

## **Sarbanes-Oxley Section 404: A Historical Analysis**

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*This paper serves the purpose of tracing the history of a selection of academic and practitioner research specifically on Section 404 of the Sarbanes-Oxley Act from the early days to today relative to its cost of compliance and related impacts. A historical review of select research will show that over a decade of compliance requirement, the act has produced improved financial reporting quality and fees have leveled off for companies that maintain adequate controls and are not found to have material internal control weaknesses.*

### **INTRODUCTION**

The entry into the 21st century brought about significant change to many. To some it was a sigh of relief that Y2K was not a concern, others were hoping that times might shift to those of sadness to happiness. To those in public accounting, few had any idea what was about to change typical business as usual. In with the new century came new household words such as Enron, WorldCom and SOX. The events caused by these companies harmed the lives of millions, not just employees of the respective companies, but anyone invested in the financial markets as fears of market integrity and lost confidence sent stock prices tumbling as well as the balance in retirement accounts of most of the working population invested. As with any major catastrophe such as this, governments act reactively often with stringent rules and regulations in which some argue are typically not well thought out. In this case, companies, auditors and most any stakeholder imaginable now were under the umbrella of a new act called Sarbanes-Oxley, known to many as SOX or SARBOX. From an accounting and auditing standpoint, the profession shifted from one that was largely self-regulated to heavily government regulated. Of the sections of this far-reaching act, the one section that had the greatest impact on the audit profession as well as management was Section 404. SOX Section 404 was the act section that required management and the external auditors to report on the adequacy of internal controls within an organization. This act required that internal controls be implemented, as well as documented and tested annually.

As the cost and effort involved to comply with Section 404 was at the forefront of concern for every public company CEO, board member and audit firm partner, the academic world took notice. Shortly thereafter, Section 404 became the number one area of accounting research. All aspects of the Section were subject to intense scrutiny by the academic world as well as the profession, but at the forefront was research relative to the cost of compliance, which was anticipated to be significant. Over a decade has now passed since this legislation became official, and much of the dust has now settled as to the fear and anticipation of its impact.

With the volume of research conducted on all aspects of Section 404, it is difficult at best to understand the impact on stakeholders Section 404 has had from reading one or two articles. This paper

serves the purpose of tracing the history of select academic and professional research specifically on Section 404 from the early days to today relative to its cost of compliance and related impacts, which has been a concern and shown to be a significant increase to companies at the onset. What were the concerns at the onset, and where are we today? Have perceptions of Section 404 changed from inception to today?

It is not possible for one paper such as this to capture all of the research in an area as heavily researched as the costs of Section 404, but the intent was to capture several pieces of research selected and deemed significant by the author and tell the history of what many simply regard as SOX 404 and what many management teams have deemed a major cost drain and factor to limit economic growth. Due to the volume of published research, other scholars may argue that some key pieces of research were excluded from the sample. The research selected for this paper in the opinion of the author best summarizes many of the key issues and blends academic and professional research to conclude based on the past and present, what can we expect to see in the future.

## **THE HISTORICAL EVOLUTION OF SARBANES-OXLEY**

A major consideration for the creation and passage of Sarbanes-Oxley was to restore investor confidence in the financial markets, as an addition to prevention of future failures such as Enron and WorldCom. Without investor confidence, investment in the markets decrease, market values fall and the economy will slow into a depressive bear-market state, much as has occurred following scandal such as Enron and WorldCom and repeated itself roughly ten years later as a result of the subprime crisis and numerous bank failures.

Section 404 of the act, the specific section that has historically attracted the most attention due to the cost and effort required to document, implement and comply evolves around assurance of proper internal controls within an organization. Internal control systems within an organization did not originate with SOX 404. Development and evolution of internal control systems can be traced well before SOX to historical phenomenon as substantial as the industrial revolution and the development of the Baltimore and Ohio Railroads of the 1830s. Over the years as technology has continued to develop at an increasing pace, business structure and the overall corporate regulatory environment has changed radically in efforts to meet the needs of the technological innovation. Jensen (2000) argued that despite the changes that have occurred in business structure and technology, the overall internal control systems of many companies have failed to evolve in manners necessary to address the demands required as a result of the changes. In Jensen's opinion, as regulation increases and the public continues to scrutinize corporate operations and reporting, companies will continue to be challenged financially through increased regulation and investor pressure with increased expectations of improved financial reporting. With the rapid adaptation of technology and how one conducts business on a day-to-day basis, internal controls should have adapted with these changes over the years. In many cases throughout history, Internal controls have not been a priority for adaptation and change, and not been subject to significant commitment of resources. By the time a company often realized additional resources were needed to change and upgrade internal controls, it was a reactive response to significant loss, which comes at significant expense such as the situation of Enron or the Subprime loan crisis, much more total cost than the proactive approach to having updated and working controls prior to problems occurring. Based on theory such as Jensen, one must consider if the significant increases in compliance cost under Section 404 are unnecessary, or necessary and required to assure that management is making the needed investment in controls to keep up with evolving technology. There has been considerable research into the cost of compliance with Section 404 and any perceived benefit as a result. From analysis of historical research, one can draw a conclusion whether or not the sharp increase in cost is warranted per Jensen's argument to adapt and change, or a regulatory burden that creates more harm to business than good and of no influence to the development of adequate controls in many instances.

## COST OF COMPLIANCE

### The Early Years (Through 2005)

It has been argued since the very inception of the act in many pieces of professional and academic literature that the increasing costs and regulatory requirements for internal control under Sarbanes-Oxley 404 are cost prohibitive, which caused the diversion of resources from other value added activities of corporate operation and would ultimately hurt the long-term growth of many businesses that have performed adequately but would struggle to meet the increased compliance standards under the act (Morse & Magurno, 2005; Swartz, 2005).

Levinshon (2004) discussed the anticipated increase in cost that businesses would face as a result of Section 404 compliance. It was shown by the author that compliance with Section 404 of the Sarbanes-Oxley Act is costing public companies much more money and time than previously anticipated at the initial onset. It was predicted that when Section 404 goes into effect that it will cost public companies 62% more on average than they had previously thought. Hammersley et al. (2005), states that companies overall are on average spending \$5.9 million in the first year of compliance. An example of this skyrocketing audit fee requirement for companies can be illustrated by examination of the audit fees paid by JetBlue Airways Corporation between 2002 and 2004, when Sarbanes-Oxley regulation became public and companies began additional compliance procedures. As shown in the below table, the increase between 2003 and 2004, when additional compliance occurred is substantial by any standard.

**TABLE 1**  
**AUDIT FEES PAID BY JET BLUE AIRWAYS 2002-2004**

Year	Total Audit Fees Paid
2002	\$765,500
2003	\$757,100
2004	\$1,407,100

Source: Compustat

From analysis of JetBlue, audit fees between 2003 and 2004 alone increased by nearly 50% compared to a modest decrease between 2002 and 2003, consistent with research on how SOX compliance influences audit fees. According to Bryan and Lilien (2005), "In a survey of 224 firms conducted by Financial Executives International (in July 2004), respondents revealed that they will spend in the first year of SOX, on average, an extra \$3 million in order to comply with Section 404. The largest companies (those with over \$5,000 million in revenues) will spend an average of \$8 million (p. 3)." The results from this survey, as well as the shown increase in cost is also consistent with what was reported previously in Levinshon (2004).

In efforts to minimize the costs of compliance, early research implied that many companies would take a band aid approach to cover first year compliance by diverting resources from other value added activities to cover the necessary needs (Dittmar & Heffes, 2004; Labate, 2005; McNally & Wagman, 2005). This band aid approach may have allowed companies to maintain compliance for first year compliance requirements, but research anticipated that in future years it would prove to be much more costly on companies to maintain long-term compliance (Labate, 2005). The cost of compliance at the time did not include just fees paid to external auditors to conduct the actual required procedures under the act, but also that of the internal auditors within the company to assist in assurance that controls were in compliance with the guidelines of Section 404 prior to the external audit. The focus of internal auditors in

many companies needed to shift from functions such as cost recoveries and consulting, and this shift often resulted in the hiring of additional internal audit staff to maintain these important activities. This is consistent with the diversion of staff reported by Dittmar & Heffes, 2004; Labate, 2005; McNally & Wagman, 2005. Cenker and Nagy (2004) discussed how nine leading internal auditors of large publicly listed corporations assisted their respective companies in implementing the Section 404 requirements. The authors further discussed some of the significant issues that these auditors are addressing and their prediction on the expected future impact of Section 404. At this time, it was unclear on what the impact would be on the long-term activities of the internal auditor, and if their role in Section 404 could remain significant as anticipated. Internal auditors were having significant difficulty due to the vagueness of the act, and inability as a result to define materiality thresholds, assign risk components, and determine the scope of documentation that would be required for an audit. This entire uncertainty further increased question on cost, as the more detail required in these functions equates to increased time commitment and overall cost. The intent of management was for internal auditors to be actively involved early in the process of establishment of internal controls, but over time delegate the functions of controls to management within specific departments and return to the pre-SOX duties, which would mean a short term upward bump in cost for the internal audit function. The authors also questioned whether or not Section 404 was going to be effective in its mission and actually improve financial reporting, or be a very expensive documentation exercise that will have limited long term impact. The authors were skeptical as to whether or not there would be a worthwhile outcome relative to the required investment.

Morse and Magurno (2005) supported Jensen's argument of significant regulation leading to financial hardship. The authors showed through interviews with various corporate CEO's that overall compliance costs for Section 404 were considerably greater than anticipated. At the same, time a number of companies that were forced to comply with the act already had measures in place that would prevent large scale scandal such as what occurred with Enron or WorldCom. Morse and Magurno (2005) cited the specific example of Lockheed Martin Corporation, a \$35 billion dollar manufacturer of advanced military technology. Even prior to Lockheed being required to comply with the mandates of SOX, due to the fact that near 90% of its total sales are to the United States Government, they were already tightly regulated and required to demonstrate the existence of substantial internal control mechanisms through annual regulatory audits as a requirement of the government contracts. The requirement of an entity in the position of Lockheed Martin to comply with Section 404 mandates did no more than add a substantial cost, duplicate activities, and create a diversion of resources from other activities that may have been beneficial to the company and its customers. According to Compustat, for Lockheed Martin, audit fees increased from \$8.3 million in 2003, to \$14.8 million in 2004 as SOX was implemented. Morse and Magurno reported that the process of mandating companies maintain adequate controls could be improved by "focusing on where the risk is." so that companies that already have documented adequate measures in place are not subject.

As a result of the high cost and extraordinary work required by many companies as shown in Cenker and Nagy (2004) and Morse and Magurno (2005), Swartz (2005) further discussed how many executives agree that regulatory compliance action was necessary to restore confidence in the financial markets, but strongly feel that substantial change needs to be made in the implementation of the act as a result of the high costs that place an undue burden on the companies that do not show cause for requiring the additional compliance. Swartz (2005) provided evidence to show that these auditing expenses, which are not value added, have indeed caused management to often to become more conservative in their business decisions, which has hindered expansion and job growth. The research concluded that it was necessary to devise a way that additional testing and compliance can be mandated, but only to those companies who show a need, not across the markets to all entities.

As reported in Leitch (2004), A survey by KPMG published in January 2004 showed that companies affected by SOX 404 expected to spend many thousands of hours on compliance activities in the first year. The effort is going into documenting financial processes and controls, mapping them to "risks" and testing each control to see if it has operated and seems effective. This is a considerable commitment, but also important to note that as the business changes, new controls will need to be mapped and

implemented, meaning that this process will not end after the first year, demanding an increased annual focus and continually increased cost as the case in the first year of compliance.

At the time, as requirements of Section 404 were coming to life for the first time in the early years, it was apparent to researchers and management that Section 404 as written was looked at as an extremely cost prohibitive act and unnecessary in its present written form in certain instances where other regulations already require that adequate internal controls be in place and validated. Even though action and regulation was necessary to restore investor confidence, less invasive and cost prohibitive actions that don't burden all publicly traded companies could deliver as effective a result. The research at the time also showed that as a result of the substantial cost and non-value added nature that Section 404 compliance brought to many companies, the impacted companies who lack resources to efficiently comply are taking measures that will provide at least temporary compliance, but at an additional cost of reduced corporate growth, which will result in the reduced labor capacity as well as corporate downsizing and financial hardship that Jensen (2000) argued also occurred as a result of the rapid onset of the industrial revolution. Based on early perceptions of the act, one had to at least ask if these costs were worth the marginal benefit that Section 404 compliance would have when imposed on all companies mandated to comply.

By 2005, the act was firmly in place, and many companies were attempting to meet compliance requirements under Section 404. Hemphill (2005) discusses the impact that the act was having on the business community as they became forced to comply, specifically relative to cost. This early in the life of the act, more than three quarters (77%) of directors surveyed thought the act should be revisited by Congress to correct some of the unintended consequences. This desire by directors to revisit no doubt centers on the perceived high costs associated with Section 404 regulatory compliance requirements. The results of this survey are consistent with the other early surveys profiled here that clearly show dissatisfaction with the act, and significant question as to whether or not the act is meeting its intended purpose.

### **A Maturing Act (2006-2008)**

By the arrival of 2006, significant data was becoming available for academics to test and refine many of the theories presented in the early years. Additional years of data could more effectively monitor trends of cost behavior. Raghundran and Rama (2006) studied whether or not there was an association between audit fees and internal control disclosures made pursuant to section 404. From a sample of firms that had December 2004 year-ends, it was shown that the mean audit fees for the firms within the sample were significantly higher than the corresponding fees for fiscal 2003. The examination from the data within this study is consistent with previous discussion by many of the other papers previously presented. Costs have significantly increased, and not returned to lower levels as was predicted in previous studies.

O'Brien (2006) also recognized that there is a significant concern with the compliance cost of Section 404. Not only does O'Brien discuss the concern with costs that come with compliance, but additionally the fact that the PCAOB reported that a significant portion of this excessive cost was attributable to audits and processes that were not as effective as intended. As a result of the findings and opinion of the PCAOB that the costs of compliance were not generating the intended benefits, in 2005 additional guidance was issued on how to implement an internal control audit that is more cost effective and can achieve its intended purpose. This guidance was necessary not only based on what was reported by O'Brien, but also as previously stated by Hemphill (2005) where a revisiting of the act was needed, as well as Cenker and Nagy (2004) who had related findings that internal auditors were previously struggling due to the vagueness of the act and uncertainty over many key decisions needed to set up effective controls. O'Brien (2006) built on previous studies and stated that the key to lowering costs and increasing efficiency was by improving training, streamlining SOX processes, and automating controls. In this model, the implementation of a top-down, risk-based approach to establishing scope and testing strategies is most important to improve efficiency and effectiveness of Section 404 compliance.

Gupta and Leech (2006) further state that the intent of Section 404 is clear, and most would agree with need of regulation and the increased emphasis on controls, but the debate as to how this can be

accomplished is significant. Many filers were lacking direction and guidance as to how to comply and meet the standards of the act. This is consistent with what was also discussed by Hemphill (2005); Cenger and Nagy (2004) and O'Brien (2004). Shown by Gupta and Leech is a consistent pattern as the act is rolled out that despite massive cost there has been significant confusion and lack of clarity that has led to confusion and disagreement between auditors, clients and the SEC. If the issues are not corrected, it was feared that the act would fail and not provide the needed transparency, investor assurance and confidence to financial markets.

The main issue of transparency relative to the act as it was rolled out pertained to those small and mid cap companies that were required to comply with the act. In the case of the small and mid cap companies, the resources needed to comply were scarcer and the uncertainty of requirements significantly increased burden on these companies. Giordano (2007) looked at the special advisory committee established by the SEC to examine the impact of Section 404 on smaller and mid cap companies. At this point, analysts were beginning to question whether smaller companies were experiencing pain significant enough to delist from US exchanges or move to become a public entity outside of the United States. The costs to these companies were excessive enough such that many of these companies could not afford to survive as a US public company, and regulators needed to consider the impact on smaller companies spent insufficient effort in doing so. Giordano examined best practices that could be done in the future to protect these companies from the high cost of compliance. A significant issue of debate at this point was the definition of what would be considered a 'small company' that might become subject to a more cost effective standard, and how would this classification alter risk to investors and not hurt the long term transparency of the regulation.

Foster, Ornstein and Shastri (2007) further examined the impact of cost to comply under Section 404 and the overall impact on material weaknesses in reporting. Foster is consistent with the pattern that the cost of compliance is high and prohibitive to many companies. The authors within this paper looked beyond the first year of compliance, and as a result beyond the prior referenced uncertainty of compliance that can lead to initial increased costs. It was shown here that the fees have increased, and after the first year the fees have not dropped as many have anticipated would occur. This is consistent with all other findings previously discussed in this paper. Even more significant is that from analysis of reported internal control weaknesses, the authors found that companies with sales that were less than \$1 billion have an increased probability of reporting a material weakness than larger companies. This finding at the time is a significant consideration relative to the debate as to whether or not SOX 404 compliance can and should be altered for smaller companies that may have as a result of the compliance costs been delisting, going private or re-listing in foreign countries as reported by Giordano (2007). Based on the reported increased probability of material weakness being reported by a small company relative to the increased cost of compliance, it must seriously be questioned whether or not this act is at all effective and doing its job for the smaller company, and what alternatives can be considered that will lower the probability of a material weakness report at more reasonable cost for smaller companies.

Bedard, Graham, Hoitash and Hoitash (2007) further built on the findings of Giordano (2007) with a focus on a comparison of companies reporting material weaknesses versus those not reporting relative to company size and audit fees paid. The purpose of this study was to make a determination whether the act has been as effective as it should be after two years of compliance and just before non-accelerated filers were required to report. Based on their study, the authors reported that in 2005, of the 2,451 companies reporting under Section 404, the number of companies with a reportable internal control material weakness did fall from 13.7% to 7.3% compared to 2004, which overall is one sign to point that the act requirements are successful. At the same time, the results did show that smaller companies still had an increased propensity to report material weakness and this is most likely the result of a lack of resources to correct identified weaknesses as quickly as larger companies. Smaller companies also start control testing later in the year due to the cost involved to test, or simply that it is not cost effective to address the material weakness as discovered. At the same time, the companies that have material weaknesses pay proportionately higher audit fees. The historical overall implication from the findings of Bedard, Graham et.al. (2007) is that the requirements of Section 404 present a significant challenge for smaller companies,

and as the deadline looms for non accelerated filers these companies would face significant challenge to comply and manage the requirements of the act.

Graziano and Sinnett (2007) looked at whether or not costs can decrease and how low they can decrease as compliance becomes routine and the third year of compliance approaches requiring the non-accelerated filers to file. Based on a survey of registrants required to comply, the results were still mixed as to whether the benefits exceeded the costs, and this is supported by what has been reported in research such as Bedard, Graham et.al. (2007); Foster, Ornstein and Shastri (2007) and others cited within to show that smaller companies have not been successful with compliance and costs have still remained high despite the fact that measures have been taken and guidance provided by the SEC to clarify confusion and uncertainty of the act. Graziano and Sinnett (2007) felt that the price and cost/benefit point has reached equilibrium and are at a level point where cost/benefit can effectively be measured at year three.

Sneller and Langendijk (2007) continue with the theme of prior research from the same era to show that costs are significant to comply, and as a result prohibitive for smaller companies to sustain growth and survive, especially as the era is entered for the non accelerated filer to enter mandatory compliance. In the case of Sneller and Langendijk (2007), the emphasis was on a case study of the European division of a US exchange listed company. The case study was descriptive to illustrate that the costs of compliance for this division under investigation were significantly higher by category of assessment costs and attestation costs. The study showed that the internal costs incurred on assessment were 12 times higher than initial SEC estimates upon passage and the onset of the act in 2002. At the same time, consistent with other companies and what was shown in Levinshon (2004) and Hammersley et al. (2005) in the first year, audit fees increased by an additional 50 percent from the previous year prior to implementation. This is significant, and would be prohibitive to many companies. It is also important to reinforce that this increase was ONLY attributable to the United States arm of this company. The authors of this study suggest that measures such as using auditors from countries with lower fees and focusing on an internal control system instead of individual controls can lower this cost. Not part of this study, but taking these suggestions can lead to issues of audit quality, assurance to investors and increased audit hours as a result of lower levels of experience and efficiency that needs to be considered as a result of these suggestions.

Similar results were also reported at the time by Krishnan, Rama and Zhang (2008). In this paper, similar to Sneller and Langendijk (2007), costs were examined by cost classification. In this case, the authors grouped costs to be classified as either internal labor costs, external consulting costs, technology and attestation fees. Based on the study, the authors concluded from survey results that the mean compliance cost paid by a company is \$2.2 million, and median cost of \$1.2 million. In looking at determining factors of these costs, factors such as firm size, the presence of material internal control weaknesses, the cost of setting up new computer systems and establishing formal internal control policies, the involvement of large auditors, and the appointment of new CEOs all had a significant bearing. Many of these factors, such as involvement of large auditors were also listed as significant in Sneller and Langendijk (2007).

The trend from the research conducted and published during this era of SOX compliance was fairly consistent that the costs of compliance is high, and most likely higher than any available benefits from the regulation. What expands this era from the previous era is that compliance now stretches to both the accelerated and non-accelerated filer and shows that smaller businesses, which are many of the non-accelerated filers face the most significant compliance difficulty. Gupta (2008) further acknowledges this, but further looks to determine how companies are using the COSO framework to comply with the Section 404 regulation. Gupta (2008) Conducted an analysis of 374 survey participants from companies of all sizes, and from the research was able to document that companies were at the time relying more on the internal control auditing standard than the expected guidance provided in the COSO 1992 control framework when conducting internal control evaluations. The COSO 1992 framework, as a known and expected control model needs to be communicated to stakeholders of the company as well as regulators. Its lack of use can be a significant cause for many to question the effectiveness of the act as well as factor for confusion and high cost. Reliance on this framework may allow compliance to be more effective and cost efficient. As a result of the findings, Gupta (2008) was consistent with other research that it may be

necessary to revisit the regulation and provide more detailed standards and guidelines of compliance expectations. More detailed standards and guidelines can assure a more consistent and accurate reporting, that will control long run costs of compliance.

The focus on Section 404 and the increased costs it bears in most research and professional discussion has been on audit compliance of the requirements. As there are significantly increased costs for audit compliance, there is also the consideration of any impact the act has on tax costs. Hall and Gaetano (2006) looked at treatment of Section 404 compliance costs on the tax side, and is one of the initial publications to focus on discussion of the tax costs of compliance. Consistent with other research, Hall and Gaetano agree that compliance is a multi year process and significant cost that will re-occur. The main point addressed was that there will be continual increased costs on the audit side and that a principles-based approach should be used for the treatment of costs on the tax side using presently existing IRS rules. The biggest distinction is whether or not the expenses can be expensed and deducted as incurred or capitalized. The authors cite significant inconsistency in the tax law that needs to be ironed out as to how these costs can be treated for tax purposes. The authors argue that most cases SOX costs should be deductible in the year incurred, but in some cases, certain aspects of the costs could be required for capitalization. The tax complexities of SOX 404 have not been heavily discussed in the historical research, but this article does create awareness that there are also significant tax considerations on top of the financial considerations of the act. As costs of compliance mount and the act matures, these costs can have a significant impact on taxable income and become part of scrutiny by the IRS. The ability to deduct these costs can help reduce the net negative impact of the cost through the reduction of taxable income and tax liability on the taxpayer. In early years, as non accelerated filers begin to file, in some cases these costs may generate operating losses that can have a significant impact on future tax liability as these companies regain profitability.

The era of compliance research from 2006-2008 was a significant area. This was an era where many scholars would argue that Sarbanes-Oxley, specifically Section 404 was significantly over researched. The volume of media coverage, coupled with the emergence of significant data within easy reach led to the mass volume of publications, many of which addressed significant issues, and to some, confusion. During this period, enough data emerged for analysts to begin to examine multi-year trends, while the non-accelerated filer and smaller company began to report and uncover a new series of concerns. The consensus was pretty clear, costs were high for all companies forced to comply. In addition to the initial costs being high, there was no evidence to show that the costs were to decline with time as many predicted. For the smaller company, the costs were so burdensome that maintaining profitability and the opportunity for sustained growth was heavily limited, so significant that companies were electing to delist or simply list exclusively on foreign exchanges. The smaller companies were showing the greatest control issues, and as a result facing the greatest proportional increase in cost across the board. Vagueness of requirements and overall reporting expectations magnified the issue, further increased cost and conflict between auditors, management, audit committees and regulators. Regulation under Section 404 was largely regarded as not worth the cost and ultimately would not meet its intended objective of improved internal control reporting and investor confidence. The next section of this paper looks at the 2009-2015 era, as the act passes its first decade. Research from the era is examined to discuss whether or not overall perceptions of effectiveness improve, decline or remain constant.

### **Passing a Decade (2009-2015)**

#### *International Implications*

As time passed into the second decade of the 21st century, SOX 404 compliance has become routine regulation. Companies of all sizes required to comply have completed multiple years of compliance, and should have a pattern of compliance procedures in place. At the same time, audit firms have had a period of years to develop audit programs that streamline the process, and address uncertainty in expectations that initially existed between auditors, companies and regulators. Despite the passage of time and permanence of the act, can academic research show that business has adjusted and perceptions of Section 404 improved?

Bhamornsiri, Guinn and Schroeder (2009) examined whether or not SOX 404 had an impact that not only impacted the US markets, but also the global markets. This specific study examined whether or not SOX 404 had an impact on worldwide securities regulation, as well as the impact on external audit fees for the first and second year relative to the economic impact on foreign companies that cross listed with US exchanges. The authors found that audit fees of the sample increased by 65% for the initial group of filers during the first year of filing, and .9% in the second year. The fee increase equated to a .5% decrease in earnings for US and foreign companies required complying. Two factors that emerged as significant compared to past discussion is that the increase initially attributed to meeting initial compliance requirements did not go away in any significant fashion, but despite the increase, the overall net impact of economic decline was small, and not a reason in itself to eliminate the act if effective in its purpose despite the cost.

Hua-Wei (2009) also examined the behavior of foreign firms for compliance relative to the costs the act imparts on these firms. Hua-Wei investigated the compliance of US-traded foreign firms with Sarbanes-Oxley section 404 through examination of changes in their material internal control weakness disclosures. The results of the study also examined if as a result of compliance, whether large firms can improve their internal controls more effectively than small and mid-sized businesses can, hence overall effectiveness relative to the cost. Based on the results of the study, US firms and US-traded foreign firms from developed countries experienced a statistically significant descending trend of material weaknesses reported, which is a sign pointing to a measure of success for the act. The study also showed that US-traded foreign companies based in developed countries adjust to SOX 404 more quickly than do those from developing countries, resulting in fewer material weaknesses being reported by these companies. Although SOX 404 imposes vast costs on US-traded foreign firms, investors can benefit from the improved internal control over financial reporting as the Securities and Exchange Commission asserts, as well as investor confidence in markets. This paper points to a consistent pattern from other research such as Bhamornsiri, Guinn and Schroeder (2009) that despite high cost of compliance fees, overall economic loss is low due to the cost, and the benefits may indeed worth the cost as more data becomes available, despite the fact fees are not decreasing following inception year.

Chan, Jacob, Lee and Seow (2012) also examined the cost faced by foreign firms to comply with the requirements of SOX 404. Specifically, the authors looked at reports issued and fees paid for the years 2004-2007. Based on the sample, the authors concluded that foreign large accelerated filers experienced an average increase of 74 percent in audit fees during the first year of Section 404 compliance, while the foreign accelerated filers and non-accelerated filers reported increases in audit fees of 33 percent and 42 percent. The design of the research and sample selection allowed the authors to control for the general market-wide increases in audit fees. As a result of the study, the paper was able to conclude that foreign large accelerated filers incurred on average a 30 percent increase in audit fees just to comply with Section 404. It is also found that the increase in audit fees among foreign large accelerated filers is negatively associated with the strength of their home countries' legal environment. These findings pose significant questions that regulators need to address as to the importance of Section 404 guidelines on foreign firms. Findings are also consistent with Hua-Wei (2009).

#### *Audit Fees and Compliance*

Mitra (2009) looks at audit pricing and factors that determine fees, much of where the emphasis of research was when the act first became law. In this case, Mitra (2009) shows that audit fees are positively related to the severity (and pervasiveness) of material weaknesses in controls during the years of disclosures and are significantly negatively related to the remediation of internal control weaknesses in the years when internal control material weakness remediation took place. This conclusion is based on analysis of data from the first three years of Section 404 compliance. The test results further demonstrate that the remediation of systematic control weaknesses has a greater effect on reduction of audit fees compared to the remediation of nonsystematic control weaknesses, though the remediation of both systematic and nonsystematic control weaknesses is accompanied by audit fee declines. Based on the results of this study, one can discuss new aspects of audit fee determinants in the post-SOX period based

on implications that the pervasiveness and severity of internal control problems induce auditors to make an upward fee adjustment while the remediation has a moderating effect on fees assessed in subsequent audit years. Based on this study, as material control weaknesses are addressed and controlled, there should be a leveling out of audit fees. This 'leveling out' means that fees will not continue to increase, but fees will not decline to the pre SOX rates as was hoped in prior research.

Hoag and Hollingsworth (2011) do provide a more favorable analysis of SOX 404 compliance fees as data sets increase to provide a more comprehensive analysis than many have reported in prior years. The authors examined audit opinions and fees charged from the years 2004-2007 and found that fees declined for companies that effectively controlled and addressed weaknesses, but that these reductions will take place over an extended period of time. Additionally, it was also found from the data that fees are still 19 percent higher three years after weaknesses are corrected for companies compared to companies who never had an adverse Section 404 opinion. Fees are double in subsequent years for those who report consecutive negative Section 404 opinions. As such, based on fee research, fees on average can be higher following compliance, but over continual study should find that fees will continue to decline for companies not reporting material control weaknesses, and over time slowly for firms that do report control weaknesses and successfully remediate them. The findings here are consistent with Mitra (2009).

Keane, Elder and Albring (2012) show a very similar relationship to audit fees and compliance history to further support that fees over the long term of the act should not be as significant an issue for those who are compliant. The authors found that there is an incremental impact on audit fees of additional material weakness disclosures. Firms that report the same material weakness in consecutive years pay higher fees than firms reporting a different material weakness in consecutive years; and audit fees remain high one, two, and three years following remediation compared to a firm that never disclosed an internal control weakness. Firms that 'keep clean' will pay lower fees and see greater reductions in fees than those who show reporting weaknesses. The implication for firms is to be extra vigilant and invest resources up front to assure that proper measures are in place before the SOX 404 audit uncovers a deficiency. The cost of additional investment up front to assure no weakness is reported will be less than the additional audit fees paid over a period of years and will mitigate some of the cost burden of compliance.

#### *The Perception of Success or Failure of the Act*

Iliev (2010) specifically looked at the impact of Section 404 on small firms, and was able to examine the data over a period of years as it became available. Section 404 caused smaller businesses to report more conservative earnings, which can have a negative impact on market value and future growth. This negative impact on market value can cause damage to the US economy as business may consider offshore development where the costs and reporting requirements of Section 404 do not apply. Iliev (2010) was supported by Millar and Wade-Bowen (2011) who examined the impact on the regulatory costs of small and large firms over multiple years of data. Millar and Wade-Bowen (2011) did find increased cost burden on overall regulatory costs, and greater economic impact on smaller firms than larger firms. The smaller firms cannot absorb the cost increases as easily as the large firms, and were significantly paying the economic price. The authors also cannot show that the act has improved investor confidence and did not report on whether or not the quality of financial reporting has improved. The focus was strictly on the cost impact. Studies such as Bhamornsiri, Guinn and Schroeder (2009) which showed little overall economic impact from an increase in fees did not focus on the difference in size of company and how this may impact the overall bearing of the health of a specific company based on size.

One major intent of SOX 404 was investor confidence in markets. If investors have more confidence, demand in the markets and growth increases. Zolnor (2009) showed that US investors following the establishment of SOX 404 continue to invest in foreign markets despite the fact that those markets maintain less stringent reporting requirements than what is expected under Section 404. Moreover, investors do not respond negatively to Section 404 disclosures of material internal control weaknesses. The research demonstrates that Section 404 does not provide useful information in the minds of investors. Zolnor (2009) feels that as a result of the costs it imposes on reporting companies, it is clear that Section 404 is an example of over-regulation and should be repealed. Inconsistent with other research of the era,

this article focuses exclusively on investor confidence, not on whether or not the act has been effective for reducing the frequency of weakness, as has been shown in other research and was also a significant intent of the act.

At this point in the post-SOX era, US markets were again entering a period of significant downfall as a result of the subprime mortgage crisis. The crisis at the time has many parallels to Enron and the collapse leading to SOX. Zolnor concludes that when regulation is enacted relative to the subprime crisis that lessons learned from SOX 404 issues be considered so that new regulation can more effectively restore investor confidence.

Hansen, Pownall and Wang (2009) is a study which similar to Foster, Ornstein and Shastri (2007). Hansen et.al. Examine the incidence of new listings and delistings on US exchanges as well as the propensity to de-list as a function of not only normal market conditions, but specifically on cost of compliance for the act. The authors found that the passage of SOX at this point in time was not a factor to de-list as was initially reported at a previous point in time by Foster, Ornstein and Shastri (2007). In this specific case, the authors found that general market conditions and firm conditions did indeed explain delisting. The passage of SOX was not directly related to delisting for any size firm. SOX is not a primary determinant of delisting, but when market conditions are favorable, SOX may influence the decision, largely due to the cost involved. Prior research implied that SOX was the root cause of de-listing.

A major argument against Section 404 is that despite the high costs of compliance, short term there may be increased investor confidence, which will spur market growth, but long term the act will be ineffective and not provide any financial statement improvement in reporting quality. As time passes and compliance increases, more data becomes available that can measure effectiveness of the act. Hua-Wei (2009) and Bhamornsiri, Guinn and Schroeder (2009) began to show that the act might be effective and provide benefits that can be justified as worth the cost. Nagy (2010) specifically examined how compliance with Section 404 of the act impacted financial reporting quality. It was shown by Nagy (2010) that there is a significant negative correlation between Section 404 compliance and the probability of issuance of financial statements that are materially misstated. This finding is significant evidence that the act is successfully improving the quality of released financial reports.

Leech and Leech (2011) were not as favorable on the quality of improved financial reporting as a result of Section 404. This paper was not based on an advanced statistical model of reported financial data as was the case in Nagy (2010), but stated that there are still a significant number of materially incorrect financial statements issued annually, despite the increased reporting requirements. With significant consideration are financial results issued by financial institutions leading to the 2008 financial crisis. Leech and Leech (2011) attribute the 2008 financial market failure to ineffectiveness of Section 404. As a result of the opinion of the authors, and CEO's of many organizations, the authors feel congress should modify the act to utilize a true risk based approach to allocate resources to those entities and causes who have the greatest probability of issuing materially wrong financial statements, and not the blanket approach of equal compliance of all companies for improved effectiveness of the act. Though Leech and Leech (2011) base their findings more on opinions and discussion with CFO's instead of statistical analysis using actual data since the act was passed, the opinion is consistent with early Section 404 research such as Morse and Magurno (2005) stating that certain entities such as government contractors already are governed to specific regulations that meet or exceed the requirements of Section 404, but still are required to comply with Section 404. This is a waste of resources, which can lead to reduced economic growth as shown in other research outlets that is unnecessary.

## **CONCLUDING THOUGHTS TODAY AND LIMITATIONS**

Basile, Hardy and Fret (2015) provide a conclusion that is significantly different than what many would have reached in the early years of the act, before there was a significant mandate to comply with the requirements of Section 404 and data to support actual results of the acts effectiveness as well as costs to comply. The authors show that over a decade of compliance requirement, management of companies has realized tangible benefits from the act. To further support the tangible benefits that have been realized

by companies mandated to comply, many private companies not under obligation to comply with Section 404 requirements have also implemented policies very similar to Section 404 into their own operations.

This paper was a historical analysis of research at key points over the lifespan of Section 404 of the Sarbanes-Oxley act. Based on the research profiled, it does support the overall perception and discussion from Basile, Hardy and Fret (2015). Individuals do not like change, and will historically react negatively to change; mainly out of fear of the uncertain as to the impact change will have on impacted stakeholders. In the early years, there was significant fear over SOX 404 as a result of the impact the act would have on so many companies. The fear as well as uncertainty led many to question the merit of the act as well as generate significant cost to manage both the fear, and initial set up to comply. Over time, compliance became reality and fear can be reduced. Research does show that overall reporting quality did increase as a result of the act. No regulation is perfect, and there will always be surprises that occur regardless of legislation, but quality does show to have overall improved. Costs are still high to comply, but there is also evidence to show that over time costs can decline, and the decline will be most significant to those companies who internally do the right things and not have reported weakness findings. The companies that face continual audit fee issues will be those who have reportable weaknesses and perhaps have difficulty managing internal controls on their own. An area of concern is that smaller businesses tend to have more difficulty in this area, and may end up facing more fee pressure in the future than larger companies with the resources to prevent unfavorable reports, and this is an issue that needs to be considered by lawmakers, as well as professional trade organizations so that these businesses can be helped in some way to mitigate this issue, mainly in the form of support to assist in management of internal controls to avoid the reporting of weakness. As a result of the vast negative press and volume of research on SOX 404 in the early years, it is often overlooked by many that the act may not be perfect, and has its issues, but overall has achieved its intended purpose, which is improved reporting quality, and improved reporting quality should improve investor confidence bearing no additional outside events to rattle it. A historical compilation of research such as this paper serves the purpose of summarizing the history and providing a perspective of where perceptions of the act are, and that these perceptions are not in the same place as 2004, where many believe they still are. Understanding the current positions of where Section 404 is from a success standpoint can put lawmakers, regulators and company management in a proper perspective to work and continually improve the act to address the areas of concern and weakness still prevalent within.

When evaluating the overall effectiveness of Sarbanes-Oxley as presented within this paper, one must also consider the limitation of this review. As stated within this paper, this act has shown to be one of the most researched areas in auditing and financial reporting. Due to the volume of published research in both the academic and practitioner spectrum of accounting research, it is not possible, nor was it the intent to profile all research in the area within this paper. The intent of this paper was to show a broad sample of blended academic and practitioner research in the area that in the opinion of the author adequately profiles the act and conclusions that represent a large portion of the academic and professional community. Some published research may have been excluded from this paper that other authors may have an opinion should have been included to further strengthen or weaken arguments presented.

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