SARBANES-OXLEY AND PRIVATIZATION FREQUENCY IN AMERICA

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Abstract

The quality of financial records is a topic of constant debate, even more so during times of recession. The United States faced a banking crisis in 2002, which rocked the very foundations of the business sector. Sarbanes-Oxley passed in response to the banking crisis, implementing a series of new standards applying to all U.S. public company executives, and firms as a whole. Consequences for fraudulent activity have evolved to be more severe, and external auditors have become more autonomous. This thesis analyzes the frequency of firms going-private in the United States. Going private transactions were collected from January 1, 2007 to February 5, 2014, in order to further investigate the behavior of the privatization trend in America. The study concluded that there was a decline in the overall number of firms going private, in addition to a change in the industries witnessing the highest frequency of privatization. Furthermore, the FEI surveys concluded that compliance costs have declined over the years following the passage of SOX. These declines support that SOX may no longer be driving firms to privatization as compliance no longer implies as significant of a financial burden.

KEYWORDS: (Sarbanes-Oxley, SOX, Privatization, Frequency)

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CHAPTER I

INTRODUCTION

Public business sectors are dominated by corporate giants throughout the world, and their actions directly affect the health of the stock market. As seen in the United States at the turn of the millennium, fraudulent activity involving a number of these giants shook the very foundations of the U.S. economy. Corporations such as Enron, Tyco International, WorldCom, and a number of firms affiliated with these giants were charged with fraud by the Securities and Exchange Commission (SEC). The result of these sequential corporate scandals would be one of the most significant pieces of legislation affecting public business.

The Sarbanes-Oxley Act of 2002 (SOX) redefined the standards for all U.S. public company boards as well as management and public accounting firms. The bill came into being as a result of the financial crisis that rocked the economic world to its very core. Major corporations such as Enron, Tyco International, WorldCom and Peregrine Systems were all found guilty of multiple counts of fraudulent activity by the SEC. "Managers that always promise to 'make the numbers,' will at some point be tempted to *make up* the numbers," (Dutta &Venkatraman, 2011). Actions such as disclosing falsified financial reports, overstating quarterly profits, as well as manipulating audit companies resulted in a financial disaster that led to the implementation of SOX.

Sarbanes-Oxley was designed to restore investors' confidence, and repair the capital market.

Prior to the implementation of SOX, auditing firms were subject to self-regulation, allowing auditors to also perform non-audit services such as consulting to the companies that they audited. Conflict of interest became a topic of debate regarding the role of an auditor, necessitating audit service reform. The investigation involving firms such as Tyco International as well as Enron, found that the negligence of senior executives was the source of the failure to prevent the gross financial misstatements that ultimately led these firms to claim bankruptcy. The lack of sufficient funding for the SEC budget led to ineffective enforcement by the SEC. Since the implementation of SOX, the SEC budget has nearly doubled. Egregious banking practices that resulted in the sizeable loans to firms such as Enron resulted in catastrophe for the investment banking sector, directly hurting investors and shaking their confidence in the stock market.

Sarbanes-Oxley consisted of eleven titles aimed to address the issues that led to the crisis of 2002. Title I established the Public Company Accounting Oversight Board (PCAOB). The PCAOB independently monitored audit firms, enforcing compliance with the newly established standards for auditors mandated by SOX. Title II set the current standards for external auditor independence, in addition to other requirements for audit procedure. Title III required senior executives to sign off on the completeness and accuracy of financial reports, effectively holding executives responsible for the quality of the financial information being reported. Title IV defined the reporting requirements for financial transactions. Title V established the conduct to be observed by securities analysts and mandated the full disclosure of potential conflicts of interest. Title VI gave

the SEC the authority to censure or bar securities professionals as well as defining the circumstances under which one can be barred from practicing. Title VII emphasized the need for information, and required the SEC to perform studies pertaining to the securities, accounting and banking sectors and report their findings. Title VII, or the Corporate and Criminal Fraud Accountability Act of 2002, created the criminal consequences for manipulating or altering financial records or interfering with active investigations. Title IX, or the White Collar Crime Penalty Enhancement Act of 2002, raised the criminal penalties that were associated with white-collar crimes, effectively establishing the failure to certify corporate financial information as a criminal offense. Title X mandated that the Chief Executive Officer must sign the company tax return. Lastly, Title XI, or the Corporate Fraud Accountability Act of 2002, defined corporate fraud, as well as revised and increased the penalties of criminal offenses, (McGraw, 2005).

SOX set a new standard to which financial reporting would be held. Its goal was to reform the auditing system that had allowed for fiascos such as the events that took place at Enron. If Sarbanes-Oxley is effectively accomplishing its goal, one would witness improvements to corporate governance as well as audit and accounting quality as a result. However, others have argued that SOX significantly raised compliance costs for publicly held corporations. The hypothesis behind this thesis is that Sarbanes-Oxley is not directly responsible for the trend of going private transactions during the period immediately following its passage, furthermore that compliance costs in relation to revenues have begun to decline since the year of the Act's passage continuing to the present day.

This paper begins by introducing the theory behind the economic implications of SOX on U.S. firms. Corporate governance, agency theory, as well as the costs and benefits analysis of staying public versus going private, are addressed and evaluated in depth in terms of their relationship to SOX and the U.S. capital market. Following, is the relevant literature that is being analyzed, it demonstrates information collected from the extensive publications regarding SOX. The crucial literature that forms the basis for this study includes the background information regarding SOX and the history of its implementation, the goals of SOX, its effects on U.S. firms, and its effects on the capital market in the United States.

In this study both qualitative and quantitative data are employed to assess the validity of the hypothesis. The data collected and the methodology behind the study are derived from two previous studies. The first method is a study performed by Megan Fox, who revised a study by Ellen Engle, Rachel M. Hayes and Xue Wang on the privatization trend surrounding the passage of The Sarbanes-Oxley Act of 2002. The previous study is modified to include a data set collected from a significantly larger period of time and the cost and benefits analysis of staying public versus going private. The results are computed and the analysis of the data is presented. The paper finishes with a summary of the studies and relevant information.

CHAPTER II

THEORY

The United States public market has battled financial downturn since its creation, and as a result of the corporate scandals at the start of the new millennium, the Sarbanes-Oxley Act of 2002 was enacted. It incorporated "the most far-reaching reforms of American business practices since the time of Franklin D. Roosevelt," (Bumiller, 2002). The series of scandals had rocked the foundation of the U.S. stock market, costing shareholders billions of dollars, and shaking the heart of investor confidence. SOX was intended to hold firms, their boards of directors, and executive management officials accountable for the quality of their financial statements, which helped to protect investors from fraud. It enhanced and mandated new standards for all U.S. public companies, as a means of restoring investor confidence. This legislation altered the future of the U.S. capital market; by increasing compliance costs which initially caused a spike in privatization transactions as firms struggled to comply with new regulations. A number of firms have been entirely reconstructed in order to follow the provisions established by SOX. This section addresses the theory related to SOX, focusing on corporate governance, agency theory, and the costs and benefits of public versus private.

Corporate Governance

At the heart of SOX are the mandated provisions aimed at improving the quality of financial reports. In order to begin improving the quality of disclosed financial

information, SOX moved to restructure the role of corporate governance amongst public firms. A number of provisions were directed at the improvement of corporate governance. Radin and Stevenson assert that, "Corporate governance for publicly traded companies is based on the principle that boards are empowered and guided by the law," (Radin & Stevenson, 2006). Corporate governance defines the system through which corporations are controlled. The structure formulates the distribution of tasks, and responsibilities amongst the various groups comprising the corporation such as the board of directors and managers. In addition to allocating responsibilities, governance also specifies the rules involved in corporate affairs, as well as the framework used to set and achieve goals. It links stockholder interests to corporate interests, maintaining a unified vision of the company's future.

Prior to Sarbanes-Oxley, management executives were allowed to be a part of auditing committees. The potential to falsify or misrepresent financial information was what led to the scandals involving corporate behemoths such as Enron and Worldcom. According to Joel Demski, "A conflict of interest arises when an executive, an officeholder or even an organization encounters a situation where official action or influence has the potential to benefit private interest," (Demski, 2003). SOX address the issues of conflicts of interest and boardroom failure through a number of its mandated provisions. The Act established the Public Company Accounting Oversight Board (PCAOB) as an administrative body that would oversee public accounting firms, as well as enforce compliance with the provisions set forth by SOX. Furthermore, the Act mandates that public companies possess a board with a majority of independent directors and an external auditing company in addition to significantly increasing the

accountability of senior executives. In order to remove the presence of conflicts of interest, SOX required that external auditors possess no direct economic stake in the company that they are servicing (Heath, 2009).

Section 404 of Sarbanes-Oxley has been under constant scrutiny since the Act passed in 2002. It is criticized because of the high fixed cost involved with complying. Section 404 mandates that both management and an external auditor individually evaluate the effectiveness of the firm's internal processes regarding the reporting of financial records and then submit a report of their findings. "…The mandatory internal control disclosures under SOX are a credible mechanism that effectively distinguishes good CFOs from bad ones by revealing the firm's internal control quality," (Wang, 2010). The increase in accountability for executives has accompanied the increased risk of holding the position, emphasizing the importance of strong internal control. SOX not only began to remove conflicts of interest with the mandates aimed at corporate governance, it also addressed the issues of agency.

Agency Theory

Agency theory is a means of understanding the effects of human morality on the business world. Principle-agent theory demonstrates how individuals, or agents, are charged with managing affairs for the agent. It illustrates the two-leveled relationship among the controlling entities of a firm. It begins with the stockholders, the agents of the first level; they elect those who reside on the board of directors and charge them with directing the company in a manner that suits both entities' goals. Since the principals manage the payment of the agents, they are able to influence the agent's activity. The second level is comprised of the board of directors, as principals, and the management

executives, as agents. The board of directors selects those who serve as management; those managers then dictate the firm's daily activity. "Yet as the early twenty-first century wave of corporate scandals demonstrated once again, it can be extraordinarily difficult for shareholders to exercise effective control of management, or more generally, for the firms to achieve the appropriate alignment of interests between managers and owners," (Heath, 2009). Management must appease the board, who then report to the stockholders. It is within the second level that agency problems arise.

Under the principles of corporate governance, firms must disclose reliable and transparent financial information. Full disclosure implies that no pertinent information is withheld from the public. "Reliable and transparent," defines information that can be easily understood and trusted as valid as well as accurate (Heath, 2009). The quality of financial reports directly relates to the reliability of the information. Stockholders have little to do with the information being released from corporations and must trust that it has not been tampered with in any form subjecting them to potential harm from falsified data. "A lot of problems would go away if people only behaved more ethically, but the fact is, people don't behave all that ethically," (Heath, 2009). Corporations owe stockholders the right to the full disclosure of all financial records verifying that they are a faithful representation of the current state of affairs. However, since management is responsible for providing financial information to the board that controls their employment, executives may be tempted to falsify information in order to distort the numbers, a practice called earnings management. Joel S. Demski explains that, "conflicts of interest in the corporate area are neither new nor avoidable," (Demski, 2003). Agency gives rise to conflicts of interest when the goals of the agent do not coincide with those of

the principal. Misrepresenting financial reports leads to the cause of most agency problems, asymmetrical information.

SOX mandates that companies must disclose detailed, reliable and transparent statements and requires senior executives to sign disclosed statements as a means of guaranteeing and taking responsibility for the quality of the information. The quality of financial statements pertains to how well the numbers displayed by the balance sheet and income statement represent the performance of a firm, (Verleun, 2011). Therefore, it is in the best interest of all entities involved in the management of a firm to release information that is as accurate as possible; however, it is when conflicts of interest arise, that problems of agency are created. Executives acting out of self-interest began to practice earnings management, resulting in a number of problems regarding the disclosed information. The issue of asymmetrical information can be found at the heart of a number of corporate scandals including the events pertaining to Enron**.** Asymmetrical information defines the scenario where one group holds more or higher quality information than another when making pertinent decisions. SOX addresses the issues of agency through the mandated provisions that require firms to possess a board of directors comprised primarily of external directors in order to limit conflicts of interest. As a result of the compliance with the provisions set forth by SOX, firms began to witness lower agency costs, the other costs associated with mismanagement (Heath, 2009). Due to the effect of falsified financial information on the health of the stock market, SOX aimed to prevent significant misrepresentations akin to those responsible for the accounting crisis in 2002.

Costs and Benefits of Private versus Public

The United States business sector is divided into two markets, the private and the public. Companies choosing to go public begin by enacting an initial public offering where stock can be sold to the public in order to gain capital necessary for growth. Conversely, a private company acquires capital through other means, such as private investors, bank loans or through selling bonds. A number of the world's most powerful and influential corporations were financed by capital raised in the public market. A firm's growth rate and need for capital are directly related to their decision to go public or remain private (Poulsen, 2008). The Sarbanes-Oxley Act of 2002 imposed further costs on companies regarded as public, emphasizing the need for the effective generation and allocation of capital.

Staying Public

Financing a corporation takes immense amounts of capital, and in order to generate the necessary resources many companies look to enter the capital market. Publicly traded entities subject themselves to shareholder scrutiny, as well as a limitation of corporate control to generate large amounts of capital necessary for growth (Jong et al., 2012). Public companies are faced with costly restructuring in order to comply with the mandated provisions of SOX. "Public companies, unlike private companies, must produce quarterly financial reports, usually with a compressed turnaround time between the close of the quarter and the government's filing deadline," (Hamilton, 2012). Firms entering the public equity market are faced with the imposed compliance costs of SOX provisions, which include the initial SEC registration, required disclosures of financial statements, and auditing and banking fees (Poulsen, 2008). The downside to being a

publicly traded company is the costs imposed by legislation and regulation, which can decrease the profitability of a company. The required provisions established by SOX may have influenced a number of smaller firms to go private due to the imposed compliance costs. According to Edward E. Nusbaum, "these regulatory developments have increased the cost of being a public company," (French, 2003). However, an annual survey by the Finances Executives International (FEI), has documented that compliance costs in relation to revenues has declined since the passage of SOX, (FEI, 2008).

Public companies are subject to the effects of daily events that can directly impact their value as a firm (Hamilton, 2012). Regardless, companies compliant with SOX have witnessed benefits to stockholder confidence and information credibility. Stockholders observe companies that have complied with regulation as a safer investment and therefore are more willing to invest. As others witness growing confidence in less risky ventures, they also invest, resulting in a number of beneficial effects to a regulation compliant firm's stock value, positively affecting stockholders. The necessity of capital in order to promote growth is the most important aspect behind a firm's decision to go public.

Going Private

Going private allocates additional breathing room for companies that are struggling to comply with public market regulations as well as allow them to maintain growth. **"**The SEC allows a company with fewer than 300 shareholders to de-register its securities and become a private company," (French, 2003). Companies going private can witness a number of benefits including possible tax benefits in addition to avoiding burdensome costs imposed by legislation. However, going private is no "silver-bullet" for responding to the provisions set forth by SOX. Privatization demands executives to seek

other means of funding their daily operations, as well as new forms of incentives for employees to retain the necessary human capital.

Researchers have concluded there are many reasons for the higher number of small firms going private. Firstly, these firms derive little to no benefit from staying public after the passage of SOX; secondly, these corporations possessed poor internal regulation that led to the fraudulent activity SOX was designed to combat. Sarbanes-Oxley set forth new regulations in an attempt to improve audit quality by diagnosing and treating issues within audit firms. SOX implemented higher costs on the firms providing low quality services, which resulted in a mass exodus of the firms offering low quality services from the public market, resulting in the improvement of audit quality. The exiting of poorly governed firms from the public market has led to growing investor confidence as public firms observe the positive effects of information credibility on their share value (Engel et al., 2007). A number of reasons, which stem primarily from a costs-benefits analysis, shape corporations financial decisions on how to finance growth. "For many private-company owners, the lure of ringing the bell on a stock exchange just isn't there anymore. Why should it be? That bell is an expensive one," (Hamilton, 2012)

The implementation of such significant reform found within the Sarbanes-Oxley Act of 2002, has permanently altered the future of the U.S. capital market, implementing new regulations that focus primarily on publicly traded companies and how they do business. SOX set out to restore investor confidence in the public market through restructuring internal controls, improving the quality of the financial information being reported, increasing the accountability held by corporate executives, and strengthening auditor power. Observers can witness that SOX has accomplished its primary objectives.

SOX may have driven a number of firms to go private immediately following its passage; however, this fact may not hold true today, nearly twelve years later. The subsequent literature review will further analyze the relevant information regarding the impact of SOX on the U.S. public market.

CHAPTER III

LITERATURE REVIEW

Since its passage, the Sarbanes-Oxley Act of 2002 (SOX), has been highly debated among supporters and critics alike. Extensive literature is available regarding the impact SOX has had upon the United States public market. It is essential to analyze the relevant information in order to effectively analyze how it has altered the future of American business. Historical insights behind the events surrounding the passage of SOX are pertinent to understanding the situation that corporations faced. First, the effects of restructuring corporate governance are assessed. Second, the literature regarding the costs and benefits of going private is analyzed. Third, the imposed compliance costs are explained and discussed. Lastly, the pros and cons regarding the mandated provisions established by SOX are addressed.

Historical Background

Implementing the Public Company Accounting Reform and Investor Protection Act, or Sarbanes-Oxley, resulted in a number of effects on the U.S. public market and publicly traded firms world-wide (Filbeck et al., 2011). "The Sarbanes-Oxley Act is the single most significant piece of legislation embracing corporate governance since the U.S. securities law of the 1930s," (Riotto, 2008). The Sarbanes-Oxley Act of 2002 (SOX), was passed in response to the events at the start of the 21st century that involved

corporate behemoths such as Enron, WorldCom, Tyco International, and a number of others. Normally a piece of legislation can take years before being passed into law. However, during a time of crisis that demanded action, SOX legislation was introduced and passed into law in a number of months (Mohan & Chen, 2007). Congress understood the state of the capital market and saw the need for intervention.

Riotto addresses the events that fueled the fire behind the implementation of SOX, acknowledging that these scandals had renewed the public interest in ethical behavior, calling for action in order to prevent any further damage to the business sector. Primarily, the provisions mandated by SOX aimed to refine financial reporting. Ahmed states, "The Act's stated purpose is 'to protect investors by improving the accuracy and reliability of corporate disclosures,'" (Ahmed, 2010). SOX was established as an effort to alleviate the damage done to the capital market by restoring public confidence and mandating a number of reforms as a means of improving information credibility (Riotto, 2008). The essential provisions of SOX, as stated by Filbeck et al., are explained in Sections I, II, III, IV, VIII, IX, and XI. Section I, created the Public Corporation Accounting and Oversight Board as an administrative body tasked with facilitating the mandated provisions of SOX. Section II, imposed limitations on the services offered by auditing firms. Section III, aimed to reform corporate responsibility, essentially restructuring corporate governance. Section IV, reformed the requirements for financial statements and internal controls. Sections VIII, IX, and XI raised the consequences associated with corporate fraud (Filbeck et al., 2011).

Engel, Hayes and Wang acknowledge both critic and proponent opinions to assess the impact SOX has had on the capital market and firms' decisions to leave it. "One

concern regarding increases in the regulatory burden on public companies is that such regulation may deter firms from seeking financing in the public equity market," (Engel et al., 2007). Proponents believed that the mandated provisions would improve financial statements, thus benefitting stockholders. While critics asserted that the imposed costs disproportionately affect smaller firms, reducing, if not eliminating, the benefits for these firms. Michael Gallagher, chairman of the CAQ's Professional Practice Executives Committee, spoke to the benefits of Sarbanes-Oxley, stating, "The benefit [is] to the cost of capital because of that assurance and that higher level of rigor from that internal control," (Tysiac, 2012). SOX directly influenced the redevelopment of corporate governance in publicly traded firms.

Effects of Improved Corporate Governance

According to Radin and Stevenson, "Corporate governance for publicly traded companies is based on the principle that boards are empowered and guided by the law," (Radin & Stevenson, 2006). The Sarbanes-Oxley Act of 2002 (SOX), is regarded as the most significant legislation affecting public companies, internal and external auditors and board of directors since the Securities and Exchange Commission was created in 1934 (Riotto, 2008). SOX mandated that all publicly traded companies establish and maintain an effective internal control system for financial reporting (Wang, 2010). The foremost goal of SOX is to "improve the accuracy and reliability of corporate disclosures made pursuant to the securities laws," (Wang, 2010). Sections 302 and 404 require all publicly traded companies to disclose information regarding the effectiveness and overall quality of internal control (Wang, 2010). Public companies owe a duty of care to shareholders and are responsible for the full disclosure of transparent and reliable financial

information. Transparent and reliable define statements that accurately and clearly depict the financial status of a specific firm.

According to Radin and Stevenson, "Governance of public corporations in the United States has operated under the agency model with regulatory strengthening since the passage of Sarbanes-Oxley legislation," (Radin & Stevenson, 2006). Agency theory is illustrated through the principal-agent, or owner-manager, relationship (Heath, 2009). The principal-agent relationship defines the interaction between the tiers of control in a corporation. The relationship begins with the stockholders, who appoint the board of directors. Next the board selects management executives. The appointee expects the appointed to conduct daily affairs in a manner that best accomplishes the goals laid out by the appointee. Conflicts of interest arise when the goals of the shareholders and senior executives diverge.

Riotto notes the impact of conflicts of interest as a driving factor behind the fraudulent activity that led to the passage of SOX. As cited in Riotto, "Current and former employees of companies charged with inappropriate dealings have indicated that intense pressure to, 'make the numbers,' have led to questionable practices," (Riotto, 2008). The relationship established through agency theory is subject to complications because the flow of information is at the discretion of the management executives. Earnings management is the practice of income smoothing, where revenues are manipulated to combat major fluctuations in earnings. "Earnings management is a natural outcome of a principle-agent moral hazard problem combined with the flexibility inherent in the Generally Accepted Accounting Principles," (Depkin, 2006). Disclosing manipulated information to the board subjects the directors to information asymmetry,

this occurs when management fails to fully disclose all pertinent financial information (Radin & Stevenson, 2006). Joel S. Demski studies corporate conflicts of interest, the primary cause of problems with agency. According to Demski, "A conflict of interest arises when an executive, an officeholder or even an organization encounters a situation where official action or influence has the potential to benefit a private interest," (Demski, 2003). Costs arising from problems arising within the principal-agent relationship are known as agency costs, these include the expenses associated with hiring external consultants as well as the losses that occur when management does not act in a company's best interest (Radin & Stevenson, 2006). "From an agency theory perspective, a stronger corporate governance structure should lead to more effective monitoring of controls and the control environment," (Cohen et al., 2010). A study conducted by Xue Wang examines the effects of the mandated improvements to disclosure requirements on corporate governance decisions regarding CFOs.

Wang studied the resulting effects of SOX internal control requirements on corporate governance decisions regarding the appointment of senior executives. Due to the SOX mandated disclosures regarding the quality of internal controls, CFOs were aptly evaluated upon their ability to manage the firm's internal workings. Wang provides that, "Economic theory suggests a link between disclosure and information asymmetry reduction" (Wang, 2010). The results of the study conducted by Wang conclude that the quality of CFOs can be deduced through the assessment of the quality of a publicly traded firm's internal control system (Wang, 2010). Cohen conducted a similar study assessing the changes to corporate governance through the testimony of auditors. The

results support that SOX has had a significant positive impact on the corporate governance environment of publicly traded companies (Cohen et al., 2010).

Staying Public versus Going Private

A number of hypotheses have been formulated regarding the costs and benefits of staying public versus going private in the wake of Sarbanes-Oxley. Compliance, as assessed by the authors, Engel, Hayes and Wang, contains both significant fixed and variable costs. Therefore, the authors contend that due to the capital market's role as an environment that promotes financial growth, these imposed costs diminish the attractiveness of being a publicly traded firm. Furthermore, according to Engel, Hayes and Wang, "...Two groups of firms are likely to benefit least from SOX-related reforms: those that are well governed prior to SOX, and those for whom insiders' ownership stakes were relatively illiquid prior to SOX," (Engel et al., 2007). The study suggests that firms considered to be well governed, or those who are SOX compliant prior to the passage, benefit the least from SOX. Mohan and Chen support that the implementation of SOX imposed financial obligations that significantly increase the costs of being a publicly traded corporation. According to Mohan and Chen, "In some cases, the costs to remain public may outweigh the benefits," which offers a broad explanation behind the number of firms seeking private financing (Mohan and Chen, 2007). In addition, Engel, Hayes and Wang agree with Mohan and Chen, stating that, "it is value-maximizing for a firm to go private in response to SOX only if the SOX-imposed costs to the firm exceed the SOX-induced benefits to shareholders," further emphasizing why firms would seek other means of financing (Engel et al., 2007).

Compliance Costs: Barrier to Entry?

Section 404 of the Sarbanes-Oxley Act mandates improvement to the financial reporting required by public firms, imposing increased costs on firms conducting business in the public market. The Financial Executives International (FEI), provide insight regarding Section 404 through their annual surveys of compliance costs. Section 404 requires companies' annual reports to contain a signed document holding management responsible for the establishment and administration of adequate internal control systems and procedures for reporting financial information. It also requires reports to contain management's assessment of the effectiveness of the internal systems and procedures in place for the reporting of financial information (FEI, 2006). In 2006, former FEI president and CEO Colleen Cunningham commented on Section 404 improvements, "We've made strides during the second year of Section 404 implementation, but there is still room for improvement. Based on the feedback from our members, it is clear that the degree of documentation is the number one issue," (FEI, 2006). Companies were forced to adapt to new regulation, and began to evolve finding ways to make compliance more efficient.

SOX imposes a number of costs and benefits to publicly traded firms. According to Engel, Hayes and Wang, "The potential benefits of SOX must be weighed, on a firm-by-firm basis, with the costs of complying with SOX," (Engel et al., 2007). The costs of complying with the mandated provisions of SOX include both direct and indirect expenses. Direct costs affecting compliant firms include accounting and auditing expenses, as well as those associated with the restructuring of internal controls. Further direct costs include consulting and insurance fees (DiGabrielle, 2008). SOX directly

increases firms' monitoring costs by a significant margin, which is viewed as particularly harsh to smaller firms (Mohan & Chen, 2010). Indirectly, compliance consumes significant amounts of time and has contributed to executives becoming more risk-averse (DiGabrielle, 2008). Compliance with SOX includes a large, initial expense; however the Financial Executives International (FEI) conducts an annual survey to measure the significance of the costs imposed by SOX. The compliance survey conducted in 2007 reported a continued decline in compliance costs imposed by Section 404 (Wang, 2010).

Included in the survey of 2007 compliance costs former FEI president and CEO Michael P. Cangemi stated, "As companies continue to find efficiencies in complying with Section 404 and make compliance part of a routine practice, we have seen a continued decline in costs," (FEI, 2008). Firms have integrated SOX provisions into the internal systems in place, reducing average compliance costs. "Public and private companies are continuing to demonstrate overall comfort with the external audit process, and we see the fact that there are no particular surprises in fees and hours as a strong indicator of their understanding and solid relationship with their auditor," said FEI president and CEO Marie Hollein (FEI, 2011). New regulation restructured how public firms do business, paving the way for the evolution of the public market.

According to Riotto, "The Sarbanes-Oxley Act of 2002 is being perceived as the most important legislation affecting public companies, internal and external auditors and board of directors since the Securities and Exchange Commission was created in 1934," (Riotto, 2008). Legislation imposed a number of reforms directly affecting how publicly traded firms conducted their affairs. Alongside these reforms were the imposed costs of

mandated provisions. Compliance with SOX indicates that a firm has overcome the necessary requirements to conduct business in the capital market.

Pros and Cons

Corporate fraud led to the financial crisis that began the 21st century. As the effectiveness of SOX continues to be debated, praises and complaints have been raised by proponents and critics alike. According to DiGabrielle, the intent behind SOX is that it will result in positive effects to corporate governance, improve the accuracy and reliability of financial statements and repair the securities market (DiGabrielle, 2008). One concern raised by Engel, is that regulations increasing the financial burden on public companies may discourage firms from pursuing financing through the public market (Engel et al., 2007). Critics of SOX emphasize the way compliance costs disproportionately affect companies, specifically those smaller in size. However, according to Radin and Stevenson, "Three years after the passage of Sarbanes-Oxley, we have seen a substantial increase in the time public company directors spend on their board duties and the time that executives devote to reporting matters," (Radin & Stevenson, 2006). Singer asserts that evidence from studying the reliability and relevance of financial reports suggested that the regulation did indeed help to reduce intentional misstatement, one of the primary goals of SOX (Singer, 2011).

In a 2006 press release, the FEI survey included a number of company suggestions regarding how to improve the efficiency and effectiveness of Section 404. Suggestions include reducing the degree of documentation, permit greater reliance on internal audit data and resources, clarify the definition of "key controls," permit roll-

forward procedures, and allow cumulative reliance on year one testing and documentation (FEI, 2006).

The passage of Sarbanes-Oxley has been accompanied by varying benefits and costs, which effect how publicly traded firms conduct themselves in the capital market. The most commonly discussed problem posed by SOX is the costs of complying with the mandated provisions. The data and methodology explain the assertions further.

CHAPTER IV

DATA AND METHODOLOGY

The Methodology for this study begins by analyzing a study undertaken by Engel, Hayes and Wang in 2004, which was revised and republished in 2007, continuing on to assess another previous study based upon the first, conducted by Fox in 2007. In order to properly analyze the results of these studies and their relevance to the current thesis, their data will be discussed and presented for analysis alongside the results of three FEI surveys. Continuing, the methodology behind this study is explained. Both of the studies were conducted within limited time periods of approximately four to five years. This thesis complements the previously conducted studies by extending the time frame, continuing from the work done by Fox in 2007, until February 5, 2014. In addition, this study addresses the frequency of firms going private, alongside analyzing compliance costs in relation to revenues since the passage of SOX. Also, it further investigates which industries, represented by their SIC codes, possessed the highest number of privatization transactions, in order to assess if the privatization trends present during the time period surrounding the passage of SOX are still prevalent today. This thesis hypothesizes that the United States capital market is not witnessing a trend of privatization, as was witnessed in the five years following the implementation of SOX, and furthermore that the compliance costs imposed by SOX have continually declined since its

implementation. Improvements to corporate governance, information credibility, and stockholder confidence, have begun to heal the damaged capital market.

Engel et al. Study

Engel, Hayes and Wang study firms' decisions regarding going private as a response to the implementation of Sarbanes-Oxley. Engel et al., study the impact of SOX on firms for which the net benefits of doing business in the public market are relatively small. Engel, Hayes and Wang contend with the hypothesis that compliance costs, or the value of SOX-mandated corporate governance reconstruction, and the benefits of being a publicly traded company before the passage of SOX are all pertinent factors in understanding how SOX affects firms conducting business in the capital market. They attempt to quantify the effects of SOX regulation on firms' decisions to go private. "Specifically, we examine firms' going-private decision, and ask how this choice was affected by SOX," (Engel et al., 2007). In order to frame their study, the authors establish three questions to evaluate their theory. First, to what level was SOX associated with the growing number of firms choosing to go private? Second, did the reasons behind deciding to go private change as a response to the passage of SOX? Third, did the driving factors of going-private announcement returns change after the passage of SOX? (Engel et al., 2007). The authors collected a sample of companies going-private, or firms filing Schedule 13e-3 with the SEC. The study analyzed a pre-SOX time period starting in the first quarter of 1998, extending into a post-SOX period ending May 9, 2005. The criteria generated a sample of 470 firms that filed a going-private transaction with the SEC. Engel, Hayes and Wang specified their sample using the definition of a firm that has left the capital market and gone private, established by the SEC, "when the company reduces

the number of its shareholders to fewer than 300 and is no longer required to file reports with the SEC," (Engel et al., 2007). (Too long, shorten the beginning maybe?). Companies witnessing negative costs to benefits when complying with SOX may seek other forms of financing.

According to the authors, "It is value-maximizing for a firm to go private in response to SOX only if the SOX-imposed costs to the firm exceed the SOX-induced benefits to shareholders, and this difference swamps the net benefit of being a public firm prior to the passage of SOX," (Engel et al., 2007). A firm essentially immunizes itself from the provisions mandated by SOX when they decide to deregister from the SEC and cease publicly trading stock. Engel, Hayes and Wang construct a number of hypothetical outcomes from their regression. They assert that, "one would expect the post-SOX going-private firms to be those where (1) SOX compliance costs are relatively high, (2) SOX-related benefits to shareholders are small, and (3) net benefits to being public are relatively small prior to the passage of SOX," (Engel et al., 2007). The study that Engel, Hayes and Wang conducted highlights three primary empirical findings; the most crucial being a statistically significant increase in the quantity of firms filing to go private post-SOX compared to pre-SOX (Engel et al., 2007). The authors conclude that small firms meet all three qualifications, which may explain the higher presence of smaller firms' going-private post-SOX, expanding upon the understanding that primarily firms go public as small operations and operate publicly as they expand. The authors also assess compliance with SOX and conclude that it contains significant elements of both fixed and variable costs. In addition to the analysis regarding the effects on small firms, the study addresses the types of firms least likely to benefit from SOX.

Engel, Hayes and Wang limit their sample to only include Rule 13e-3, going-private transactions, which are initiated by affiliates of the filing company. According to the authors, "We used this restriction because it yields a strict criterion for what it means to 'go private,' and because firms that go private under this rule must disclose complete information with the SEC in their Schedule 13e-3 and other filings," (Engel et al., 2007). They begin by analyzing the market response to the events surrounding the passage of SOX, investigating if the reaction is connected with hypothesized firm characteristics related to the net benefit of SOX. They continue on to study whether the factors that are used in predicting the decision to go private have changed pre- and post-SOX. The authors conclude with the assessment of whether SOX-passage related announcement returns can predict the going-private decision, and the examination of stock price response to firms' going-private announcement (Engel et al., 2007). The authors establish a timeline of events surrounding the passage of SOX, including the announcement of future legislation in February of 2002, and the date of implementation on July 25, 2002. The established timeline provided key insight behind the regression included in the study.

The sample recognized 470 firms filing Schedule 13e-3, after eliminating the firms that did not fit the criteria of the regression, the regression sample was numbered at 237 going-private transactions (Engel et al., 2007). The authors use a number of control variables, "BM (adjusted book-to-market), leverage (Lev, total liabilities deflated by assets), free cash flow (CF), accounting profitability (ROA), and stock return volatility (StdRet)," (Engel et al., 2007). They continue on to assert that LogMV (log of market value) and trading activity (turnover) may offer an assessment of the costs and benefits of SOX, as well as the net benefits of operating in the public market. The study utilizes a

multivariate regression to analyze the data in order to review the variations in abnormal announcement returns that occurred throughout the time period surrounding the passage of SOX. The results show that smaller and less frequently traded companies reacted less favorably to the occurrences that positively affected the likelihood of the passage of SOX (Engel et al., 2007). Next, the study attempts to predict going-private transactions conducting logit regressions linking the decision to go private to specific firm characteristics in order to calculate if the determinants behind a firm's going-private decision have change in the wake of SOX. The authors conclude that, "two explanatory variables are repeatedly consistent: a higher ownership percentage by managers and directors and a higher book-to-market value are positively related to the likelihood of a firm going private, both pre- and post-SOX," (Engel et al., 2007). Lastly, the authors consider the abnormal stock return that accompanies the announcement of going-private transactions.

Engel, Hayes and Wang conclude their study by explaining that their hypotheses were supported by their empirical evidence. In response to their questions, the authors found that "(1) the quarterly frequency of going private increased modestly after the passage of SOX, (2) the abnormal returns associated with the passage of SOX were positively related to firm size and share turnover; (3) smaller firms experienced higher going-private announcements returns in the post-SOX period compared to the pre-SOX period," (Engel et al., 2007).

Fox Study

Megan Fox conducted a study, in 2007, to further examine the findings set forth by the study performed by Engel et al., in 2004. Fox extends the time frame to include filings

from 2004-2007, in order to investigate what size firms were going private during the time period, as well as if there had been a change in which industries were more likely to choose to go private. The time frame criteria generated a sample consisting of 400 firms that filed schedule 13e-3, a going-private transaction, with the SEC between Feb 1, 2004 and January 1, 2007. Fox collected the sample of firms by running a search on the SEC's EDGAR data engine for Schedule 13e-3 during the extended time frame. Fox proceeded to analyze the data for a number of factors including, firm size, industry (SIC codes), and frequency of transactions categorized by year (Fox, 2007).

Firm size was categorized and determined by the number of employees in each firm, using the average size of the firms and the standard deviation of the sample to create the specific ranges. Fox defined small firms as firms that have 9,000-999,999 employees, medium as having 1,000,000-9,999,999 employees and large firms having 10,000,000 or more. Fox establishes the size ranges to categorize the data to determine the frequency within each size group. The assessment of frequency examines whether smaller or larger firms are more susceptible to going-private (Fox, 2007).

Fox collected the industry codes associated with each firm filing Schedule 13e-3, which were provided by the SEC's EDGAR engine. Each code was recorded with its respective company, and then categorized in order to calculate the most frequently occurring industry. The most frequent industries gauge which are the most affected by SOX and which are most influenced by compliance.

Lastly, Fox categorized the data chronologically by date and year, allowing for quarterly and yearly analysis. The study conducted by Engel et al., utilized a quarterly analysis of frequency, while Fox constructs a yearly analysis. Fox calculates the total

number of firms per year as well as the percentage per year for the time period as a whole, in order to evaluate which years were subjected to the highest number of Schedule 13e-3 transactions, and to determine if the overall number of filings has increased or decreased since the study performed by Engel et al., (Fox, 2007).

Fox asserts three hypotheses. First, smaller firms will be going-private more frequently because they receive the least amount of benefits from remaining public and suffer the most significant costs of compliance with SOX as public firms. Second, the industries appearing to go private most frequently will be computer technology firms, and/or U.S. financial institutions, such as banks or accounting firms. Third, the data should provide results illustrating a decline in the number of firms going private during the extended time frame (Fox, 2007).

The report shows that small firms comprise more than 50% of the sample of firms going-private, which validates that a majority of the transactions were performed by small companies. SOX provides limited benefits to small companies, highlighting the attractiveness of going-private. Furthermore, the results show that the most frequent industry was SIC code 7372, pre-package software, a specific category within the service industry. The second proved to be state commercial banks, followed by national commercial banks. Fox's presented findings are consistent with those presented by Engel, Hayes and Wang. However, pre-package software is higher in the results provided by Fox's study, suggesting that these firms may have struggled in recent years, emphasizing their reasons to leave the public market. Lastly, the yearly frequency indicates that the trend of going-private transactions is growing. However, when the data is assembled according to frequency per quarter as done in Engel et al., the trend has remained

TABLE 4.1

ENGEL, HAYES AND WANG: DISTRIBUTION OF PRIVATIZATION TRANSACTIONS AMONG INDUSTRIES (2-DIGIT SIC CODES)

SIC No.	Industry	# All	# Pre-SOX	#Post-SOX	% All
1	Agriculture Production-Crops	4	1	3	1.13
7	Agriculture Services	2	1	1	0.57
13	Oil and Gas Extraction	8	3	5	2.27
15	Building Construction Gen Contr, Op Bldr	3	2	1	0.85
16	Heavy Construction	2	1	1	0.57
17	Construction-Special Trade	1	0	1	0.28
20	Food and Kindred Products	10	8	2	2.83
21	Tobacco Products	1	1	0	0.28
22	Textile Mill Products	5	5	0	1.42
23	Apparel and Other Finished Products	3	2	1	0.85
24	Lumber and Wood Products, Ex Furniture	4	3	1	1.13
25	Furniture and Fixtures	6	5	1	1.7
26	Paper and Allied Products	2	1	1	0.57
27	Printing, Publishing and Allied	8	6	2	2.27
28	**Chemicals and Allied Products**	**6**	**4**	**2**	**1.7**
29	Petroleum Refining and Related Industries	2	1	1	0.57
30	Rubber and Miscellaneous Plastics Products	2	1	1	0.57
32	Stone, Clay, Glass, Concrete Products	2	0	2	0.57
33	Primary Metal Industries	1	0	1	0.28
34	Fabricated Metal, Ex Machinery, Trans Eq.	7	3	4	1.98
35	Indl, Comml Mahinery, Computer Eq	11	10	1	3.12
36	Electronic, Other Electrical, Ex Comp Eq.	12	9	3	3.4
37	Transportation Equipment	5	5	0	1.42
38	Measurement Instr, Photo Goods, Watches	9	6	3	2.55
39	Miscellaneous Manufacturing Industries	6	5	1	1.7
42	Motor Freight Transportation, Warehouse	4	2	2	1.13

TABLE 4.1 - Continued

48	**Communications**	**9**	**6**	**3**	**2.55**
49	Electric, Gas, Sanitary Services	4	4	0	1.13
50	Durable Goods-Wholesale	13	10	3	3.68
55	Apparel and Accessory Stores	2	1	1	0.57
58	Eating and Drinking Places	17	13	4	4.82
59	Miscellaneous Retail	8	6	2	2.27
60	**Depository Institutions**	**34**	**13**	**21**	**9.63**
61	Nondepository Credit Institutions	4	1	3	1.13
62	Security and Commodity Brokers	2	1	1	0.57
63	Insurance Carriers	11	5	6	3.12
64	Insurance Agents, Brokers and Service	1	1	0	0.28
65	**Real Estate**	**19**	**12**	**7**	**5.38**
67	Holding, Other Investment Offices	16	12	4	4.53
70	Hotels, Other Lodging Places	3	1	2	0.85
72	Personal Services	1	1	0	0.28
73	**Business Services**	**42**	**21**	**21**	**11.9**
75	Auto Repair, Services, Parking	1	1	0	0.28
76	Miscellaneous Repair Services	1	1	0	0.28
78	Motion Pictures	2	2	0	0.57
79	Amusements and Recreation	7	4	3	1.98
80	Health Services	6	5	1	1.7
82	Educational Services	1	0	1	0.28
83	Social Services	3	2	1	0.85
86	Membership Organizations	1	0	1	0.28
87	Engr, Acc, Resh, Mgmt, Rel Svs	7	5	2	1.98
99	Nonclassifilable Establishment	1	1	0	0.28
	Total	353	219	134	100

Engel, Ellen, Rachel M. Hayes and Xue Wang. "The Sarbanes-Oxley Act on Firms' Going Private Decisions." MBA Thesis, University of Chicago. (2004): Table 2—30-31.

consistent. Fox's study neglects outside factors, asserting that if increased privatization is a result of the mandated SOX legislation, then it is possible firms are still trying to figure out how to continue conducting business in the public market (Fox, 2007).

Fox hypothesizes that SOX has become a physical and financial burden on firms and is driving them to invest in other options, primarily privatization, to remain in business. The data show that the industries most likely to file Schedule 13e-3 include depository institutions, software companies and restaurants. The frequency of firms going-private per year has risen since the implementation of SOX, (Fox, 2007).

Current Study

The current study builds upon the information put forth by Engel, Hayes and Wang, and Fox's work expanding the findings of Engel et al. It differs in a number of ways. First, it utilizes a revised version of the study performed by Engel et al., published in 2006, in the *Journal of Accounting and Economics*. Second, it further extends the time frame to stem from January 1, 2007 to February 5th, 2014. Third, it answers the question, is there still a prevalent privatization trend like the U.S. witnessed in the aftermath of the financial scandals of 2002? Fourth, it investigates whether there has been a shift in which industries are most frequently privatizing, highlighting which industries are most susceptible to the imposed costs of SOX. Lastly, it examines the results of FEI surveys of compliance costs in order to evaluate whether they are still as significant as they were immediately following the implementation of SOX. Also, the FEI surveys are analyzed to answer whether or not the percentage of revenues lost to compliance costs are increasing or decreasing. The data was collected using a full-text search using MergentOnline's search engine, which includes all documents in the SEC's EDGAR data archive, as well

as from the FEI's annual survey regarding compliance costs. The data were then analyzed for firm size, industry (SIC code), frequency of transactions amongst all 2-digit SIC industries.

First, the SIC-codes associated with each firm are collected and categorized. The SIC-codes are used to calculate the most frequently privatizing industries, using their respective 2-digit SIC-codes. In addition, the SIC-codes are used to create a table illustrating privatization frequency across all primary industries. This allows for the evaluation of which industries are most affected by SOX legislation. Second, the data is categorized by filing date and broken into both quarters and years. The total number of firms is used to create tables representing the percentage of total firms going-private during each quarter, and subsequently each year. The quarterly and yearly analysis allows for comparison to the results provided by Fox to see if a privatization trend exists and if the total number of firms filing Schedule 13e-3 has risen or fallen.

The study raises a number of hypotheses. First, that U.S. accounting and banking services will witness the highest frequency of privatization. These firms have the largest variation in size, providing that the available capital for each individual firm ranges considerably. The smaller firms unable to continue competing with their larger competitors, who possess the means to easily comply with SOX, have begun utilizing other forms of financing, such as going private or going public internationally. Second, the cost of compliance in relation to revenues has continued to decline from 2002 to the present day, suggesting that compliance is not as significant of a financial burden as it once was. Lastly, due to the study's lack of data regarding IPOs, assessing whether the number of firms going-private is greater than the number of IPOs in the public sector is

neglected. However, the data should illustrate a decline in the overall number of firms filing Schedule 13e-3 and going private, suggesting that more than a decade after the implementation of SOX, it has not had significant impact on driving firms to go private.

The results and subsequent analysis of the data follow. The data is examined in a similar manner to the study conducted by Fox, as well as to the study performed by Engel, Hayes and Wang, accounting for the revisions conducted on their study. The study focuses on industry frequency, quarterly and yearly frequency of privatization, as well as compliance in relation to revenues. The results are then compared to those presented by Engel et al., and Fox, as a means of comparing and contrasting the outcomes. Furthermore, the data and analysis provoke discussion regarding the effects of SOX mandated provisions on firms' decisions to leave the public market, shaping the future of the U.S. business sector.

TABLE 4.2

FOX: ANNUAL FREQUENCY OF GOING PRIVATE TRANSACTIONS FOR 2004-2007

Year	Frequency	Percentage Of Total Sample
2004	**122**	**30.60%**
2005	**149**	**37.40%**
2006	**124**	**31.20%**
2007	3	0.75%
Total	398	99.95%

Fox, M. (2007). *Effects of Sarbanes-Oxley on small & large U.S. firms* (student thesis). Retrieved from Colorado College, Colorado Springs, CO: Table 5.4—49.

TABLE 4.3

FOX: QUARTERLY FREQUENCY OF GOING PRIVATE TRANSACTIONS 2004-2007

Quarter	Frequency	Percentage of Sample
2004q1	24	6.00%
2004q2	24	6.00%
2004q3	26	6.00%
2004q4	**45**	**11.25%**
2005q1	22	5.50%
2005q2	**41**	**10.25%**
2005q3	**43**	**10.75%**
2005q4	**40**	**10.00%**
2006q1	16	4.00%
2006q2	**54**	**13.50%**
2006q3	30	7.50%
2006q4	21	5.25%
2007q1	3	0.75%

Fox, M. (2007). *Effects of Sarbanes-Oxley on small & large U.S. firms* (student thesis). Retrieved from Colorado College, Colorado Springs, CO: Table 5.5—50.

CHAPTER V

RESULTS, ANALYSIS AND DISCUSSION

The previous chapter creates the foundation for this chapter by establishing the study and the methodology behind the conducted assessment. Chapter V displays the results of this study and offer interpretations and analysis. This section concludes with the significance of the results and a discussion of the possible implications for the future of the public market.

Results and Analysis

The results of the study offer insight to the impact of Sarbanes-Oxley over a decade after its implementation. The sample was comprised of 551 firms that had filed schedule 13-E3, a going private transaction, with the SEC during the time frame of January 1, 2007 to February 5, 2014. The transactions were analyzed for two elements, filing date and the respective firm's SIC code. First, the filings were organized according to their SIC codes in order to calculate the distribution of privatization transactions among industries.

The data was gathered with respect to SIC codes, using the 2-digit code to categorize the filings. The distribution is illustrated by Table 5.1, showing which industries saw the highest volume of going private transactions as well as their percentage of the total sample. Table 4.1 shows the distribution of privatization transactions among industries from the study done by Engel, Hayes and Wang. The

TABLE 5.1

Distribution of Privatization Transactions Among Industries (2-digit SIC codes)

SIC No.	Industry	# of Transactions	% of all transactions
1	Agriculture Production-Crops	1	0.18%
8	Forestry	1	0.18%
10	Metal Mining	1	0.18%
12	Bituminous Coal & Lignite Mining	1	0.18%
13	Oil and Gas Extraction	27	4.90%
14	Mining & Quarrying of Nonmetallic Minerals	1	0.18%
15	General Building Contractors	4	0.73%
16	Heavy Construction	1	0.18%
17	Construction-Special Trade	8	1.45%
20	Food and Kindred Products	13	2.36%
22	Textile Mill Products	1	0.18%
23	Apparel and Other Finished Products	4	0.73%
26	Paper and Allied Products	1	0.18%
27	Printing, Publishing and Allied	3	0.55%
28	**Chemicals and Allied Products**	**46**	**8.35%**
29	Petroleum Refining and Related Industries	1	0.18%
31	Leather and Leather Products	5	0.91%
32	Stone, Clay, Glass, Concrete Products	1	0.18%
33	Primary Metal Industries	4	0.73%
34	Fabricated Metal	5	0.91%
35	Industrial and Commercial Machinery	15	2.72%
36	Electronics, Electrical Equipment	24	4.36%
37	Transportation Equipment	2	0.36%
38	Measurement Instruments, Photo Goods, Watches	11	2.00%
39	Miscellaneous Manufacturing Industries	7	1.27%
42	Motor Freight Transportation	2	0.36%
44	Water Transportation	5	0.91%
45	Air Transportation	1	0.18%
47	Transportation Services	1	0.18%
48	**Communications**	**35**	**6.35%**
49	Electric, Gas, Sanitary Services	9	1.63%
50	Durable Goods-Wholesale	17	3.09%

TABLE 5.1 - Continued

51	Nondurable Goods-Wholesale	3	0.55%
53	Department and Misc General Merchandise Stores	1	0.18%
54	Food Stores	1	0.18%
56	Apparel and Accessory Stores	3	0.55%
57	Home Furniture, Furnishings and Equipment Stores	1	0.18%
58	Eating and Drinking Places	9	1.63%
59	Miscellaneous Retail	5	0.91%
60	**Depository Institutions**	**55**	**9.98%**
61	Nondepository Credit Institutions	2	0.36%
62	Security and Commodity Brokers	3	0.54%
63	Insurance Carriers	23	4.17%
64	Insurance Agents, Brokers and Services	1	0.18%
65	**Real Estate**	**53**	**9.62%**
67	Holding, Other Investment Offices	34	6.17%
70	Hotels, Other Lodging Places	3	0.55%
72	Personal Services	1	0.18%
73	**Business Services**	**60**	**10.89%**
76	Miscellaneous Repair Services	1	0.18%
78	Motion Pictures	4	0.73%
79	Amusements and Recreation	4	0.73%
80	Health Services	10	1.81%
81	Legal Services	1	0.18%
82	Educational Services	8	1.45%
83	Social Services	1	0.18%
87	Engr, Acc, Resh, Mgmt, Rel Svs	4	0.73%
88	American Depositary Receipts	1	0.18%
89	Services, Not Elsewhere Classified	1	0.18%
	Total	551	100.00%

business services and depository institution industries remain at the top of the list, holding consistent with the findings of Engel, Hayes and Wang. Furthermore, this study found that the real estate, chemical and allied products, and communications industries have witnessed a significant increase in the number of privatization transactions being filed by firms. A number of conclusions can be drawn from the elevated number of firms within these industries going private, such as they are now benefitting least from SOX. Furthermore, another conclusion is that the value of information confidentiality for some firms, such as those in the chemicals and allied products industry, when deciding to go private, outweighs the benefits of staying public and being subject to full disclosure. The increase in these industries highlights the changing economic environment present in the United States, which is supported by the declining number of going private transactions being filed with the SEC.

The transactions were next categorized by filing date in order to assess whether the total number of firms going private per year has continued to increase since 2007. The yearly frequency was calculated in Table 5.2. The table shows that the witnessed trend in Fox's study has continued beyond 2007; however with a declining number of transactions. The year 2007 generated the highest number of transactions, finding that 111 firms went private. 2007 remains fairly consistent with the trend found by Fox, as show in Table 4.2. However, as show in Table 5.2, the trend remains but not to the significant degree it had reached in the five years following the implementation of SOX. For comparison to the Engel, Hayes and Wang study and the more recent Fox study, the quarterly frequency was also calculated. Table 5.3 shows the resulting frequencies, proving that quarterly, the frequency has been fairly inconsistent. However, it is

important to note that this study does not include outside factors such as market health. The growing number of privatization transactions in the years following its implementation has been attributed to SOX imposed compliance. However, as the number of transactions begins to decline, two things may be argued; that the firm's most affected by SOX compliance have made their way out of the market, and that being a publicly traded firm has become more attractive.

TABLE 5.2

ANNUAL FREQUENCY OF GOING PRIVATE TRANSACTIONS FOR 2007-2014

Year	Frequency	Percentage of Total Sample
2004	122	12.90%
2005	149	15.75%
2006	124	13.11%
2007	**111**	**11.73%**
2008	67	7.08%
2009	**81**	**8.56%**
2010	**82**	**8.67%**
2011	**83**	**8.77%**
2012	49	5.18%
2013	73	7.72%
2014	5	0.53%
Total	946	100.00%

TABLE 5.3

QUARTERLY FREQUENCY OF GOING PRIVATE TRANSACTIONS FOR 2007-2014

Filing Quarter	Frequency	Percentage
2007q1	28	5.08%
2007q2	33	5.99%
2007q3	16	2.90%
2007q4	34	6.17%
2008q1	21	3.81%
2008q2	6	1.09%
2008q3	27	4.90%
2008q4	13	2.36%
2009q1	7	1.27%
2009q2	14	2.54%
2009q3	29	5.26%
2009q4	31	5.63%
2010q1	13	2.36%
2010q2	15	2.72%
2010q3	20	3.63%
2010q4	34	6.17%
2011q1	11	2.00%
2011q2	24	4.36%
2011q3	36	6.53%
2011q4	13	2.36%
2012q1	12	2.18%
2012q2	10	1.81%
2012q3	12	2.18%
2012q4	15	2.73%
2013q1	22	3.99%
2013q2	21	3.81%
2013q3	8	1.45%
2013q4	21	3.81%
2014q1	5	0.91%
Total	551	100.00%

FEI Survey Results

In 2006, The FEI released their fourth survey of SOX compliance since 2004. The results regarding the fiscal year 2005 show that compliance costs in relation to revenues are declining, as average compliance costs are $3.8 million, approximately 16% lower than the 2004. According to the FEI survey, "The data shows that many of these reductions can be attributed to lower staff and consultant time and reduced auditor fees." The synopsis of the survey found that internal staff time decreased 11.8%, external costs, such as consultant fees, but excluding primary auditor fees, fell 22.7%, and that auditor attestation fees dropped 13%. Increased efficiencies have reduced the number of internal staff hours needed to comply with Section 404 in 2005 (FEI, 2006).

In 2008, the FEI released the results of their survey pertaining to compliance costs in the fiscal year 2007. According to the FEI survey, average costs of SOX compliance were $1.7 million. The survey reported that on average companies required 11,100 internal staff hours in order to comply with Section 404, depicting an 8.6% decrease from 2007. Furthermore, surveyed firms reported an average of 1,244 external people hours were necessary to comply, representing a decrease of 13.7%. Also, that auditor attestation fees paid by the surveyed companies in 2007, comprised 23.7% of a company's total annual audit fees, displaying a 5.4% drop since the previous year (FEI, 2008).

In 2011, the Financial Executives Research Foundation (FERF), the research affiliate of FEI, released another study which surveyed company reports, studied the shifts in audit fees for the fiscal year 2010. "The survey, which formerly focused on SOX 404 compliance costs, was updated in recent years to reflect the shift in auditors no longer segregating fees for the internal control auditor attestation from the traditional

statutory financial statement audit fees." The publicly held companies surveyed, reported on average $3.3 million in total audit fees for the fiscal year 2010. These reports showed a two percent increase in the audit fees paid by these same respondents in 2009. The survey stated that, "Overall, executives cited internal audit staff work, and changes in company operations as some of their primary reasons for the difference in fees." Companies are adapting to the improvements done to the public market by SOX provisions and the reductions in internal and external hours show that the improvements to SOX have begun to ease the financial burden on publicly financed firms (FEI, 2011).

The hypothesis set forth by this study is that the capital market is not witnessing a trend nearly as significant as seen immediately following the passage of SOX, as fewer firms turn to privatization. The data show a shift in which industries are most likely to go private. The most likely industries to witness privatization are: business services, depository institutions, real estate, chemicals and allied products, and communications. The frequency of firms going private each year has declined since 2007. However, quarterly the findings are inconsistent offering little to the analysis of SOX's effects on firm's decisions to go private. The findings show that SOX may have initially driven firms to go private as a reaction to imposed compliance negating the attractiveness of remaining public. Regardless, this assertion is challenged as an expanded time frame shows that fewer companies are going private post-SOX, finding that SOX may be worth the cost.

Discussion

The assessment of the data is consistent with the proposed hypothesis that privatization frequency is declining along with compliance costs in relation to revenues.

The distribution of transactions among industries show that there has been a shift in which industries are privatizing the most, supporting that SOX compliance may not be the direct cause behind a firm's decision to seek alternative financing. Furthermore, the number of firms going private per year has declined overall since 2007, which supports the premise that firms are finding alternative means to make SOX compliance more manageable. After over a decade of compliance firms are beginning to see that the benefits may be worth the costs.

FEI survey results have shown that costs of compliance with Section 404, and more recently auditor fees, on average have declined since 2004. The decline in compliance costs prove that companies are finding ways to more efficiently and effectively comply with SOX, improving the attractiveness of public financing. The decline in the overall number of privatization transactions and costs of compliance support that SOX may not impose as significant of a financial burden on publicly traded companies as it did in the years immediately following its implementation.

The results offered by this study paired with the results of the annual FEI surveys, suggest that improvements to SOX have reduced the average cost of compliance, easing the financial burden imposed on public firms, and making public financing more attractive. The business services and depository institution industries saw the highest number of transactions in both studies. However, this study shows that the real estate, chemical and allied products, and communications industries have seen a significant increase in the number of firms going private, which emphasizes that there has been a shift in which industries are struggling to operate publicly since 2006. SOX was meant to restore investor confidence in the capital market. The improvements to SOX have begun

to ease the imposed financial burden and have shown that new regulation may have been worth the price.

Next, follows the conclusion of this thesis. It acknowledges each chapter and finishes with comments on the future of public financing.

CHAPTER VI

CONCLUSION

The 21st century began with a financial crisis that set the stage for the implementation of Sarbanes-Oxley, the most significant piece of legislation affecting public business since the securities act of 1934. SOX imposed new legislation forever altering how publicly traded firms do business. It has made it more expensive to remain public, as companies restructure corporate systems to comply with new regulation. Firms began seeking other means of financing as the attractiveness of remaining public dwindled in the wake of the passage of SOX. However, as compliance becomes more manageable and restructuring becomes more efficient, the trend has shifted, showing a decline in total number of transactions per year.

First, chapter II establishes and introduces the theory behind the resulting effects of SOX imposed regulations. The theoretical concepts include, but are not limited to, corporate governance, agency theory, and the costs and benefits of staying public versus going private, as well as compliance costs as a barrier to entry. A number of problems arise from the restructuring of corporate governance systems in order to comply with SOX provisions. Executives are being held responsible for the reliability and transparency of disclosed financial statements aiming to eliminate conflicts of interest and restore information credibility. Agency theory addresses the two-leveled relationship found within corporations, where the managers (agents) work for the board of directors

(principals) and the board of directors (agents) work for the shareholders (principals). The disconnection in the flow of information allows for conflicts of interest to arise, highlighting the potential issues faced by poorly governed corporations. The costs benefits of remaining public versus going private illustrate the attractiveness of both options. Remaining public offers a massive amount of capital for financing operations, while going private offers privacy that some industries find to be crucial to staying competitive in the market, such as pharmaceutical industry. Compliance costs of SOX mandated provisions have been argued as a barrier to entering the public market, as many small firms cannot bear the financial burden. However, as complying with mandated restructuring becomes more efficient, privatization transactions are declining.

Chapter III offers insight to the events that encompassed the implementation of Sarbanes-Oxley. The literature review presents the historical background that led to the signing of the act, its primary provisions, its impact on corporate governance, the structural systems of publicly traded companies, a glimpse at the costs benefits behind staying public versus going private, and the general pros and cons.

Chapter IV categorizes the data collected from the previous studies conducted by Engel et al., and Fox, followed by the freshly gathered data used in this study. Engel, Hayes and Wang analyzed the effects of SOX on firms varying in size and industry, and addressed the relevant attributes that were possessed by public firms that successfully remained public versus those that led them to choose privatization. The results provided that there was indeed a growing trend of small firms going private during the years surrounding SOX. Primarily, these firms were financial institutions or those offering accounting services. Fox investigated the findings of Engel, Hayes and Wang further

using similar questions in order to evaluate whether the trend of privatization transactions was still present four years after the implementation of SOX. The current study expands upon Fox's findings, once again expanding the time frame, to see whether or not the trend of privatization still exists today and if it is still increasing. In addition, it assesses the distribution of privatization transactions among industries set forth by Engel, Hayes and Wang. It also addresses the potential shift in which industries are witnessing the most firms going private ten years later.

Chapter V addressed the results of the study, showing that there is a declining number of transactions occurring in the years following 2006. The top two most frequent industries are depository institutions and business services, holding consistent with Engel, Hayes and Wang's findings. However, three industries have witnessed significantly higher frequencies in this study: real estate, chemicals and allied products, and communications. The results are then discussed and the implications for the public market are interpreted. Compliance has driven a number of firms to go private. But it has also improved information credibility, and as provisions become commonplace in the public market, fewer firms are seeking private financing.

The hypothesis for this study was raised by the findings set forth by the study conducted by Fox in 2007. Fox used an older study conducted by Engel, Hayes and Wang from 2004, which was then updated in 2006. This study expands on the results found by Fox and Engel, Hayes and Wang. Both previous studies attribute the firms going private during their time frames to the passage of SOX, while this study investigates if their findings still hold true. Further research behind the impact of SOX includes analyzing the factors behind why firms seek public or private financing. This

includes an investigation behind the number of IPOs, to find if more firms are going private than those entering the public market, as well as what SOX means for the valuation of those IPOs. Sarbanes-Oxley has altered the future of the public market forever. As the number of firms seeking private financing declines, regulation may indeed be worth the cost.

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