because of the additional complexity in tracing the origin of recycled and scrap minerals. The special treatment would require such minerals be included in a CMR and governed by special rules. The rules would require that products containing scrap and recycled minerals be listed as "DRC conflict free."

The proposed rules also expected that such issuers would disclose in its annual report the products that contained scrap and recycled products, as well as, furnish a CMR report. Also expected, a description of the due diligence performed and an IPSA of that report. The Commission did not define either scrap or recycled, but did provide guidance regarding the usage of the term "recycled." According to the Commission, if the conflict minerals are derived from reclaimed end-user or post-consumer

^{74.} SEC Final Rule

products, the term "recycled" is appropriate. On the other hand, "partially processed, unprocessed, or byproduct from another ore" cannot be described as "recycled." The commission noted that in cases where products contained scrap or recycled conflict minerals along with new minerals, the issuer would be required to apply "the recycled and scrap alternative approach would apply to only the portion of the minerals that were recycled or scrap and the issuer would be required to furnish a Conflict Minerals Report regarding at least the recycled or scrap minerals." If the new materials originated in the Covered countries, they also would require inclusion in the CMR.

Diverse actors provided commentary on this issue. A wide variety of actors demonstrated support for some type of specification of rule governing scrap and recycled conflict minerals. Catholic Relief Services suggested that "the SEC define 'scrap' so as not to introduce a loophole..."⁷⁷ In a joint comment by ICAR and Global witness, the posited "that the exemption for recycled minerals could be used to circumvent the intent to the statute..."⁷⁸ This commentary also offered a suggested that the definition should exclude "gold coins, bars, or financial gold. Recycled minerals also do not include scrap from jewelry, and other manufacturing and any jewelry or other product not previously owned as end-use products by consumers."⁷⁹ This comment letter demonstrated a strong concern that industry would use the scrap and recycled material to weaken the statue if not so defined. Others presented a contrasting position

^{75.} Id.

^{76.} SEC Final Rule 2012

^{77.} CRS—Comment letter (02/08/2011)

^{78.} Global Witness I (11/01/2011)

^{79.} Id.

regarding the handling of scrap and recycled conflict minerals. The American Apparel & Footwear Association (AAFA) suggested that "recycled material is not treated as originating in the DRC or adjoining countries." The American Association of Exporters and Importers (AAEI), went on to add that "the DRC rebel groups do not extract their revenue from trading in 'reclaim'."⁸⁰

This section traced the actors through the inscriptions left behind as a result of their movements. Reflecting back on central question 2 and the associated subquestions, the findings are examined in the context of the questions and through the ANT lens. Central question two queries; How did the various actors influence the scope and content of the conflict minerals reporting standards established because of the Dodd-Frank Act?

The analysis of the SEC rule phase demonstrated the various methods and associations made and remade to influence the final rule promulgated by the Commission. Actors formed alliances and generated artifacts in the forms of comment letters and meeting memos, and used these objects to enlist the members of the commission to translate the proposed rule in to a final rule.

Sociology of the social would try to explain this phase through envoking a set of social charactersitics that are causal to the outcome. However, sociology of associations, ANT requires examining the uncertainties described previously to generate an account. The first uncertainty, group formation, as applied to this phase is revealed through the efforts of various actors to enlist other actors in order to build support for given positions. For example, the Enough Project enlisted human rights organizations to build

a network they refered to as the multi-stakeholder group. It is necessary to point out that the multi-stakeholder group is an actor and not merely an intermediary, because the positions it advanced were distinct from those advanced by the Enough Project. This is also true for Raise Hope for the Congo, and the Center for American Progress, two other groups affilliated with them. It is important to note that the SEC viewed responses from each of these groups as being from distinct entities, demonstrating that in the eyes of the Commission, they are distinct actors. This process reveals that the actors most engaged in the legislative phase also worked to establish actor networks in this phase as well. In addition to those actors identified in the legislative phase, now at the rule defining phase the Commission as a whole, as well as the individual commissioners are being enlisted by the other actors to participate in the tranlation.

The second source of uncertainty, action is overtaken, provides a frame through which to view the surprising actions and mediations that occur during the legislative phase. One of the major contributors to increased action being engaged is that of the establishment of the conflict minerals provisoin of Dodd-Frank. Business groups and human rights groups informed the Commission that they supported the ideals of the law, but had concerns and input as to how best facilitate it. The analysis of this phase shows which actors were initially successful (sub-question 2), as well as which were mediators and intermediaries (sub-question 3). When the questions were posited, there was an expectaion on the researchers part that there would be a limited number of identifiable actors whose actions would be relatively easy to trace. As is the case with ANT studies, this is not the case. The rule phase involves the frenetic array of actors that sent comment letters and met with the Commission in the attempt to enlist support for various approaches to define conflict mineral reporting.

The third source of uncertainty, ageny of objects, applies to how the actors envoked the agency of artifacts, like various university studies that showed how burdensome the rules would be, or how the provision of Dodd-Frank should be interpreted to be faithful to the original language.

The fourth source of uncertainty, matters of fact versus matters of concern, can be viewed as a tranlation of the fourth sub-question, did the roles of the actors remain constant over time? I see this uncertainty as extending beyond the legislative and rule making phases, culminating in the implementation phase, and accordingly will be addressed later. Now that the SEC phase has been examined in the context of the central questions and sub-questions, the actions and movements of the implementation phase are addressed.

The promulgation of the final rule for conflict mineral reporting under Dodd-Frank established the implementation schedule and regulatory requirements for issuers that utilize conflict minerals in their products. The implantation phase describes the movements of the actors during the phase-in and early implementation of the Commission's rule.

4.3 Implementation

After the final rule was issued by the SEC, the actors continued to engage in trials of strength to shape the interpretation of the reporting requirements for conflict minerals under the Dodd-Frank Act. As this type of financial regulation has never been implemented before, associations continue to be formed and tested, demonstrating that the regulation has not yet been "black-boxed" into acceptance. The period of time

between 2012 and 2016 has been demarcated for this section, because of the relevant events, and the availability of data.

4.3.1 Legal Challenges to Implementation

Two months after the SEC released the final rule, three of the actors; the Chamber of Commerce (Chamber), the National Association of Manufacturers, and the Business Roundtable, filed a petition in the United States Court of Appeals for the District of Columbia Circuit petitioning for the rule to "be modified or set aside in whole or in part." To demonstrate the strength of their actor-network, the plaintiffs (actors) provided information in the petition designed to garner support. For example, the Chamber claimed that it "is the world's largest business federation, representing 300,000 direct members and indirectly representing an underlying membership of more than three million businesses and organizations of all sizes, sectors and regions." The other two actors also provided the court with details about their representational strength. NAM noted that it "is the preeminent U.S. manufacturers association as well as the nation's largest trade association." Business Roundtable stated that it is an association of CEO's of major U.S companies that generate more than \$7.3 trillion in revenue and almost 16 million employees. Roundtable also provided other financial information intended to support the strength of the network.

^{81.} United States Court of Appeals for the District of Columbia Circuit No. 12-1422 (10/22/2012)

^{82.} Id.

^{83.} Id.

While the case was pending, the circuit court rendered a verdict in another unrelated case against the SEC that concluded that "it lacked jurisdiction over a direct challenge to a different SEC ruled issued under Dodd-Frank."⁸⁴ Four days after the decision in the other case, the challenge to the final rule brought forth by the Chamber, Nam, and Roundtable was transferred to district court. The D.C. district upheld the rule on July 23, 2013. The SEC had overcome its first trial of strength against the final rule.

On August 15, 2013, the plaintiffs proceeded to file a motion for expedited review with the U.S. Court of Appeals for the District of Columbia Circuit in response to the lower court's decision. The SEC enlisted more actors for this legal action. In addition to the SEC, Amnesty International, Better Markets, Inc., Senator Durbin, Congressman McDermott et al., and Global Witness, joined in support of the Commission on this case. The court of appeals rendered its decision on April 14, 2014. The court determined that the Commission's final rule "violate the First Amendment to the extent the statute and rule require regulated entities to report to the Commission and to the state on their website that any of their products have 'not been found to be DRC conflict Free'"85 This case demonstrates the interplay of actors attempting to define the implementation of the final rule. The Commission, NAM et al, SEC et al, the three judge panel, Section 1502, and the final rule, are all actors working to shape the outcome. The court, as a three member panel working towards an opinion, is being recruited, individually and collectively, by each of the other actors. The court decision demonstrates that the final

^{84.} United States District Court for the District of Columbia (Civil Action No. 13-cv-635(RLW), 07/20/2013)

^{85.} United States Court of Appeals for the District of Columbia (Circuit No. 13-5252, April 14, 2014)

rule is an actor, based on how it refers to it in the decision rendered. In nine of the twenty-one instances that the court mentions the "final rule", it does so in the context of it acting in some manner. Some examples include, the "final rule adopts", the "final rule adopts", the "final rule does...," the "final rule requires", and the "the final rule does not survive." The court articulates how it considered the arguments of the various actors and the ramifications for each of the actors. This case demonstrates the usefulness of Actor-Network Theory in tracing the actors and their actions.

Because a potentially relevant case involving the definition of compelled corporate speech, the SEC and related actors petitioned for a rehearing in light of that case. The court reconsidered the case in light of the additional arguments presented, as well as, the additional en banc (all eleven judges) decision in the other compelled speech case. On August 18,2015, the court upheld its previous decision against the SEC's requiring issuers to describe their conflict minerals as being either "DRC conflict free" or "not DRC conflict free." The impact of these decisions on the implementation of the final rule is discussed in the next section.

4.3.2 SEC Response to Litigation

After the first decision against the Commission, the SEC modified the final rules to reflect the first amendment concerns addressed by the court. Two of the five SEC Commissioners issued a statement prior to the joint statement of the Commission.

These Commissioners advocated that the Commission stay the entire rule until such time the district court issued its pending decision" Commissioners Gallagher and

^{86.} United States Court of Appeals for the District of Columbia (Circuit No. 13-5252, August 18, 2015)

Piwowar advocated "A full stay is essential because the district court could (and in our view, should) determine that the entire rule is invalid."⁸⁷ These actors claimed that First amendment issues "permeate all the required disclosures."⁸⁸ However, the next day the Commission issued its joint pronouncement limited the stay to the specific aspects of the rule that the court struck down. The first statement can be viewed as an artifact generated by the two actors on the Commission seeking to influence either the Commission's final report that was forthcoming, or an attempt to signal to the other concerned actors that the Commission was divided on the appropriateness of the final rule in light of the court's decision. The only certain conclusion that can be drawn from the April 28th statement is that Commissioners Gallagher and Piwowar believed that "Marching ahead with some portion of the rule that might ultimately be invalidated is a waste of the Commission's time and resources—far too much of which have been spent on this rule already—and a waste of vast sums of shareholder money. A full stay of the effective and compliance dates of the conflict minerals rule would not fix the damage this rule has already caused, but it would at least stanch some of the bleeding."⁸⁹

The SEC guidance enumerated the updated process, as modified for consistency with the ruling. Issuers not required to file a CMR are still required to "disclose their reasonable country of origin inquiry and briefly describe the inquiry they undertook."⁹⁰

^{87.} Joint Statement on the Conflict Minerals Decision (https://www.sec.gov/news/public-statement/2014-spch042814dmgmsp)

^{88.} Id.

^{89.} Id.

^{90.} Statement on the Effect of the Recent Court of Appeals Decision on the Conflict Minerals Rule (https://www.sec.gov/news/public-statement/2014-spch042914kfh)

Companies that determine in step two that a CMR is necessary are required to "include a description of the due diligence that the company undertook." However, a determination of "DRC conflict free", "not found to be DRC conflict free", or "DRC conflict indeterminable" are no longer required to be reported. Issuers are only required to obtain an IPSA if they elect to describe their products as "DRC conflict free." The impact of these changes to final rule are discussed in the next section.

4.3.3 Implementation

Issuers were required to submit their first year conflict minerals results on May 31, 2014 for the prior calendar year. According to Audit Analytics⁹², 1,331 issuers filed form SD, as required by the Commission's final rule. Of these issuers, 1,044 included a CMR (without determination), and only four of these submitted an IPSA. The remaining 283 firms provided the reasonable country of origin inquiry information, as defined in step two of the commission's process. Year two of reporting conflict minerals saw a reduction in both the numbers of only RCOI disclosure and CMR (without determination) reporting to 248 and 1032 respectively, as well as, a fifty percent increase in IPSA submissions. By year three, those numbers had fallen to 239 and 969. However, the number of firms that elected to disclose their products as "DRC conflict free" and provide a, IPSA experienced a near five hundred percent increase over the first years reporting.

^{91.} Id.

^{92.} Audit Analytics (http://www.auditanalytics.com/blog/conflict-minerals-update-year-3-brings-better-conflict-mineral-reporting/)

The uncertainty of the court's potential future ruling (decided on August 18, 2015) and the lack of prior experience in reporting this material, yielded higher levels of RCOI only and CMR disclosures than observed in the subsequent years. In contrast, the growing number of issuers electing to incur the expense demonstrates a perceived benefit to issuers able to make such a determination. The reduction in RCOI only filings appears to reveal that some firms were able to eliminate the necessity of the covered conflict minerals. The reduction in CMR (without determination) filings likely reflects the results of more IPSA filings and reduction in conflict mineral usage.

Of the nineteen IPSAs performed in 2016, twelve of them were performed by public accounting firms. Of these, eight were big four engagements with six being performed by KPMG and two by E&Y. 93 Seven issuers elected to submit performance audits, as allowed under the final rule. Five of those were conducted by two consulting firms; three by RCS global, and two by Elm Consulting. RCS global worked as an actor in concert with the Enough Project and Elm Consulting engaged directly in the SEC rule making phase. The two Big Four firms mentioned, also engaged as actors in the SEC rule phase.

Examining these findings in the context of the research questions (and subquestions), reveals that the actors at the beginning of the implementation phase grew from being NAM, the U.S. Chamber of Commerce, and the Business Roundtable as one group and the SEC the other side, to include a variety of groups working the SEC in defense of keeping the final rule in tact. As the importance of the uncertainties has already be established, only a brief analysis in that context is presented here.

^{93.} Audit Analytics (http://www.auditanalytics.com/blog/conflict-minerals-update-year-3-brings-better-conflict-mineral-reporting/)

Uncertainty four, matters of fact versus matters of concern, acknowledges that the objective reality is constructed, much the way a house is built, one associationat a time until many associations are built and a fragile objective reality emerges. With respect to the legal actions and implementation, it is apparent that some of the actors that were significantly involved in the first two stages, were also aggressively seeking to destroy the assemblage in this phase. The three actors; NAM, Chamber, and ROUNDTABLE, joined together to form associations that sought to weaken/end the efforts to advance disclosure to conflict minerals. In the end of this phase, they were effective in scaling back the requirements for public disclosure of "DRC conflict free" or "not DRC conflict free." This also eliminated the need for an IPSA, unless a given firm chose to claim "DRC conflict free" for its products.

4.4 Summary

This chapter described the results of the data collection process and Actor-Network Theory based analysis as described by Latour (2005).

The identification of actors involved in the three phases of the conflict minerals process was established by tracing the artifacts they left behind as a result of their engagement. Lobbying disclosures and media reporting proved useful artifacts to trace the exact words and actions of the actors during the legislative phase of the process. During the SEC rule-making phase, comment letters Submitted to the Commission and the SEC final rule provided the basis for the actor-network analysis. For the implementation phase, the arguments found in the litigation documents and SEC releases related to the cases were used to trace the actors' movements.

The data was used to follow the actors as they worked to establish coalitions necessary to influence the outcome of the potential conflict minerals disclosure legislation. At each phase of the process, actors worked towards one of three goals. Some of the actors worked toward the goal of preventing/weakening the legislation. Others moved towards ensure that the legislation was established and was "strong." Others still, worked to specify and define the minutia of its implementation. These latter group of actors generally sought to address issues that specifically impacted them.

Actors that at one instant sought to engage in advancing one of these objectives, frequently aligned with actors pursuing another objective when alliances on that issue could be formed. For example, NAM worked to provide extensive guidance during SEC rule phase in attempts to shape the Commission's final rule. Then immediately after the rule was issued, it began litigation to have section 1502 and the SEC's final rule struck down in part or in whole.

The use of ANT guided qualitative research methods provided an effective framework for analysis of this complex phenomenon. Quantitative methods would have collapsed the rich and diverse data into a limited set of variables that would not capture the richness of the process involved in changing the financial disclosure policy to include this innovation in regulation to effect social change.

ANT, as defined in *Reassembling the Social* (Latour, 2005), provides an innovative framework for addressing difficult questions about complex associations. In the case of this research it proved to be an effective tool for exploring the innovation of extending corporate disclosure to humanitarian related issues and the processes employed to affect that change.

5 CONCLUSION

Chapter five provides an overview of the research, summary of the methodology and results of the study. The conclusions are presented and contextualized with respect to the relevant contributions. The implications for the profession regarding policy issues are discussed. Limitations of this study are addressed, and a prologue for extending the research is presented.

5.1 Overview and Summary of the Study

Financial regulation represents an important role in providing investors with decision useful information. Financial statement users are seeking additional information related to corporate social responsibility than traditional reporting has previously disclosed. The Congress sought to use its power to regulate corporations to affect change in the Democratic Republic of the Congo. Legislative efforts culminated in the inclusion of conflict minerals regulation in Title XV, section 1502 of the Dodd-Frank Act. Section 1502 established reporting guidelines that required affected issuers to report information about the sources of their minerals and whether or not those minerals are contributing to the funding of the violence and human rights abuses in the region.

The purpose of this was to apply Actor-Network Theory to examine the process in which the various actors developed and implemented the Dodd-Frank Act. Preliminary research questions were developed to this end and explored. As the actors' movements were traced, the scope of the study was refined and reduced to the exploration of section 1502 related to conflict minerals reporting. The principles of ANT were employed and the general theme of "follow the actors" (Latour, 2005)

was the governing directive. Tracing the actions and the artifacts of the actors guided the direction of the research and resulting questions of interest. This analysis led to reflection and modification of the original proposed questions.

Examination of the data revealed that investigation of section 1502 of Dodd-Frank would be best contextualized through examination of its legislative, rule determination, and implementation phases. This became apparent through observation of artifacts left by the actors at the different stages of the process.

The research process began with an iterative examination of the 849 page Dodd-Frank Act. Detailed examination of the Act revealed that Title XV represented a miscellaneous amalgam of regulations not specifically related to the primary objectives outlined in the title of the Act, of "Wall Street Reform" or Consumer Protection."⁹⁴ The analysis of Dodd-Frank led to investigation of section 1502, because it specifically related to regulation and reporting, and represented an unusual innovation in reporting objectives. This innovation focused on the expressed purpose of mitigating the sexual and gender-based violence in the region.⁹⁵ The diversity of actors and the regulatory approach used to define the final rule provided a rich collection of artifacts for tracing the actors' movements.

Analysis of the legislative phase of conflict mineral disclosure provided the data necessary to examine central question one and the related sub-question. Concurrent to the Global Financial Crisis, public awareness of the violence and genocide in the Congo came to light. This coupled with trips to the region by members of congress to the area and enlistment from various humanitarian groups created the initial motivation to

^{94.} P.L 111-203—Dodd-Frank Wall Street Reform and Consumer Protection Act

^{95.} S.891—Congo Conflict Minerals Act of 2009

alter the corporate usage of conflict minerals in an attempt to reduce the human rights violations. Because of the GFC, congress was motivated to increase financial disclosure and reporting requirements, in an effort to reform Wall Street and improve consumer protection.

According to Senator Durbin, "without knowing it, tens of millions of people in the United States may be putting money in the pockets of some of the worst human rights violators in the world, simply by using a cell phone or laptop computer. We ought to do all we can to make sure that the products we use and the minerals we import, in no way support those who violate human rights abroad (Schure, 2010) (http://www.worldpress.org/article.cfm/Conflict-Minerals)." This sentiment reflects the way the provision was mapped to the mission of Dodd-Frank, as a means to further protect consumers. This is executed by drawing on the heightened interest in disclosure and regulation that resulted from the Global Financial Crisis. Additionally, supporters also noted that the conditions in the Congo were exacerbated by the downturn in the economy that resulted from the GFC. This downturn, according to Marks (2011), led to mining revenues in the region falling and an inability of the Congo government to effectively respond to attacks on multiple fronts. Thus, it can be seen that the actors advancing this fundamental change in reporting enlisted the GFC as an artifact actor, with the expressed purpose of enlisting legislative support for new legislation.

Conflict mineral regulation was first introduced in 2008 by Republican Senator Sam Brownback and was premised on restricting certain minerals, in a manner similar to the approach used to ban the importation of "blood diamonds". This attempt was not successful, but it did mobilize actors to publicly engage in discussions of the violence and human rights violations being perpetrated against those in the region. Senator

Brownback and others issued a second bill in 2009 that eventually became foundational to section 1502 of Dodd-Frank. Also in 2009, Congressman McDermott introduced a companion bill in the house that was also eventually incorporated into Dodd-Frank.

Consistent with the approach described in second Brownback bill, section 1502 delegated the promulgation of rules to the SEC. The law required that such rules be established no later than 270 days after enactment of the law on July 21, 2010. The Commission released its final rule on conflict minerals on August 22, 2012.

After Dodd-Frank was passed, the SEC initiated its rule development phase by soliciting comments. The period governed by the Commission and later provided opportunities for actors to engage and work to define the reporting requirements. The rule development and the implementation phases provided the data necessary to analyze in the context of central question 2 and the related sub questions.

5.2 Contributions

This study makes contributions to the disciplines of accounting and sociology. Extending Actor-Network Theory to accounting regulation and disclosure expands the usage of ANT to public policy issues in the area of accounting research and demonstrates another area of research that can benefit from this approach.

This study adds to the disclosure literature insight into the processes employed to establish new regulation and disclosure policy. Also this research contextualizes the involvement of accounting and other actors involved in a specific instance of policy making. Through the use of ANT, the application qualitative research methods to complex activities like regulation is advanced as an alternative to the frequently employed quantitative methods applied in a broad body of literature. Exploratory

research examining the complexity of the legislative process provides results that can inform other disclosure research utilizing qualitative and quantitative techniques.

This research contributes to the sociology research, and specifically to the corpus of ANT research into additional areas like public policy and financial regulation. As another translation of Actor-Network Theory, this research represents a potential expansion of the implementation of ANT research.

5.3 Policy Implications

The use of ANT in analyzing the conflict minerals provision of Dodd-Frank provides an opportunity to trace the actors' efforts to enlist other actors in an attempt to define the objectives and implementation of corporate disclosure and reporting. Tracing the actors movements through the various phases from legislative through implementation, it reveals that in the case of conflict minerals reveals the methods employed at various stages and the corresponding effectiveness of such engagement.

The primary actors at the legislative phase includes corporations that engaged in the costly act of lobbying specific issues, and humanitarian organization representatives that engaged the public through the media and legislators through congressional testimony. With respect to section 1502 of Dodd-Frank, the lobbying activities effectiveness is difficult to determine, as lobbying disclosures only reveal the issues lobbied and not the concerns or position of the actor. However, it must be noted that the conflict minerals section of Dodd-Frank is most consistent with the concerns articulated by groups like the Enough Project.

From a policy perspective, the SEC rule development phase provided the most transparency in its approach to addressing the concerns of all of the actors. The

Commission's policy is to disclose on its website all of the comments it receives related to a pending ruling, as well as, to articulate how it addressed those concerns in its final ruling. Also, the Commission describes relationships that it observes between actors and how they applied that knowledge to their ruling.

In the case of this issue, the use of litigation to further shape the legislative outcome also revealed how some actors employ this method as a trial of strength. The courts also disclose the arguments employed by all relevant actors seeking to settle the issue.

Related specifically to actors from the accounting profession, the comment letters reveal more than is typically disclosed through legislative activities of lobbying and PAC contributions. The accounting firms and the AICPA provided comment letters to the Commission that stated specifically the issues they sought to provide commentary on or sought clarification. Many actors, including advocacy groups, politicians and corporations used the media to advance their enlistment efforts to frame the conflict minerals issue in terms consistent with their interests. However, nearly all of the identified engagement by the accounting profession limited its activities to technical issues related to the legislation. Only one accounting firm deviated from this pattern, when commenting on the preferred type of audit to be mandated under the final rule.

Although the results of an ANT study are difficult to generalize, the results of this study suggest that if transparency and objectivity are a primary concern in the financial regulation and disclosure policy process, then lobbying Congress to allow the SEC to establish the specifications of the regulation may be an effective approach to this objective.

5.4 Limitations

Several limitations regarding the methods, results and conclusions of this study need to be addressed. First, because Actor-Network Theory is a qualitative research approach, the methodology relies on interpretation of the artifacts generated by the actors, which introduces the potential biases of the researchers and idiosyncrasies. Also, Latour notes that each instantiation of ANT is in itself a translation of the methodology, thus reflecting the researcher's interpretation of an effective way to implement the theory.

Second, the results generated from the research depend on the volume of the data incorporated and the effectiveness of mapping the associations. Multiple researchers could examine the same collection of data and be drawn to different associations that would shape the observed results. This doesn't imply that the underlying data is not "facts", but instead demonstrates that skill, biases, involvement in the data gathering process (does the researcher have direct contact with the observed), and finally the completeness of the data captured. The risk of omitted important data is always a risk in reach the results.

Third, the conclusions reached based on the results of this study reflect the specific case observed in the environment in which it existed. ANT notes that these outcomes are temporary and fragile. For example, the passage of Dodd-Frank occurred in the context of the aftermath of the Global financial Crisis, with a specific president in office and a unique set of Congress in the month of July in 2010. Generalizing these results, to broader circumstances in questionable from a qualitative research point of view and inappropriate from an ANT perspective. However, this does not mean that it

is not useful to treat this type of exploratory research as informative for designing and examining other research questions in order to trace the similarities and differences in the outcomes.

5.5 Prologue for Future Research

Describe the potential for change in the rule as a result of the 2016 election.

Describe it in terms of congressional makeup and with respect to the two commissioners that recommended applying a stay to the entire final rule.

Because the data for 2017 is not yet available, and the 2016 election results have potentially impacted the actors involved, extending the research to include the new data would provide insight into the evolution of the conflict minerals reporting issue. The SEC recently sought comment letters from interested parties regarding the current rule and guidance related to it. On January 26, 2017, President Trump named Commissioner Michael Piwowar acting SEC Chairman. The fact that he was one of the two Commissioners that recommended a complete stay on the conflict minerals final rule likely impacts the fate of the reporting requirements for conflict minerals. These facts, and potentially unknown factors demonstrate the need for further investigation into the evolution of reporting as a means to evoke social change.

REFERENCES

- Andrade, Antonio Díaz. "From intermediary to mediator and vice versa: On agency and intentionality of a mundane sociotechnical system." *International Journal of Actor-Network Theory and Technological Innovation (IJANTTI)* 2, no. 4 (2010): 21-29.
- Arnold, Patricia J. "Global financial crisis: The challenge to accounting research." *Accounting, Organizations and Society* 34, no. 6 (2009): 803-809.
- Barth, Mary E., and Wayne R. Landsman. "How did financial reporting contribute to the financial crisis?" *European Accounting Review* 19, no. 3 (2010): 399-423.
- Bateman, Bradley W. "Bringing in the state? The life and times of laissez-faire in the nineteenth-century United States." *History of Political Economy* 37, no. Suppl 1 (2005): 175-199.
- Bezemer, Dirk J. "Understanding financial crisis through accounting models." *Accounting, Organizations and Society* 35, no. 7 (2010): 676-688.
- Bengtsson, Elias. "Repoliticalization of accounting standard setting—The IASB, the EU and the global financial crisis." *Critical Perspectives on Accounting* 22, no. 6 (2011): 567-580.
- Benston, George J. "The federal "safety net" and the repeal of the Glass-Steagall act's separation of commercial and investment banking." *Journal of Financial Services Research* 2, no. 4 (1989): 287-305.
- Brennan, Niamh M., and Collette E. Kirwan. "Audit committees: practices, practitioners and praxis of governance." *Accounting, Auditing & Accountability Journal* 28, no. 4 (2015): 466-493.
- Brewster, Mike. *Unaccountable: How the accounting profession forfeited a public trust*. John Wiley & Sons, 2003.
- Brook, Yaron, Robert Hendershott, and Darrell Lee. "The gains from takeover deregulation: evidence from the end of interstate banking restrictions." *The Journal of finance* 53, no. 6 (1998): 2185-2204: 79-80.
- Bruner, Robert F., and Sean D. Carr. "Lessons from the Financial Crisis of 1907*." *Journal of Applied Corporate Finance* 19, no. 4 (2007): 115-124.

- Carey, John L., The Rise of the Accounting Profession: From Technician to Professional, 1896-1936 (American Institute of Certified Public Accountants, 1969).
- Carey, John L., The Rise of the Accounting Profession: To Responsibility and Authority, 1937-1969 (American Institute of Certified Public Accountants, 1970).
- Chow, Chee W. "1982 Competitive Manuscript Award: The Impacts of Accounting Regulation on Bondholder and Shareholder Wealth: The Case of the Securities Acts." *Accounting Review* (1983): 485-520.
- Cooper, David J., and Keith Robson. "Accounting, professions and regulation: Locating the sites of professionalization." *Accounting, organizations and society* 31, no. 4 (2006): 415-444.
- Creswell, John W. Research design: Qualitative, quantitative, and mixed methods approaches. Sage, 2013.
- Davis Polk 2015 http://www.volckerrule.com/infographic/july2015infographic.html
- Davis Polk, Dodd Frank Progress Report, July 15 2013, http://www.davispolk.com/Dodd-Frank-Rulemaking-Progress-Report/.
- Dwyer, Peggy D., and Robin W. Roberts. "Known by the company they keep: A study of political campaign contributions made by the United States public accounting profession." *Critical Perspectives on Accounting* 15, no. 6 (2004): 865-883.
- Eichengreen, Barry, and Kris J. Mitchener. "The Great Depression as a credit boom gone wrong." *Research in Economic History* 22 (2004): 183-238.
- Evarts, Susanna, Cornel Ban, JD Second Reader, and Gianpaolo Baiocchi. "Translating the Translators." (2011).
- Federal Deposit Insurance Corporation, and Resolution Trust Corporation (U. S.). 1998. Managing the crisis: the FDIC and RTC experience, 1980-1994. Washington: DC.
- Fradkin, Philip L. The great earthquake and firestorms of 1906: how San Francisco nearly destroyed itself. Univ of California Press, 2005.
- González, Gibrán Rivera. "The use of Actor-Network Theory and a Practice-Based Approach to understand online community participation." PhD diss., The University of Sheffield, 2013.

- Greene, Edward F. "Dodd-Frank and the future of financial regulation." *Harvard Business Law Review* (2011).
- Griffin, G. Edward. *The creature from Jekyll Island: a second look at the Federal Reserve*. Aware Journalism, 1998.
- Hansen, Bradley A. "A Failure of Regulation? Reinterpreting the Panic of 1907." Business History Review 88, no. 03 (2014): 545-569.
- Hendrickson, Jill M. "The Long and Bumpy Road to Glass-Steagall Reform: A Historical and Evolutionary Analysis of Banking Legislation." American Journal of Economics and Sociology 60, no. 4 (2001): 849-879.
- Herrick, Myron T. "The panic of I907 and some of its lessons." *The Annals of the American Academy of Political and Social Science* 31, no. 2 (1908): 8-25.
- Hopwood, A. G. (1978). Accounting research and the world of action. Accounting Organizations and Society, 3 (2), 93-95
- Hopwood, Anthony G. "The economic crisis and accounting: Implications for the research community." *Accounting, Organizations and Society* 34, no. 6 (2009): 797-802.
- Huber, Wm Dennis. "The history of the decline and fall of the American accounting profession." *International Journal of Economics and Accounting* 4, no. 4 (2013): 365-388.
- Humphrey, Christopher, Anne Loft, and Margaret Woods. "The global audit profession and the international financial architecture: Understanding regulatory relationships at a time of financial crisis." *Accounting, organizations and society* 34, no. 6 (2009): 810-825.
- Jorda, Oscar. "Crises before and after the creation of the Fed." FRBSF Economic Letter 2013 (2013): 13.
- Kolko, Gabriel. *Triumph of Conservatism*. Simon and Schuster, 2008.
- Komai, Alejandro, and Gary Richardson. *A brief history of regulations regarding financial markets in the United States:* 1789 to 2009. No. w17443. National Bureau of Economic Research, 2011.

- Kothari, S. P., and Rebecca Lester. "The role of accounting in the financial crisis: lessons for the future." *Accounting Horizons* 26, no. 2 (2012): 335-351.
- Kroszner, Randall S. "Lessons from financial crises: The role of clearinghouses." *Journal of Financial Services Research* 18, no. 2-3 (2000): 157-171.
- Latour, Bruno. *Science in action: How to follow scientists and engineers through society.*Harvard university press, 1987.
- Latour, Bruno. *The pasteurization of France*. Harvard University Press, 1993.
- Latour, Bruno. "On actor-network theory: A few clarifications." *Soziale welt* (1996): 369-381.
- Latour, Bruno. "For David Bloor... and Beyond: A Reply to David Bloor's' Anti-Latour'." *Studies in history and philosophy of science* 30 (1999): 113-130.
- Latour, Bruno. "On recalling ANT." The Sociological Review 47, no. S1 (1999): 15-25.
- Latour, Bruno. *Politics of nature*. Harvard University Press, 2004.
- Latour, Bruno. *Reassembling the social: An introduction to actor-network-theory*. Oxford university press, 2005.
- Latour, Bruno. We have never been modern. Harvard University Press, 2012.
- Latour, Bruno, and Steve Woolgar. *Laboratory life: The construction of scientific facts*. Princeton University Press, 2013.
- Laux, Christian, and Christian Leuz. *Did fair-value accounting contribute to the financial crisis?* No. w15515. National Bureau of Economic Research, 2009.
- Laux, Christian, and Christian Leuz. "The crisis of fair-value accounting: Making sense of the recent debate." *Accounting, organizations and society* 34, no. 6 (2009): 826-834.
- Malcolm Anderson, and John Richard Edwards. *The priesthood of industry: the rise of the professional accountant in British management*. Oxford University Press, 1998.
- Marglin, Stephen A., and Juliet B. Schor. *The golden age of capitalism: reinterpreting the postwar experience*. Oxford University Press, 1991.

- Markham, Jerry W. "Accountants Make Miserable Policemen: Rethinking Federal Securities Laws." *North Carolina Journal of International Law and Commercial Regulation* 28 (2003): 10-21.Matthews, Derek,
- Miller, Peter, and Ted O'leary. "Accounting and the construction of the governable person." *Accounting, Organizations and Society* 12, no. 3 (1987): 235-265.
- Mishkin, Frederic S. *Asymmetric information and financial crises: a historical perspective*. No. w3400. National Bureau of Economic Research, 1990.
- Moen, Jon, and Ellis W. Tallman. "The bank panic of 1907: The role of trust companies." *The Journal of Economic History* 52, no. 03 (1992): 611-630.
- Moen, Jon R., and Ellis W. Tallman. "Clearinghouse membership and deposit contraction during the panic of 1907." *The Journal of Economic History* 60, no. 01 (2000): 145-163.
- Mol, Annemarie. "Ontological politics. A word and some questions." *The Sociological Review* 47, no. S1 (1999): 74-89.
- Olney, Martha L. "Avoiding default: the role of credit in the consumption collapse of 1930." *Quarterly Journal of Economics* (1999): 319-335.
- Picard, Claire-France. "The marketization of accountancy." *Critical Perspectives on Accounting* (2016).
- Pinch, Trevor, Michael Mulkay, and Malcolm Ashmore. "Clinical budgeting: experimentation in the social sciences: a drama in five acts." *Accounting, Organizations and Society* 14, no. 3 (1989): 271-301.
- Previts, Gary John, and Robert Bricker. "Fact and Theory in Accounting History: Presentmindedness and Capital Market Research*." *Contemporary Accounting Research* 10, no. 2 (1994): 625-641.
- Rahill, J. J. and A. G. Platt. 1905. Corporation Accounting and Corporation Law: A Manual of Corporate Organization and Management: Accounting in Theory and Practice:

 Banking, with Special Reference to the National Banking System, and a Treatise on Stock Exchanges.

- Roohani, Saeed, Lee Knight, and Ray Knight. "The S&L Crisis: A Learning Experience for Accountants." *The Journal of Bank Cost & Management Accounting* 7, no. 3 (1994): 60.
- Sarker, Suprateek, Saonee Sarker, and Anna Sidorova. "Understanding business process change failure: An actor-network perspective." *Journal of management information systems* 23, no. 1 (2006): 51-86.
- Sprague, Irvine H. Bailout: An insider's account of bank failures and rescues. Beard Books, 2000.
- Tallman, Ellis W., and Jon R. Moen. "Lessons from the Panic of 1907." *Economic Review* 75 (1990): 2-13.
- Tallman, Ellis W., and Jon R. Moen. *Liquidity creation without a lender of last resort:*Clearinghouse loan certificates in the banking panic of 1907. No. 2006-23b. Working Paper, Federal Reserve Bank of Atlanta, 2007.
- Tallman, Ellis W., and Elmus Wicker. "Banking and financial crises in United States history: What guidance can history offer policymakers?" (2010).
- Tallman, Ellis W., and Jon R. Moen. "The transmission of the financial crisis in 1907: an empirical investigation." (2014).
- Tatnall, Arthur, and Anthony Gilding. "Actor-Network Theory in Information Systems Research." (2005): 42-46.
- Thornburg, Steven, and Robin W. Roberts. "Money, politics, and the regulation of public accounting services: Evidence from the Sarbanes–Oxley Act of 2002." *Accounting, Organizations and Society* 33, no. 2 (2008): 229-248.
- Véron, Nicolas. "Fair value accounting is the wrong scapegoat for this crisis." *Accounting in Europe* 5, no. 2 (2008): 63-69.
- Véron, Nicolas. "Financial reform after the crisis: an early assessment." *Peterson Institute* for International Economics Working Paper 12-2 (2012).
- Watts, Ross L., and Luo Zuo. "Accounting conservatism and firm value: Evidence from the global financial crisis." *WorkingPaper*, http://papers.ssrn.com/sol3/papers.cfm (2012).

- Whalen, R. Christopher. 2008. "The Subprime Crisis—cause, Effect and Consequences". *Journal of Affordable Housing & Community Development Law* 17 (3). American Bar Association: 219–35.
- Whitney, Toby. "Conflict minerals, black markets, and transparency: The legislative background of Dodd-Frank Section 1502 and its historical lessons." *Journal of Human Rights* 14, no. 2 (2015): 183-200.
- Wicker, Elmus. *The Great Debate on Banking Reform: Nelson Aldrich and the Origins of the Fed.* Ohio State University Press, 2005.
- Woolley, John T. *Monetary politics: The Federal Reserve and the politics of monetary policy.*Cambridge University Press, 1985.
- Young, David, Ron Borland, and Ken Coghill. "An actor-network theory analysis of policy innovation for smoke-free places: understanding change in complex systems." *American Journal of Public Health* 100, no. 7 (2010): 1208-1217.
- Zeff, Stephen A., "The American Accounting Association-Its First Fifty Years" (American Accounting Association, 1966).
- Zeff, Stephen A. "How the US accounting profession got where it is today: Part I." *Accounting Horizons* 17, no. 3 (2003): 189-205.
- Zeff, Stephen A. "How the US accounting profession got where it is today: Part II." *Accounting Horizons* 17, no. 4 (2003): 267-28