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SAS 99 and Fraud Detection

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Abstract

Fraud has been a big problem in many companies in recent years. It causes both economic and social consequences in our society. The integrity of the accounting profession has also been questioned. In order to give better guidance for external auditors to uncover fraud in a timely manner and restore public confidence to the accounting profession, the Auditing Standards Board of the AICPA issued Statement of Auditing Standards No.99 (SAS 99). This paper discusses the procedures required to implement SAS 99 and documents four recent fraud cases, with a focus on how SAS 99 could have been effective to help auditors discover these frauds.

1. Introduction and Background

While fraud is something that can not be completely eliminated, steps can be taken in order to detect it in a timely manner before it causes serious consequences. In order to guide external auditors to conduct financial statement audits, The Auditing Standards Board, which is part of the American Institute of Certified Public Accountants, issued Statement of Auditing Standards No. 99 effective on December 15, 2002. Statement of Auditing Standards No. 99 is a collection of standards that supersede Statement of Auditing Standards No. 82, Consideration of Fraud in a Financial Statement Audit. SAS No. 99 corrected some of the shortcomings of SAS No. 82, so understanding the difference between SAS 99 and SAS No. 82 could help auditors to better follow the guidelines of SAS No.99 and conduct the financial statement audits more efficiently. A detailed comparison of SAS 82 and SAS 99\(^1\) is listed in Appendix A of this paper.

While SAS 99 is a collection of standards that is intended to help external auditors detect fraud, becoming familiar with SAS 99 could also help management or employees prevent fraud from happening in the first place. It would be meaningful to document several recent corporate frauds and to test how or if SAS 99 could have been effective in detecting these frauds, so that auditors can learn what could have been done in the past in order to detect fraud, and what should be done in the future to conduct audits effectively.

The rest of this paper is organized in the following manner. In Section 2, the procedures required to implement SAS 99 are discussed in detail. Section 3 contains four fraud case analyses, including Enron, Tyco, WorldCom, and ZZZZ Best Company, for the purpose of testing how or if SAS 99 could have been effective in detecting these frauds. In Section 4, a conclusion is drawn based on the four case analyses.

2. Procedures Required to Implement SAS 99

This section discusses procedures which are required to implement SAS 99. Many of these procedures can be performed either at the same time or in a different sequence, depending on the circumstances. SAS 99 includes the following ten procedures, and each of them will be discussed in detail:

1. Description and characteristics of fraud
2. Professional skepticism
3. Discussion among key engagement personal
4. Information gathering
5. Risk Identification
6. Risk Assessment
7. Responses to the results of the assessment
8. Evaluation of audit evidence
9. Communication of possible fraud
10. Documentation of the auditor’s consideration of fraud.
Step one. Description and characteristics of fraud.

Auditors should consider two types of misstatements. The first one is misstatements arising from fraudulent financial reporting, which may be accomplished by manipulation, falsification, or alteration of accounting records; by misrepresentation or intentional omission significant information and by intentional misapplication of accounting principles. The second type of misstatement auditors should consider is misstatements arising from misappropriation of assets, which causes the financial statements not to be presented according to Generally Accepted Accounting Standards.

Step two. Professional skepticism.

Due professional care requires auditors to exercise professional skepticism. When conducting a financial statement audit, auditors should have a questioning mind and be critical in assessing audit evidence. Examples of the application of professional skepticism in response to the risk of material misstatement due to fraud are designing additional or different auditing procedures to obtain more reliable evidence in support of specified financial statement account balances, classes of transactions, and related assertions, and obtaining additional corroboration of management’s explanations or representations concerning material matters. Appendix 1 shows that, compared to SAS 82, there is a dramatically increased emphasis on maintaining an attitude of professional skepticism in SAS 99.

Step three. Discussion among key engagement personal.

Discussion among key engagement personal regarding the risks of material misstatement is important and should continue throughout the audit. The discussion should include an exchange of ideas among the audit team members about the susceptibility of the entity’s financial statements to material misstatement due to fraud. The discussion should emphasize the need to maintain a questioning mind and to exercise professional skepticism in gathering and evaluating audit evidence.
Step four: Information gathering.
Auditors should gather the information needed to identify the risk of material misstatement due to fraud. The first step is making inquiries of management and others within the entity about the risks of fraud. The inquiries of management should include whether they have knowledge of any fraud, their understanding about the risks of fraud in the entity, the programs and controls the entity has, whether management has reported to the audit committee and so on. Besides management, auditors should also make inquiries of the audit committee, the internal audit personnel, and employees with varying levels of authority within the entity. The second step of information gathering is considering the results of the analytical procedures performed in planning the audit. The result of this analytical procedure identifies the existence of unusual transactions or events, and amounts, ratios, and trends that might indicate the existence of fraud. The third step in information gathering is to consider the fraud risk factors, which include the incentives/pressures to perpetrate fraud, the opportunities to carry out the fraud, or attitudes/rationalization to justify a fraudulent action. Lastly, there are many other sources of information that may be helpful in identifying risk such as review of interim financial statement.

Step five. Risk Identification.
Auditors should identify risk that may result in material misstatements due to fraud. The information gathered in the previous steps should be used to identify risks that might result in a material misstatement due to fraud. Auditors should pay special attention if the risk factors, mainly pressure, opportunity and rationalization, exist. The identification of risks requires professional judgment. In identifying risks, auditors should consider whether the risk involves fraudulent financial reporting or misappropriation of assets, whether the risk could result in a possible material misstatement of financial statements and the likelihood that it will result in misstatement, and lastly, whether the potential risk is pervasive in the financial statements or related to specific accounts. Auditors should consider improper revenue recognition as a fraud risk, because many material misstatements due to fraudulent financial reporting result from over or understatement of revenue. Management override of controls should also be considered a fraud risk. A more complete list of risk factors is included in Appendix B, pages 22 to 25.
Step six. Risk assessment.
Auditors should assess the identified risks after taking into account an evaluation of the entity’s programs and controls that address the risks. According to SAS 55, auditors should understand the five components of internal control in order to plan an audit. As part of the understanding of the internal control, auditors should evaluate whether the programs and control are properly designed and placed in operation.

Step seven. Responses to the results of the assessment.
Assessment of the risk of material misstatement due to fraud should affect the assignment of personnel and the extent of supervision and the extent of concern about the accounting principles and policies adopted by management. The assessment of the risk should also be used to predict the auditing procedures that could be used in conducting the audit. The nature of the auditing procedures performed may need to be changed to obtain evidence that is more reliable or to obtain additional corroborative information. The timing of substantive tests and the extent of the procedures applied should also be modified to reflect the assessed risk of material misstatement due to fraud. The extent of the procedures applied should reflect the assessment of the risk (Please refer to appendix C for a list of examples of modification of the nature, timing and extent of tests, and examples of responses to identified risk of misstatements arising from fraudulent financial reporting and misappropriation of assets.)

Because management is in a unique position to perpetrate fraud, the auditor should examine journal entries and other adjustments for evidence, review accounting estimates for biases, and evaluate the business rationale for significant unusual transactions that could result in material misstatement due to fraud (Please refer to appendix D for examples).

Step eight. Evidence evaluation.
First of all, auditors should assess the risk of material misstatement due to fraud throughout the audit. Examples of conditions that may be identified during fieldwork that change or support a judgment regarding the assessment of the risks are given in Appendix E. Secondly, the auditor should evaluate whether analytical procedures performed as substantive tests or in the overall review stage of the audit indicate a previously unrecognized risk of material misstatement due to
fraud. Third, the auditor should evaluate the risks of material misstatement due to fraud at or near the completion of fieldwork to see whether the accumulated results of auditing procedures and other observations affect the assessment of the risks of material misstatement due to fraud made earlier in the audit. If the matter involves higher-level management, the auditor should reevaluate the assessed risk and its impact on the nature, timing and extent of the tests of balances or transactions and the assessment of the effectiveness of controls. On the other hand, if the auditor believes the misstatement is or may be the result of fraud, but there is not enough evidence to evaluate whether the effect is material, the auditor should attempt to obtain additional evidential matter, consider the implications for other aspects of the audit, and discuss the matter with appropriate level of management at least one level above those involved.

**Step nine. Communication of possible fraud**

Auditors should communicate a possible fraud to the appropriate level of management, even if the matter is inconsequential. For fraud involving senior management which causes a material misstatement in the financial statement, the auditors should report to the audit committee. If the auditors identify some risk of material misstatement due to fraud that has continuing control implications, the auditor should report to appropriate management. Generally, the auditor does not have the responsibility to disclose possible fraud to outside parties. However, the auditor may do so if the matter relates to certain legal and regulatory requirements, in response to a subpoena and to a funding agency or other specified agency.

**Step ten. Documentation of auditor’s consideration of fraud.**

The auditors should document the following: the discussion among engagement personnel, the procedures performed to obtain information necessary to identify and assess the risks of material misstatement due to fraud, the identified risks of material misstatement due to fraud and a description of the auditor’s response to those risks, documentation that would support the auditor’s decision, the results of the procedures performed to further address the risk of management override of controls, other conditions and analytical relationships that caused the auditor to believe that additional auditing procedures or other responses were required, and the nature of the communication about fraud made to management, the audit committee, and others.
3. Case Analysis

In order for auditors to learn from the previous corporate fraud cases and to test how or if SAS 99 could have been effective in detecting these frauds, four recent fraud cases, including Enron Cooperation, Tyco International, WorldCom, and ZZZZ Best Company, are documented in this section. Each case analysis is composed of a brief summary of company background, followed by analysis of how the fraud happened, why it happened, and finally and most importantly, how SAS 99 could have been effective in detecting fraud.

3.1 Case one: Enron Corporation

What happened?

Enron was founded in 1985 from a merger between InterNorth, Inc., and Houston Natural Gas Company. As a former CEO of the Houston Natural Gas Company, Kenneth Lay emerged as CEO of Enron. Lay followed his predecessor and adopted an aggressive growth strategy. Kenneth Lay hired Jeffery Skilling in 1987, promoting him to CEO by early 2001, while Lay served as the chairman of the board of directors. During the 1990s, Skilling transformed Enron from a natural gas supplier into an energy-trading firm that served as an intermediary between energy producers and final consumers. Widely regarded as a successful transformation, Enron reported that revenue grew from $10 billion in early 1990s to $101 billion in 2000. Kenneth Lay, Jeffrey Skilling and their top officers were nationally recognized because of Enron’s new business model. Enron was recognized as one of the most innovative, fastest growing and best managed businesses and its stock price swelled.

Unfortunately, Enron suddenly collapsed and filed for bankruptcy in December 2001. Enron’s collapse shocked investors national-wide and the media reported that it was “the biggest crisis investors have had since 1929.” The loss of market capitalization was about 60 billion dollars.

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and thousands of Enron workers who held Enron's stock in their 401(k) retirement accounts lost tens of billions of dollars.

**Why did it happen?**

There are numerous issues that are related to Enron's collapse, and the most important one is its aggressive and fraudulent accounting practice, which was backed up by its top management teams. Several major factors that contributed to Enron's collapse include: a bad corporate culture, Enron's lack of internal control, Enron's transactions with its SPEs, its using of derivatives to manipulate accounting results, and its intentional omission of important information in financial statement disclosures. These accounting issues are discussed in detail below.

One of the most important factors that contributed to Enron's collapse was that Enron did not have a corporate culture that encouraged honest accounting practice. Enron's key executives, such as Kenneth Lay, Jeffrey Skilling, and Andre Fastow (former Enron CFO), were accused of fostering rule breaking and discouraging problem reporting. Also, Enron's internal control system, a very important tool to decrease the risk of fraudulent financial reporting, broke down, and lack of proper separation of duties allowed management to override control.

Special Purpose Entities, sometimes called special purpose vehicles, were used by Enron as a tool to raise needed financing for various purposes without the debt being reported in its balance sheet. An important guideline, the so called 3 percent rule, provided by The Financial Accounting Standard Board allows a company to not consolidate subsidiaries' financial statements as long as at least 3 percent of a Special Purpose Entity's capital is provided by independent outside parties. Enron managed to establish hundreds of SPEs, and divert huge amounts of its debt to these entities. Enron also conducted many transactions with its SPEs so that it recognized unrealized gains on the increase in the market value of its own common stock.

Derivatives were another tool used by Enron to manipulate its accounting records. Enron entered into long term commodity contracts to delivery energy commodities. Sometimes the period
covered many years. According to the accounting rules, projected profits from those contracts must be booked. However, Enron often inflated its profits by assuming a lower cost to provide those commodities to fulfill the contracts.

Enron also violated generally accepted accounting principles in that it intentionally failed to disclose information in the financial statement that was critical to Enron’s users. Stockholders, employees, the SEC and other stakeholders of Enron were not totally aware of the true situation of Enron.

Could SAS 99 have prevented the fraud?

Andersen had been Enron's auditor since the merger between InterNorth, Inc. and Houston Natural Gas Company in 1985. As Enron's former auditor, Andersen was harshly criticized by the public and was held responsible for Enron’s bankruptcy. As a result, Andersen’s long and proud history came to an end in 2001. In retrospect, people may ask that what could Andersen have done differently, with the help of SAS 99 guidelines, to prevent the Enron fraud from happening or to discover the fraud earlier?

Professional Skepticism: One of the mistakes Anderson had made was to assume that the management team of Enron was honest and had integrity, and to believe everything management said and the evidence that was presented to them. SAS 99 makes it very clear that it requires auditors to exercise professional skepticism. As I mentioned earlier, the management team of Enron did not establish an honest corporate culture, and to some extent it even fostered the dishonest accounting practices and discouraged problem reporting. If Andersen's auditors had been a little more skeptical, the fraud at Enron could have been detected.

Risk identification: SAS 99 could have been helpful in the process of gathering information to identify fraud risk factors. SAS 99 requires the auditor to make inquiries of management about the possibility of fraud, to assess the effectiveness of internal controls, and to assume improper revenue recognition as a fraud risk. A former employee of Enron, Sherron Watkins, vice president of corporate development, wrote a letter to Kenneth Lay concerning the problematic
accounting and possible scandals that were going on in Enron. However, no one from Andersen had ever asked Enron’s management about it. If the auditors had known this information, the auditors would have discovered lots of fraud, such as related party transactions with Enron’s hundreds of SPEs, improper gain recognition, overriding accounting principles, overstating revenues and so on. Enron’s lack of internal control was also surprising. A top executive of Dynegy, after briefly considering a merger with Enron, reported that Enron’s lack of internal control was mind-boggling. If Andersen’s auditors had done what SAS 99 requires them to do, such as talk to Enron’s internal audit personnel and Enron’s employees, they would have gathered enough information to identify many significant risk factors which could have lead them to uncover the fraud. Enron also had problems with improper revenue recognition. Enron used the derivatives to manipulate its accounting records. It substantially understated the cost to fulfill long-term contacts and thus overstated its revenue. If Enron’s auditors had assumed improper revenue recognition as a risk factor, they would have investigated more and assessed the appropriateness of the assumptions Enron had made concerning the cost Enron would have in order to fulfill contracts.

**Responding to the identified risk:** Following the guidelines of SAS 99 would have helped Andersen’s auditors to identify risks of fraud in Enron. In responding to the identified risk, the SAS 99 procedures require auditors to adjust the nature, timing, and extent of procedures to be performed and the assignment of personnel and supervision in order to obtain substantive audit evidence. Because of the overwhelming risk of fraud that would have been identified, Andersen would have assigned skilled auditors with significant engagement experience, and they would have been working under proper supervision. When there were considerable material misstatements in Enron’s financial statement due to illegitimate transactions, Anderson’s accountants reported that they were comfortable about the transactions and how they were presented in Enron’s financial statements, even after they had spent considerable time analyzing all sorts of questionable transactions. Also, more reliable information and evidence from outside of Enron would have been obtained if SAS 99 were available at that time and Andersen’s accountants followed it. That would have made Enron’s scandal more obvious and it could have been uncovered before it got worse.
Communication of Fraud: It was determined that Anderson did not fulfill its professional responsibility in that it failed to communicate to Enron’s board of directors any reportable conditions, such as, Enron’s poor internal control, its dealing with SPEs, and its problematic financial reporting. SAS 99 would have been effective in preventing and uncovering the fraud if it had been followed, because it requires auditors to communicate about possible fraud to management, the audit committee, and others.

The Importance of Independence: Overwhelming evidence suggested that Andersen was deeply involved in Enron’s fraud. Besides auditing, Andersen received millions of dollars for providing consulting services to Enron. Accountants from Andersen helped Enron set up SPEs, and Enron followed their advice. Based on available evidence, it is not unreasonable to suggest that Andersen’s accountants were aware of what was going on in Enron, and they knew that Enron’s financial statements were not fairly presented according to generally accepted accounting standards. Instead of issuing a qualified opinion and bringing it to the attention of the public, Andersen tried to conceal the fraud, until the fraud grew too big and finally burst. From this we can see that in order for SAS 99 to have been effective in preventing and detecting fraud in Enron, Andersen would have had to be independent, and willing to follow the auditing standards.

In conclusion: Probably the most significant barriers to Enron’s external auditors uncovering the fraud in Enron was Anderson’s deep involvement in Enron’s business decisions. As a result, in order for SAS 99 to be effective in detecting the fraud, Anderson would have had to maintain its independence and be willing to follow SAS guidelines and uncover the fraud.

3.2 Case two: Tyco International

What happened?

Kozlowski and Swartz misappropriated company assets by which they enriched themselves at the expense of the company, and they concealed their conduct from Tyco’s board of directors.

Kozlowski and Swartz used various methods to misappropriate company assets, such as the relocation programs, the "Tyco Bonus" misappropriation, the Key employee loan program, and the "ADT" automotive Bonus misappropriations. They took more than $120 million in bonuses, which were never approved by the board of directors; they took interest-free loans (some were "forgiven" as part of Tyco's loan forgiveness program), and falsely presented the company's financial condition to investors to boost the stock price while selling $575 million in stock without telling investors, which is a requirement under SEC rules. Also, Kozlowski has been charged with avoiding more than $1 million in sales taxes on the purchase of a painting, supposedly shipped out of New York State. In January 2005, Kozlowski and Swartz were found guilty of grand larceny, securities fraud, conspiracy, and falsifying business records, and they face 15 to 30 years in prison.

Why did it happen?

Unlike Enron's Key Lay, Kozlowski and Swartz were not charged with accounting fraud. The Kozlowski and Swartz case was about their misappropriation of Tyco's assets-money. In essence, the Tyco case is all about Kozlowski and Swartz's greed. They used the company's money to support their lavish lifestyle. For example, Dennis Kozlowski used company money to pay for an $18 million New York co-op apartment and a $14 million private art collection as well as other lavish items such as a custom-made $6000 shower curtain, $2000 trash can, and a $2,000,000 birthday party for his wife in Italy.

Could SAS 99 have prevented the fraud?

Professional skepticism: Richard P. Scalzo was the PricewaterhouseCoopers LLP (PwC) engagement partner for the audits of the financial statements of Tyco international Ltd. for the period from 1997 through 2001. In the process of auditing the company's financial statements, Scalzo became aware of the lack of integrity of Tyco's management team, such as the use of relocation programs to misappropriate company assets. According to SAS99, Scalzo should have directed his audit team to reevaluate the risk assessment of the Tyco audits and perform
further testing and audit procedures to address the risk factor. If Scalzo had done that, the Tyco fraud could have been discovered at its earliest stage.

**Obtaining the information needed to identify the risk factors:** SAS 99 could have been effective to prevent the Tyco fraud if the auditors had followed the SAS 99 guidelines. SAS 99 requires auditors to obtain information needed to identify risk factors, and it also lists examples of fraud risk factors related to misappropriation of assets. Among these, at least three risk factors are present in this case. The most important one is the changes in behavior or lifestyle of Kozlowski and Swartz. Kozlowski spent $2 million to have a birthday party for his wife, and his shower curtain was worth as much as $6000. And these are only small items that he spent the company’s money on. SAS 99 could have been useful in helping auditors to identify this risk factor in that it requires auditors to make inquiry of management and others within the entity about the risk of fraud. If the auditors followed the SAS 99 guidelines, Kozlowski’s lavish lifestyle, especially the $2 million dollar birthday party, would have been discovered by auditors.

The other risk factor is the inadequate system of authorizing and approving of transactions. The size and amount of misappropriation in this Tyco case was huge and it is surprising how the fraud was carried on without the proper knowledge and authorization of the board of directors.

The disputes between Tyco’s management team and its external auditor concerning the proper disclosure of information, for example, Tyco’s refusal to disclose non-interest-bearing “relocation loans,” is also a risk factor that auditors would consider if they followed the SAS 99 guidelines. Because, according to SAS 99, auditors should always consider disputes with management a risk factor.

**Assessing the identified risk and responding to the results of assessment:** If the auditors had followed the SAS 99 guidelines, they would have identified a significant risk of misstatement in the financial statement due to fraud. In responding to the results of the risk assessment, SAS 99 requires auditors to evaluate the business rationale for significant unusual transactions. There were many unusual transactions, such as the forgiven relocation loan and huge number of key employee award and bonuses, which would have led to the conclusion that fraudulent activities
existed. Various red flags encountered by the auditors in the audit process also would have
directed the auditors to discover the fraud. For example, the clear evidence showed that the Key
Employee Loan Program, whose stated purpose was the payment of taxes on the vesting of
restricted stock, was being used for the improper benefit of its most senior officers.

**In conclusion:** SAS 99 could have been effective in preventing or uncovering the Tyco fraud.
However, in order for SAS 99 to work, the most important part is for auditors to follow the
guidelines. There were many risk factors in this case which could have suggested, and brought to
the attention of its board of directors as well as external auditors, the presence of
misappropriation of company assets by senior management.

### 3.3 Case three: WorldCom

**What happened?**

WorldCom, once the telecommunication giant, filed for bankruptcy protection on July 21, 2002.
During the period of 1999 to 2000, WorldCom manipulated its financial statements and
overstated its income by approximately $9 billion. About 20,000 people lost their jobs and
investors lost about $180 billion in WorldCom's bankruptcy. Criminal charges were filed against
its former CEO Bernard Ebbers, former CFO Scott Sullivan as well as five other former officers.
In March 2005, Bernard Ebbers, former CEO, was found guilty of conspiracy, securities fraud
and false regulatory filings. Scott Sullivan also pleaded guilty to accounting fraud charges.

**Why did it happen?**

In 1999, WorldCom's revenue growth halted and its stock price dropped. At that time, Bernard
Ebbers owned $1 billion worth of WorldCom's stock. In order to prevent his share of WorldCom
stock from depreciating and to meet the expectations of financial analysts' projected earnings,

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WorldCom’s senior management team “cooked the books” in order for the company to look better, as evidenced by the inflated company stock prices.

Could SAS 99 have prevented the fraud?

WorldCom manipulated its financial results in two ways. First, WorldCom categorized operating expenses as capital expenditures. Second, WorldCom reduced its operating expenses by improperly releasing certain reserves held against operating expenses. According to AICPA, from 1998 to 2000, WorldCom reduced reserve accounts held to cover liabilities of acquired companies, which increased WorldCom’s revenues by $2.8 billion. By marking operating costs as long-term investments, WorldCom increased its revenue by $3.85 billion. SAS 99 could have been helpful in discovering the fraud in the following ways:

Obtaining the information needed to identify the fraud risks: SAS 99 states that the auditor should use professional judgment in determine whether a risk factor is present and this should be considered in identifying and assessing the risks of material misstatement due to fraud. At least three risk factors listed in SAS 99 would have helped auditors discover the possibility of fraud in WorldCom. The first risk factor was that WorldCom’s management faced great pressure as the revenue growth for WorldCom halted and its stock price dropped in 1999. As a result, there existed excessive pressure for WorldCom’s management to meet the expectations of investment analysts, institutional investors and so on. The second risk factor was that management, such as Bernard Ebbers and Scott Sullivan, had significant financial interest in WorldCom as they each owned billions of dollars worth of WorldCom’s stock. Declining company stock price meant declining of their wealth. The third risk factor was that WorldCom had unusual profitability when compared to that of other companies in the same industry, such as AT&T. All of these risk factors listed in SAS 99 could have been helpful and provided some hints to WorldCom’s auditors to help them discover the fraud.

Identify the risk that may result in a material misstatement due to fraud: Both improper revenue recognition and management override control existed in WorldCom’s fraud. SAS 99 could have been helpful in discovering the fraud in that it requires auditors to assume improper revenue
recognition and management override control as fraud risks and requires auditors to take appropriate actions to address the risk.

**Responding to the risk assessment:** According to SAS 99, auditors should respond to the risk assessment by reviewing the revenue recognition and management estimates. This could have helped auditors to catch WorldCom’s treating of operating expenses as capital expenditures as well as its manipulating the estimation of reserve accounts in order to artificially inflate its operating income.

**Evaluating audit evidence:** SAS 99 lists some examples of evidence that suggested the existence of fraudulent accounting transactions in WorldCom. For example, many artificial transactions and journal entries that significantly overstated WorldCom’s income were unexplained and without proper support documentation; and some unusual or unexplained analytical relationships existed, such as WorldCom’s unusual profit compared to the industry trends.

**Conclusion:** SAS 99 could have been effective in preventing the fraud in WorldCom if the SAS 99 procedures had been carefully followed by auditors.

### 3.4 Case four: ZZZZ Best Company

**What happened?**

ZZZZ Best was established in 1981 by Barry Minkow, a fifteen year old high school graduate. Started as a carpet-cleaning business, ZZZZ Best expanded into the insurance restoration business, which accounted for 80% of the company’s reported income, as Minkow was not patient with the growth of the company. Based on the company’s high growth and high reported income in 1987, the company’s stock became one of the hottest stocks on Wall Street. The company had a market valuation of $211 million after only six year in business. Unfortunately,

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the company was nothing more than a massive fraud scheme that fooled banks, investors, and CPA firms. ZZZZ Best never made a profit, and its growth and its reported income were totally fictitious. ZZZZ Best declared bankruptcy in 1988 as it become apparent to the public that the company was having difficulty paying off its debts.

**Why did it happen?**

Several factors resulted in the fraud. First, Minkow faced the problem of a shortage of working capital when he started out as a carpet cleaner. Banks refused to lend him money, and he felt the financial pressure. Second, Minkow deceived law firms, CPA firms, and all other related entities by forging documents and spending millions of dollars to rent construction sites to deceive auditors’ onsite inspections, trying to make auditors think that the sites really belonged to ZZZZ Best Company. Third, ZZZZ Best company’s auditors did not exercise due professional care in conducting the audit. For example, many fraud risk factors were overlooked and auditors obtained too few direct confirmations from independent sources to support ZZZZ Best Company’s financial statements.

**Could SAS 99 have prevented the fraud?**

*Obtaining the information needed to identify risk of fraud:* SAS 99 could have been helpful in detecting the fraud in that it requires auditors to consider fraud risk factors. There were many fraud risk factors that, if ZZZ Best’s auditors had looked carefully, would have led the auditors to uncover the fraud early: for example, ZZZZ Best’s rapid growth or unusual profitability, especially compared to that of other companies in the same industry, its unreasonable demands on its auditors to sign an agreement not to “make any follow up telephone calls to any contractor, insurance companies, the building owners, or the other individuals involved in the restoration contract,” the domination of management by Minkow alone without compensating controls, and the fact that Minkow had been involved in a string of credit card forgeries as a teenager.
**Responding the assessed risk:** SAS 99 could have been effective in helping to detect the fraud in that it requires auditors to change the nature, timing and extent of the auditing procedures to reflect the extent of assessed risk.

Due to the high risk of material misstatement due to fraud, which could have been identified if SAS 99 guidelines were followed, the auditors should have changed the nature of the auditing procedures to be performed to obtain more reliable or additional corroborative information. For example, instead of making inquiries of management, more evidential matter should have been obtained from ZZZZ Best's vendors, customers and creditors, which could have easily led to the discovery of the fraud.

More substantial auditing procedures could have been performed to discover the fraud. More specifically, according the SAS 99, ZZZZ Best’s auditors should have done the following in order to uncover the fraud. First, its auditors should have inspected ZZZZ Best’s restoration sites on a surprise or unannounced basis. Secondly, auditors should have made oral and face to face inquiries of ZZZZ Best’s major customers and suppliers in addition to written confirmation. And thirdly, auditors should have made inquiries of management or others within the ZZZZ Best Company about the risks of fraud.

**Evaluating the audit evidence:** The following conditions that should have been identified in the fieldwork would have supported a judgment that fraud had occurred in ZZZZ Best Company: unsupported transactions, anonymous tips to the auditor about alleged fraud, and missing documents and unavailability of original documents. In addition, in his book *Contemporary Auditing: Real Issues & Case*, Michael C. Knapp lists some unusual or unexplained analytical relationships that suggest the existence of fraud, which ZZZZ Best’s auditors had overlooked:

1. The amounts called for by the insurance restoration contracts were unrealistically large.
2. The number of multimillion-dollar insurance restoration contracts reportedly obtained by ZZZZ Best exceeded the total number available national wide during the relevant time period.
3. The purported contracts failed to identify the insured partyed, the insurance companies, or the locations of the jobs.
4. The contracts consisted of a single page that failed to contain details and specifications of the work to be done, such as the square yardage of carpet to be replaced, which were usual and customary in restoration business.

5. Virtually all of the insurance restoration contracts were with the same party.

6. A large portion of the ZZZZ Best insurance restoration contract occurred immediately, and opportunistically, prior to a planned offering of stock.

7. The purported contracts provided for payments to ZZZZ Best or Minkow alone rather than to the insured or jointly with ZZZZ Best and the insured, contrary to the practice of the industry.

8. The purported contracts provided for payments by the insurance adjustor contrary to normal practice in the industry under which payments are customarily made by the insurance company directly to its insured or jointly to its insured and the restorer.

9. ZZZZ Best’s purported gross profit margins for its restoration business were greatly in excess of the normal profit margins for the restoration industry.

10. The internal controls at ZZZZ Best were grossly inadequate.

**Conclusion:** Compared to the first three corporate frauds, the ZZZZ Best Company fraud was simple and relatively easy to detect. It could have been detected by auditors if they had followed the SAS 99 procedures and only tried to conduct a face to face interview with the company’s customers, vendors as well as its creditors.

4. **Conclusion and Future Work**

In this paper, I documented SAS 99 procedures and four recent corporate frauds, and analyzed how or if SAS 99 could have been effective in detecting these frauds. Because the detailed audit documentation for each of these fraud cases was not available, I was not able to identify the details of the audit procedures that were or were not done by these companies’ external auditors. However, after careful analysis based on available information, I concluded that SAS 99, combined with other Statement of Auditing Standards issued by the Auditing Standard Board, could have been reasonably effective in detecting frauds, if followed by auditors who diligently exercise their due professional care.
As mentioned before, although SAS 99 is a set of effective standards intended to provide guidelines for external auditors to uncover fraud, it can also effectively help corporate management, internal auditors, as well as corporate employees to identify risk factors and implement effective internal controls to prevent fraud from happening in the first place. Take Tyco International as an example. If the board of directors was aware of the risk factors, such as the lavish life styles of its key employees, which could have indicated the possibilities of misappropriation of company assets, appropriate actions could have been taken to address the issue before the fraud got worse. So, in the future, it could be useful to identify or discuss how SAS 99 can be used by corporations or companies in preventing frauds, not just detecting frauds. After all, if fraud can be prevented before it happens, it is beneficial to both companies and our society.
Appendices

Appendix A: Changes in SAS 99 from SAS 82

- A dramatically increased emphasis on maintaining an attitude of professional skepticism.
- Increased discussion among engagement personal regarding fraud in the financial statements.
- Emphasis on obtaining more information regarding fraud risks.
- Increased inquiry and interaction with client's personnel on all levels and in all areas.
- Increased emphasis on designing audit procedures to identify fraud risks.
- Continuing attention to fraud risk factors and indicator throughout the audit.
- Expanded assessment and increased documentation.

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Appendix B: Risk factors

Risk factors relating to misstatements arising from fraudulent financial reporting:

Pressures
A. Financial stability or profitability is threatened by economic industry, or entity operating conditions, such as:
   - High degree of competition or market saturation, declining margins
   - High vulnerability to rapid changes, such as changes in technology, product obsolescence, or interest rates.
   - Significant declines in customer demand and increasing business failures in either the industry or overall economy
   - Operating losses making the threat of bankruptcy, foreclosure, or hostile takeover imminent
   - Recurring negative cash flows from operations while reporting earning and earnings growth
   - Rapid growth or unusual profitability especially compared to that of other companies in the same industry.
   - New accounting, statutory, or regulatory requirements.
B. Excessive pressure exists for management to meet the requirements or expectations of third parties due to the following:
   - Profitability or trend level expectations of investment analysts, institutional investors, significant creditors, or other external parities
   - Need to obtain additional debt or equity financing to stay competitive.
   - Marginal ability to meet exchange listing requirements or debt repayments or other debt covenant requirements

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<http://www.aicpa.org/antifraud/risk/38.htm>
Appendix B

- Perceived or real adverse effects of reporting poor financial results on significant pending transactions.

C. Management or the board of director's personal financial situation is threatened by the entity's financial performance arising from the following:
  - significant financial interests in the entity
  - significant portions of their compensation is related to the company's performance
  - personal guarantees of debts of the entity
  - Pressure to meet financial targets set up by the management or board of directors.

Opportunities

Opportunities to engage in fraudulent financial reporting that can arise from the following:

A. Significant related-party transaction not in the ordinary course of business or with related entities not audited or audited by another firm
  - Ability or power to dominate a certain industry that allow the company to involve in transactions that are not at arm's length
  - transaction that involve subjective judgments or uncertainties that are difficult to corroborate
  - Significant, unusual, or highly complex transactions
  - cross international board transactions
  - operations in tax-haven without clear business justification

B. Ineffective monitoring
  - A single person dominates management
  - Ineffective board of directors

C. Complex or unstable organizational structure
  - Difficult to identify the entities that have controlling interest in the entity
  - Organizational structure involving unusual legal entity
  - High turn over of senior management
Appendix B

D. Deficient internal control

- Inadequate monitoring of controls
- High turnover rates or employment of ineffective accounting or internal audit staff
- Ineffective accounting and information system

Rationalizations

Conditions that allow fraud perpetrators to rationalize their fraudulent activities:

- Ineffective communication, implementation, or enforcement of ethical standards
- Non-financial management excessively participate in selection of accounting principles or determine of significant estimates
- Known history of violations of security law and regulations
- Management has excessive interest in stock price and earnings
- Aggressive or unrealistic forecasts
- Management failing to correct known reportable condition
- An interest by management in employing inappropriate means to minimize reported earning for tax-motivated reasons.
- Management attempts to justify marginal or inappropriate accounting
- Frequent disputes with current or predecessor auditor
- Unreasonable demands on the auditor
- Limit auditor’s access to information or communication to audit committee.
- Management attempts to influence the scope of the auditor’s work.

Risk factors relating to misstatements arising from misappropriation of assets

Pressures

A. Personal financial obligations
B. Adverse relationships between the entity and employees
Appendix B

- Known or anticipated future layoffs
- Anticipated changes to compensation or benefit plan
- Rewards inconsistent with expectations

**Opportunities**

- Large amount of cash on hand or processed
- Small size, high value inventory items
- Easily convertible assets
- Fixed assets lacking identification of ownership

**C. Inadequate internal control over assets**

- Inadequate segregation of duties
- Inadequate management oversight
- Inadequate job applicant screening
- Inadequate recordkeeping
- Inadequate authorization
- Inadequate physical safeguard of assets
- Lack of reconciliations of assets
- Lack of timely and appropriate documentation of transactions
- Lack of mandatory vacations for employees performing key control functions
- Inadequate management understanding of information technology
- Inadequate access control over records

**Attitudes/rationalization**

Conditions that allow fraud perpetrators to rationalize their fraudulent activities of misappropriation of assets:

- Disregard for need for monitoring
- Disregard for internal control
- Behavior indicating displeasure or dissatisfaction with the company
- Change of lifestyle that many indicate assets have been misappropriated.
Appendix C: Modification of Nature, Timing and Extent of Audit Test

A. Example of modification of nature, timing, and extent of test in response to identified risks of material misstatements due to fraud

- Performing procedures at location on a surprise
- Requesting that inventories be counted at the end of the reporting period
- Making oral inquiries of major customers and suppliers in addition to written confirmation
- Performing substantive analytical procedures using disaggregated data
- Interviewing personnel involved in activities in areas where a risk has been identified
- Discussing with other independent auditors, if any, concerning the extent of work that needs to be performed

B. Examples of Responses to identified risks of misstatement arising from fraudulent financial reporting:

a. Revenue recognition
   - Performing substantive analytical procedures relating to revenue using disaggregated data
   - Confirming with customers certain relevant contract terms and the absence of side agreements
   - Inquiring of the entity’s sales and marketing personnel or in-house legal counsel regarding sales or shipments near the year end.
   - Inventory qualities

b. Examining inventory records
   - Count inventory at or near the end of reporting period
   - Perform additional procedures during the observation of the count

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Appendix C

- Using a specialist
- Test the reasonableness of the qualities
- Using computer-assisted audit techniques to further test the compilation of the inventory counts
- Management estimates
c. Supplement the audit evidence
  - Engage a specialist
  - Develop an independent estimate for comparisons
  - A retrospective review of similar management judgments and assumptions in prior periods.

C. Example of response to identifies risk or misstatement arising from misappropriations of assets.
  - Obtaining an understanding of the control
  - Testing the effectiveness of such control
  - Physical inspection of assets
  - Use of substantive analytical procedures
Appendix D: Responses to risk of management override of controls

A. Examining Journal entries and other adjustments
   - Obtain an understanding of the entities financial reporting
   - Identify and select journal entries and other adjustments for testing
   - Determine the timing of the test
   - Inquire of individuals involved in the financial reporting process

B. Reviewing accounting estimates for biases
   - Whether the estimates are reasonable
   - Review and compare the estimate with the prior year

C. Evaluating the business rationale for significant unusual transactions
   - Whether the transaction is overly complex
   - Whether there are discussions about the nature of such transaction with audit committee
   - Whether management is emphasis on the need for particular accounting treatment than other
   - Whether transactions involve unconsolidated related parties, especially SPEs.
   - Whether transactions involve previously unidentified related parties

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Appendix E\textsuperscript{11}: Evaluating Audit Evidence

Examples of condition may be identified during fieldwork that changes or support a judgment regarding the assessment of the risks:

A. Discrepancies in the accounting records
   - Transactions are not recorded in a complete or timely manner
   - Unsupported or unauthorized balances or transactions
   - Last-minute adjustments
   - Evidence of employee's access to systems and record inconsistent with their duties
   - Tips or complaints to the auditor about the alleged fraud

B. Conflicting or missing evidential matter including:
   - Missing document
   - Documents that have been altered
   - Unavailability of original documents
   - Significant unexplained items on reconciliations
   - Inconsistent, vague, or implausible responses from management or employees
   - Unusual discrepancies between the entities' records confirmation replies
   - Missing inventory or physical assets
   - Unavailable or missing electronic evidence
   - Inability to produce evidence of key systems development and program change

C. Problematic or unusual relationship between the auditor and the management
   - Denial of access to records facilities, certain employees, customers, vendors, or others
   - Undue time pressures imposed by management
   - Complaints by management

Appendix E

- Unusual delays by the entity in providing requested information
- Unwillingness to facilitate auditor access to key electronic files for testing
- Unusual delays in providing requested information
- Denial of access to key IT operations
- Unwillingness to add or revise disclosures in the financial statements