

**The Effectiveness of the Sarbanes-Oxley Act of 2002 in Preventing  
and Detecting Fraud in Financial Statements**

by

**Debra L. De Vay**

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in Financial Statements*

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THE EFFECTIVENESS OF THE SARBANES-OXLEY ACT OF 2002 IN  
PREVENTING AND DETECTING FRAUD IN FINANCIAL STATEMENTS

A Dissertation

Presented to the  
Faculty of the Argosy University–Orange County

In Partial Fulfillment of  
The Requirements for the Degree of

Doctor of Business Administration

by

Debra L. De Vay

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The collapse of Enron, WorldCom, and other large corporations in 2001 and 2002 motivated Congress to pass the Sarbanes-Oxley Act of 2002 (SOX). The purpose of this legislation was to restore investor confidence in the United States stock markets, and to prevent and detect fraud in financial statements as well. This dissertation examines the effectiveness of SOX for the latter purpose of preventing and detecting fraud, using statistical enforcement data presented by the Securities and Exchange Commission, and financial statement restatement numbers published by the Huron Corporation. The two methodologies utilized to analyze the data were the unpaired t test and the chi square test. Surveys were also emailed to executives and certified public accountants across the country to extract opinions as to the effectiveness of SOX. The statistical analysis results displayed that in 61% to 65% of the data sets, the numbers prior to the enactment of SOX were no different than the numbers subsequent to the enactment of SOX. The majority of the survey respondents feel that the benefits of SOX are not

worth the costs, it is not effective in the prevention and detection of fraud in financial statements, and that it should be modified, but not eliminated entirely. While some sentiment exists that SOX is salvageable if revisions are executed, both the quantitative and qualitative analyses indicate support of the null hypothesis, that SOX is not effective in the prevention and detection of fraud in financial statements.

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## DEDICATION

To my husband, Chris De Vay, who is my rock. And to my parents, Henry and Clara Yabrof, who not only always told me I could accomplish whatever I set my mind to do, but agreed to be my editors as well. And to the memory of my brother, Mark Yabrof, whose encouragement and enthusiasm helped me through to completion.

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## CHAPTER ONE: THE PROBLEM

Fraud prevention and detection in financial statements is a very relevant topic in light of the financial scandals that have shaken the corporate world in the last several years, most notably in large, well-established companies such as Enron Corporation (Enron) and WorldCom. In response, the United States (U.S.) Congress passed the Sarbanes-Oxley Act of 2002 (SOX), official legislation designed “to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes” (One Hundred Seventh Congress of the United States of America, 2002, p. 1). In order to complete this task to protect investors, the main goal of SOX is to prevent and detect fraud in financial statements, policed by the Securities and Exchange Commission (SEC). The proposed problem to be researched then is the determination of whether or not SOX, after being in place for over three years, has been successful and has actually been effective in preventing and detecting fraud.

Those affected by the passage of SOX are most notably public corporations that are obligated to comply with the many requirements of the law. The shareholders and investors that rely on the financial statements of the complying corporations will be positively affected by SOX, in the event that it fulfills its purpose of preventing and detecting fraud in financial statements. However, actions of the SEC in enforcing SOX will ultimately determine whether or not it has been suitably valuable.

### SOX Background

Nothing has shaken the accounting and auditing professions more than the collapse of Enron and the resulting ban from auditing public companies placed on Arthur Andersen LLP (Arthur Andersen), one of the biggest and oldest accounting firms in the

U.S. The signal has clearly been sent of the need for change within the professions and throughout the audit function. Congress has reacted to the events with the passage of SOX, aimed at preventing another Enron scandal.

Enron, a Texas-based company, was formed as a result of the 1985 merger of Houston Natural Gas and InterNorth, two regulated natural gas companies. Eventually the company began an aggressive growth strategy with a developed “complex financial structure” (Reinstein & Weirich, 2002, p. 1). It was not successful at these endeavors, and the stock prices of Enron began to fall.

To make the stock offerings of the publicly traded corporation a more attractive investment, Enron began the development and use of special purpose entities (SPEs) as liability receptacles, which removed millions of dollars of debt from the balance sheet. SPEs are formed to operate as trusts for the parent company that developed them. The number of SPEs that Enron established at the time of the collapse of the company is estimated to be at more than 3,000 (Rossi III, 2002).

In 1999, Enron also set up several private investment limited partnerships, including LJM Cayman L.P. (LJM1) and LJM2 Co-Investment, L.P. (LJM2). The chief financial officer (CFO) of Enron, Andrew Fastow, was the managing member of the general partners at the same time that he was serving in the capacity as the CFO for Enron. These partnerships were used “in hedging transactions involving millions of shares of Enron stock and other company assets” (The Corporate Library, 2002, p. 1). In July of 2001, Fastow sold his shares of the partnership to a long time employee of Enron, Michael Kopper, who at the time reported to Fastow. The purchase price was alleged to



be around \$16.5 million (SEC, 2002), and Kopper resigned from Enron just prior to the transaction.

Then on October 16, 2001, the third quarter earnings for the year for Enron were made public, and the company acknowledged that it had recorded a \$1.01 billion after-tax charge to the earnings in order to recognize “asset impairments, restructuring costs, and losses associated with certain investments” (Herdman, 2001, p. 11). Of this amount, \$35 million worth of transactions involved LJM2. Also on this date, Enron revealed that it had reduced shareholders equity by \$1.2 billion. Enron subsequently explained that this reduction was for “correction of accounting errors” (Herdman, 2001, p. 11). On October 24 of the same year, Fastow was replaced as the CFO of Enron and later terminated.

On November 8, 2001, Enron filed a Form 8-K with the SEC. The 8-K is considered a current events report that discloses important occurrences in a timely manner and which cannot wait until the next filing of the quarterly Form 10-Q or the annual Form 10-K. The 8-K that Enron filed revealed that it would restate the financial statements for the years ending December 31, 1997 through December 31, 2000, and also restate the financials for the quarters ending March 31, 2001 and June 30, 2001. These restatements resulted in a reduction of income of \$569 million for Enron, which was 16% of the reported net income for those statements. Enron also warned investors not to rely on the financial statements for those time periods as previously disclosed, including those audited by Arthur Andersen, the independent external audit firm of Enron.

On December 2, 2001, Enron filed for Chapter 11 bankruptcy protection. With the filing of the Form 8-K, the SEC had already begun an investigation of Enron and the

financials of the collapsing company. On November 29, 2001, the SEC investigation expanded to include the independent auditors of Enron, Arthur Andersen.

In 2002, many other companies followed in the scandalous footsteps of Enron. Such corporations included Adelphia Communications and Global, who filed for bankruptcy in that year, and WorldCom, whose internal audit discovered \$3.8 billion of “miscounted” funds (Nationmaster, 2005, p. 1).

Congress had already begun to react in late 2001 and early 2002. Both the House of Representatives (House) Committee on Financial Services, headed by Congressman Michael Oxley, and the Senate Committee on Banking, Housing, and Urban Affairs, chaired by Senator Paul Sarbanes, were convening hearings with expert witnesses testifying as to the causes of the Enron debacle and other notable scandals. Both committees sent bills to the respective branches of Congress aimed at preventing and detecting the financial fraud that existed within failed as well as failing companies. These bills were eventually merged to create SOX.

#### Statement of the Problem

SOX was signed into law by President of the United States George W. Bush on July 30, 2002, “conferring much tougher regulatory and enforcement powers upon the U.S Securities and Exchange Commission” (Friedman, 2002, p. 1). It was “passed in haste and with regulatory zeal for the purpose of restoring the confidence of the investing public” (Keller, 2002, p. 1). Also, it is a “serious directive to raise significantly the standards of corporate transparency and accountability” (Friedman, 2002, p. 2). More than 12,000 publicly traded companies are subject to SOX, most of which are not large corporations.

The majority of SOX involves “regulation of the accounting profession and the auditing and financial reporting process” (Keller, 2002, p. 1). The provisions of SOX include such areas as limiting the services offered by independent auditors, documentation and audit of internal controls, corporate governance, personal accountability, enhanced disclosure, protection for whistleblowers, analyst conflicts of interest, and professional conduct for attorneys practicing before the SEC who represent publicly traded companies. SOX is “the most sweeping legislation affecting accounting, disclosure and corporate governance in a generation” (Keller, 2002, p. 1). As such, the importance that has been placed upon SOX by Congress and the investors indicates the significance that researching effectiveness of the legislation would be to the accounting community as well as to stockholders and the general public.

The study completed, described herein, of the effectiveness of SOX was undertaken not only to ascertain whether the legislation is fulfilling the purpose of preventing and detecting fraud, but also to establish if revisions are necessary to enhance the usefulness and to achieve the goals of the legislation. The study has also helped to determine if enforcing SOX is worth the other related issues that have arisen since its inception.

One such issue is the rising costs to corporations to comply with the legislation, especially the internal control standards of SOX. Some large U.S. companies are alleging that the accounting rules stemming from SOX that are “aimed at improving shareholder trust are hurting shareholder returns” (United Press International, 2004, p. 1). Another issue is the effect of the legislation on foreign companies. In 2003, 19 non-American companies were listed in the U.S. stock market, while in the year 2000, 50 were listed.

SOX “gets some blame since it forces foreign companies to meet more stringent reporting rules” (Rossant, 2004, p. 1). Also, smaller companies are electing to become private to avoid the regulations of SOX. “Since the new reporting requirements of the 2002 Sarbanes-Oxley Act took effect, the number of companies announcing privatization plans rose 30 percent from levels during the 16-month period before the law” (Bachman, 2004, p. 2).

### Research Questions

The main research question encompassed by this study is whether or not SOX is effective in preventing and detecting fraud in financial statements. This would include several aspects of this question, one of which is whether or not SOX adequately addresses revision of the accounting and auditing processes by both public companies and external auditors in order to reasonably ensure discovery of fraud. Other aspects include whether SOX should be amended or revised to make it more effective or beneficial, and whether it should ultimately be discarded as ineffective.

Subsidiary study questions include whether or not the costs to comply with SOX are worth the results, and whether SOX is substantially different from previous studies that have been completed. In addition, the study will help clarify whether or not Congress is qualified to provide the solution to the current fraud situation, and if SOX will correspondingly result in the return of investor confidence in the securities market by providing adequate corporate transparency into the financial status of the target investment.

The response to the main research question of whether SOX is effective can be inferred by statistical analysis of judicial, legislative, and reporting enforcement actions

prior to and subsequent to the enactment of SOX. The other questions require value judgments based on opinions as well as the statistical response to the main research question.

### Assumptions

An assumption is not an assertion, but a statement to be tested for accuracy (Kaplan, 1998). SOX has been in effect for only slightly more than three years. One assumption made during this study involving the effectiveness of SOX in preventing and detecting fraud, is that a determination can be made at this time concerning SOX. Another assumption is that because of the notoriety of the recent corporate and accounting scandals, the interest in the study as a whole will be enhanced because of its relevance.

Other assumptions have been made in the course of the study as to the methodology of the research. One such assumption is that the enforcement and financial statement restatement data used in the study is adequate and relevant enough to answer the research questions and validate the conclusions, as well as be representative of the degree of effectiveness of SOX. Another assumption is that the analysis of this data provides enough consistent responses to point to a single result, and that the data analysis methods utilized in the study are the best available in interpreting the data to enable an accurate conclusion. If it were possible for the research to be ongoing, then additional data gathered and analyses completed may further support, or may even alter, the conclusions drawn in this study. This question will remain a task for subsequent studies on the topic.

The other category relates to the conclusions drawn from the research and the data analysis. One assumption is that these conclusions will be able to explain current outcomes and will be able to predict future outcomes. Also, the assumption has been made that the research is objective, and if any interpretations are made, they will be designated as such and explained from the research. Differing viewpoints will also be presented and explained in order to strengthen the conclusion drawn. Another assumption is that the readers of the research will draw the same conclusions as the ones presented, without bias or prejudice. This would indicate that these readers will interpret the results in the same way as those presented in order to reach a similar outcome.

#### Rationale and Theoretical Framework

“The problem of fraud is an ancient one” (Dushkin Online, 2000, p.1). The examination of SOX is therefore very relevant, considering that the legislation is the most recent response by Congress to this most ancient problem. The determination of whether or not SOX will be helpful in eradicating accounting and financial statement fraud will be of utmost interest.

Several remarkable theories exist concerning fraud in accounting and the presentation of the financial statements. Albrecht (2003) suggested that a good economy is actually hiding the problems that companies are experiencing, creating more of an incentive to “cook the books.” Albrecht also stated the use of stock options as earnings for company executives is encouraging these executives to manipulate financial statements to result in higher stock prices. This tends to create a focus on the short term rather than the long term performance of the company. Albrecht also cited a 1998 Gallop Poll concerning corporate honesty, with the result that “50% of CFOs admitted having

been asked to manipulate the books; 17% admitted they had” (p. 5). As far as auditors are concerned, Albrecht observed that auditing does not bring in nearly as much revenue as consulting does, which is why the certified public accounting firms were providing several different varieties of services to their clients, including auditing, consulting, and management information systems. As a consequence, auditors were becoming too closely involved with their clients and participating in unethical practices to please them, as Arthur Andersen did with Enron, a most profitable client of the firm. Traditionally, certified public accounting firms “failed to take responsibility for fraud detection” (p. 10), which is why SOX emphasizes more auditor involvement in fraud prevention and detection.

Ballweiser (2002) explained some other theories. One theory was the normative regulation theory of financial accounting, which guarantees “fairness for investors, protecting them against fraud and exploitation” (p. 6), as well as providing a comparability of financial statements. Ballweiser also stated the purpose of auditing is to enforce accounting rules, again “guaranteeing fairness for investors” (p. 11).

Kwechansky (2003) talked about fraud itself. Kwechansky claimed that fraud has been around a long time, virtually when “people began trading money for goods and services” (p. 3), and also explained three types of fraud are to be considered, which are investment fraud “by unscrupulous people” (p. 3); employee fraud in which employees take inventory or money from the company; and corporate fraud, which has become prevalent lately, in which the management of a company “defraud a company’s employees, investors, lenders and sometimes its customers” (p. 3). This third type of

fraud is the one which has come to the forefront in recent years, due to Enron, WorldCom, and other companies being involved in scandal.

### Methodology

The study uses statistical methodology in order to examine the data that has been collected. The bulk of the data analyzed centers around enforcement actions begun by the SEC when financial statement fraud is detected. The difference between the mean number of enforcement actions realized before SOX was enacted and after SOX was enacted was tested using the unpaired t test. The chi square test was used as well to test the significant difference between the number of actions prior to SOX and the number of actions subsequent to SOX. These methods were utilized because they were determined to be the most effective methods to produce reliable results. The data was collected from reports by the Corporate Fraud Task Force (CFTF) presented to President Bush, statistics found on the SEC website, and the Reports on Administrative Proceedings published by the SEC.

The other statistical analysis used in the study involved the number of restatements of financial statements by public corporations. A comparison was made between the restatements that occurred prior to the enactment of SOX and subsequent to the enactment of SOX.

The methodology used throughout the study involved correlational research. Correlations were examined between various statistics and the occurrence of these statistics in relation to the enactment of SOX.



## Delineation of the Research Problem

“The fall of Enron, WorldCom, and the others, while massive in size and shocking in scope, is nothing particularly new” (CFO, Magazine for Senior Financial Executives, 2003, p. 1). The main issue, then, which provides the basis for the research question examined by this study, is the determination of whether or not SOX has been effective against a problem that has existed for centuries, with little or no success experienced by the conclusions and provisions of previous studies.

Several commissions were organized in previous years for the purpose of completing studies on audit effectiveness and fraud in financial statements. The Commission on Auditors’ Responsibilities (Cohen Commission) was created in 1974 to study auditor responsibilities as well as the perception of the public concerning auditor responsibilities. From October, 1985 to September, 1987 the National Commission on Fraudulent Financial Reporting (Treadway Commission) met for the sole purpose of identifying causes of fraud in order to prevent the occurrence of fraud. A subsequent study was called *Fraudulent Financial Reporting: 1987-1997: An Analysis of U.S. Public Companies*, which was concerned with fraudulent financial reporting and audit reform. In 1998, the Panel on Audit Effectiveness (O’Malley Commission) was created, which scrutinized the current audit model. The 1998 Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees (Blue Ribbon Committee) was not concerned specifically with fraud, but some of its conclusions could possibly lead to fraud prevention and detection. Despite these studies by very knowledgeable and qualified people, the collapse of Enron and other corporate fraud scandals still occurred.