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We Learn from History: Earnings Management and Business Scandals in the Early of 2000s

Gerui (Grace) Kang*

Abstract

Many business scandals are related to earnings management/manipulations. The purpose for this study is to explore the indicators/signs, incentives of earning management and top accounting issues related to earnings manipulations. Firstly, this study summarizes the indicators/evidence and incentives of earnings management and what technique can be used to engage in earnings management and explores the possible reasons for the increased number of restatements in early of 2000s along with the effects of restatement on stock prices, restatement companies and investors. Then, this study reviews three earnings management cases to demonstrate how the indicators, incentives of earnings management and techniques used by management are observed in these cases. Finally, what we learn from these cases are discussed.

Keywords: business scandals, earnings manipulation, fraud, financial reporting audit, regulation.

I. INTRODUCTION

There is no clear consensus of the definition of earnings management (Dechow et al., 1996). Vinciguerra and O'Reilly-Allen (2004) suggest that earnings management may include "violations of GAAP" cases, in which management uses Non-GAAP accounting treatments to prepare fraudulent financial reporting and "Within GAAP" cases, in which management intentionally uses aggressive or conservative accounting treatments to hide true economic performance from investors and other stakeholders. In this paper, earnings management includes both "Within GAAP" and "violations GAAP" cases.

Earnings management is not a new issue. Many business scandals are related to earnings management/manipulations. Why did earnings management become a serious problem in the early 2000s? What would accounting regulators and accounting standard setters learn from these scandals? All of these are worthy of discussion. In this paper. Firstly, I present the possible indicator/evidence of the seriousness of earnings management. Secondly, I discuss the general incentives of earnings management and the top accounting issues related to earnings manipulation. Thirdly, I review three earning management cases. Finally, I discuss what lessons can learn from these cases and the implications of earnings management in accounting and auditing.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Evidences/Indicators of Earnings Management

2.1.1. The direct evidence/indicator of earnings management-financial statement restatement

The restatement of financial reports is seen as the proxy for fraud (Coffee, 2003). The number of restatements can be seen as the direct evidence or indicator of earnings management. Earnings management is not a new issue; however, it has become a very

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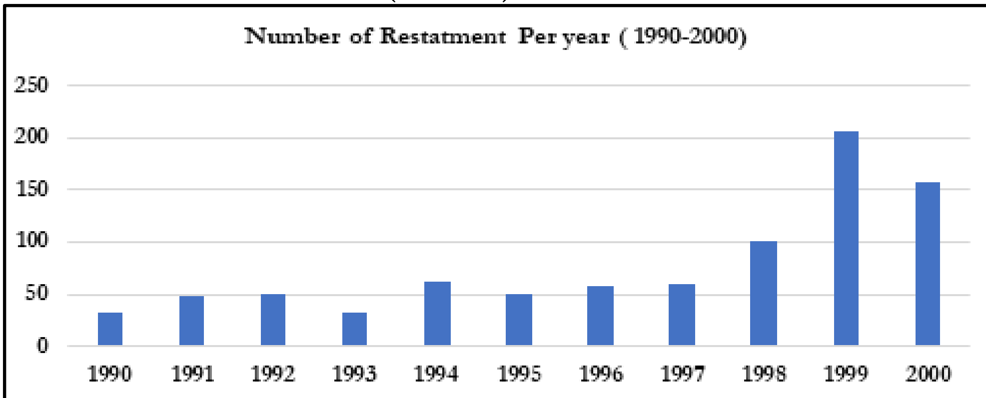
serious problem since 1997. The average numbers of restatements per year increased dramatically after 1997 (Moriarty & Livingston, 2001; p. 54; see Figure 1). The GAO study reported that the number of financial statement restatements rose from 92 in 1997 to 225 in 2001, and the average number of restatements each year was 174 (see Table 1). The data from the two studies indicates that earnings management has become more serious around 2000s.

Figure 1

Number of Restatement Per Year (1990-2000)



Data resource: Moriarty & Livingston (2001; p. 55).

Table 1

Restatement by Year 1997-2002

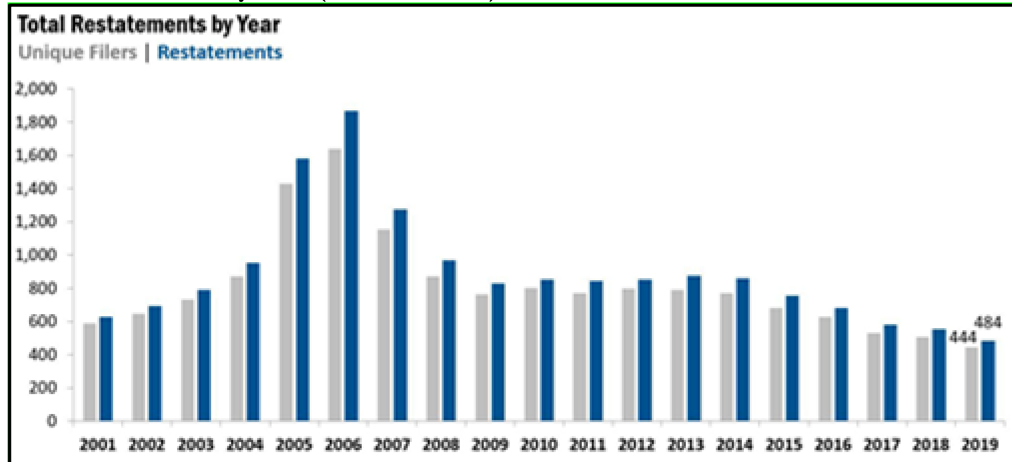
Year	Number of Restatement
1997	92
1998	102
1999	174
2000	201
2001	225
2002	250
Average/Year	**174**

Resource: GAO-03-138 (2002; p. 15).

In reaction of the occurrence of a series of business scandals such as Enron and WorldCom etc. in the early of 2000s, the U.S. Congress passed the Sarbanes–Oxley Act of 2002 (SOX) that mandates certain practice in accounting information reporting and sets requirements for corporate governance. Table 1 and Figure 1 present the picture of restatement of financial information before SOX. Does SOX change the picture dramatically? The answer is "no". The number of restatements does not go down significantly with the enaction of SOX.

In Figure 2, the summary of the total restatement by year from 2001 to 2019 is presented. The number of restatements per year maintains a high level (above 400 each year) for most of the years. The passage of SOX does not dramatically change the picture of restatements. However, it does not mean that SOX has no impact on earning quality and earning management. SEC and audit may catch more misstatements and that led to the big number of restatements.

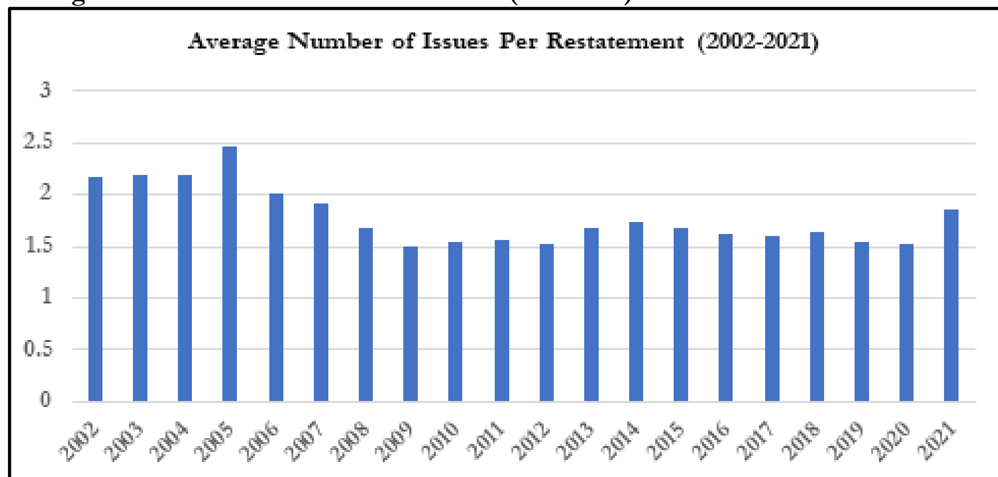
Figure 2
Total Restatement by Year (Year 2001-2019)



Resource: audit analytics cited by Murphy (2020); https://www.complianceweek.com/accounting-and-auditing/report-2019-restatements-at-19-year-low-revenue-still-top-issue/29421.article).

Companies are requested to restate their financial statements for many different reasons and issues. The number of issues per statement helps financial accounting information users understand the severity of the misstatements. The more issues per statement, the serious the misstatements. Figure 3 shows the average number of issues per restatement from year 2002 to 2021.

Figure 3
Average Number of Issues Per Restatement (2002-2021)



Data resource: audit analytics (2021).

Figures 2 and 3 present the picture of restatements from two different perspectives. Figure 2 provides the facts regarding the popularity of earnings management while Figure 3 shows the severity of misstatement. The facts indicate that earnings management is still a serious issue. What to do to mitigate earnings management is still a challenging task for capital market regulators, accounting professionals, and management.

2.1.2. Indirect evidence/indicators of earnings management

When companies have engaged in earnings management while the SEC or the external auditors has not yet detected it, is it possible to get evidence/signals of earnings management. Many academic studies provide methods to catch the evidence/signals of earnings management before earnings management is caught by the SEC.

1) Beat or meet analyst's forecasts

Bartov et al. (2002) found that firms meet or beat analysts' earnings forecasts may have a higher stock return than firms that do not meet or beat analysts' earnings forecasts. Meeting or beating analysts' earnings forecasts could be achieved through earnings management. When studying earnings management, people may pay closer attention to those firms meet or beat analysts' earning management than those do not. Hubbard (2023) found that as firms that just meet or beat forecasts are associated with higher levels of revenue manipulation.

2) Small positive earnings, low frequencies of small earnings decreases, and unusually high frequencies of small earnings increases

Burgstahler and Dichev (1997) found that unusually low frequencies of small earnings decreasing and unusually high frequencies of small earnings increasing are signs of earnings management to avoid earnings decreases; and unusually low frequencies of small losses and unusually high frequencies of small positive earnings are signs of earnings management to avoid loss. If there is no earnings management, the distributions of earnings changes and earnings levels should be relatively smooth (p. 102).

3) Lack of correlations between relevant accounting information (e.g., lack of association between cash flow from operation and earnings)

Magrath and Weld (2002) suggest that the warning signs of earning management may include: cash flows are not correlated to earnings, receivables are not related to revenues, allowance for doubtful accounts are not associated with receivables, reserves are not related to balance sheet items, abnormal acquisition reserves, and earnings that consistently and precisely meet analyst's expectations.

The findings of the above research suggest that there may be more earnings management cases than the number of restatements and earnings management may be more serious than what the number of restatements suggests.

2.2. Incentives of Earnings Management

Incentives of earnings management play significant roles in earnings management. Cuccia et al. (1995) and Nelson et al. (2002) found that when practitioners have an incentive to report aggressively, either more detailed and precise accounting standards or verbal based accounting standards cannot effectively reduce the aggressiveness of reporting. Healy and Wahlen (1999) suggest that there are three types of earnings management incentives: capital market motivations, contracting motivations and regulation motivations. Lev (2003) suggested that the general reasons for earnings manipulation are personal gain, continuation of investor/supplier support and satisfying contractual arrangements. Based on prior research, this study summarizes the primary incentives of earnings management as followings:

2.2.1. Income-smoothing

Income-smoothing hypothesis suggests that firms choose accounting treatment to make the reporting earnings "smooth" (i.e. minimize the fluctuation of reported earnings). When earnings are unusually high, managers will choose income-decreasing accounting treatments; when earnings are unusually low, managers will choose income-increasing actions (McNichols & Wilson, 1988). Income-smoothing is the main incentive to manage earnings before 1997 (Coffee, 2003). This incentive still motivates managers

to manage earnings after 1997, but it is not the leading motivation since then (Nelson et al., 2002).

2.2.2. Bonus hypothesis

Watts and Zimmerman (1986) postulated the "bonus hypothesis," which hypothesized that "managers of firms with bonus plans are more likely to choose accounting procedures that shift reported earnings from future periods to the current period. (p. 208)." It is very common for business to tie management compensation to their performance. Generally, earnings and stock prices are measures of management performance. In order to get more compensation, managers strive to improve earnings and that improves stock prices. When firms' earnings do not meet expectations, managers may boost earnings. Prior research indicates that earnings management is positively associated with manager's compensation (i.e. Leuz et al., 2002; cited by Lev, 2003). This hypothesis has received the most support (Dechow et al., 1996).

2.2.3. Capital market motivations

Investors and financial analysts use accounting information to predict firms' earnings and predict stock price. This fact creates an incentive for managers to manage/manipulate earnings to attract investors. Overstatement of earnings frequently occurs before initial public offers (i.e. Teoh et al., 1998a; cited by Healy & Wahlen, 1999), and stock acquisitions (Erichson & Wang, 1998; cited by Healy & Wahlen, 1999). Bartov et al. (2002) found that firms that meet or beat current analysts' earnings forecasts enjoy a higher stock return than firms that fail to meet analysts' forecasts.

2.2.4. Debt hypothesis

Watts and Zimmerman (1986) hypothesized that "the larger a firm's debt/equity ratio, the more likely the firm's manager is to select accounting procedures that shift reported earnings from future periods to the current period (p216)." This hypothesis has received significant support (Dechow et al., 1996).

Nelson et al. (2002) did a survey and found evidence about auditors' beliefs about managers' incentives for earnings management attempt. This study provides a thorough picture of management's motivation to manage earnings. Table 2 presents their findings.

Table 2
Incentives of Earnings Management

Panel A: Incentives identified as primary motivation for attempt	
Incentives identified as primary motivation for attempt	
	# of attempts
Related to stock market	
Analysts expectation	86
Stock price	29
Impending or new IPO or SEC	12
Other	23
Total	**150**
Related to contracting and cash flows	
Executive Compensation	
Bonuses/incentives	22
Board expectations	7
Total	**29**
Debt contract	27
Other	49
Total contracting/cash flows	**105**
Clarity (e.g., trying to better reflect economics, avoid confusion)	11
Total Incentives	**266**

To be continued Table 2 (Panel B)

Panel B: Particular numbers identified as primary motivation for attempt	
Incentives identified as primary motivation for attempt	
	# of attempts
Improve current income	101
Smoothing income	78
Improve future income	59
Other	11
Total	**249**
Grand Total, Panels A and B	**515**

Resource: Nelson et al. (2002; Table 5; p. 190-191).

Panel A lists the frequency with which various incentives were identified by auditors as a manager's primary motivation for an earnings management attempt.

Panel B lists the frequency with which various financial statement numbers or patterns were identified by auditors as a manager's primary motivation for an earnings management attempt.

The results of Nelson et al. (2002) suggests that incentives related to stock market, contracting and cash flows, current income improving, income-smoothing, and future income improving primarily motivate managers to manage earnings. In the next part, this study will discuss the top accounting issues related to restatements.

2.3. Top Accounting Issues Related to Restatements

Per GAO (2002) report, "revenue recognition was the most common reason for restatement, which is about 37.9 % of the 919 announced restatements from 1997 to 2002. Restatements due to revenue recognition include cases in which a firm recognizes revenue sooner or later than they should under GAAP (p. 19-20)." A cost or expense-related issue is the second most common reason for restatement. (GAO-03-138, 2002; p. 20). Table 3 presents the top 9 reasons that cause restatement.

Table 3

Restatements by Reason: 1997-June 2002

Reasons	**Percentage of Restatement (%)**
Revenue recognition (restatement due to improper revenue accounting)	37.9
Cost/expense (restatement due to improper cost accounting. i.e. improperly capitalizing expenditure; improper treatment of tax liabilities, income tax reserves or other tax-related items	15.7
Other (restatements due to inadequate loan-loss reserves, delinquent loans, loan write-offs, or improper accounting for bad loans and restatements due to fraud, or accounting irregularities that were left unspecified)	14.1
Restructuring/assets/inventory (restatements due to asset impairment, goodwill, timing of asset write-downs, restructuring activity and inventory valuation etc.)	8.9
Acquisition/merger (restatements due to wrong accounting method was used or losses or gains were understated or overstated. This does not include restatements due to IP R&D)	5.9
Securities-related (restatements due to improper accounting for derivatives, warrants, stock options and other convertible securities)	5.4
Reclassification (restatements due to improprieties such as debt payments being classified as investments)	5.1
IPR&D	3.6
Related-party transactions	3.0

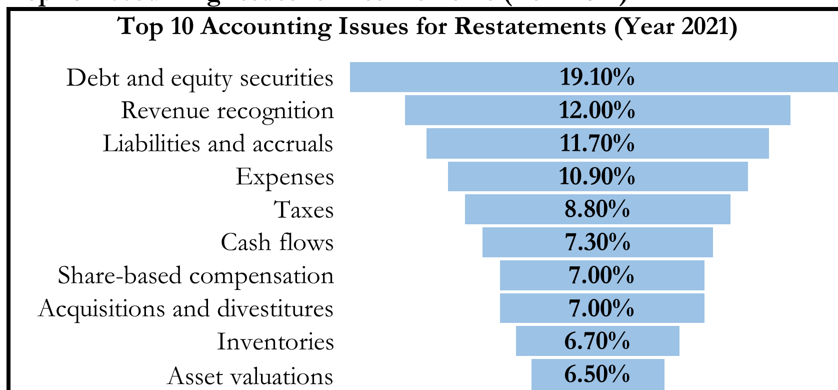
Resource: GAO-03-138 (2002; p. 21-22).

Moriarty and Livingston (2001) found similar results. They found that "the underlying reasons for restatements are revenue recognition, cost, revenue and cost, loan loss, acquisition, in-process, research and development (IP R&D), reclassification, bookkeeping error, others and unknown (p. 54)." Revenues recognition is the leading reason for earnings management and restatement due to this issue provides 360 cases, which is about 33% of the all restatement cases (1,080) from 1977 to 2000. Moriarty and Philip (2001) also provide 6 common themes for revenue restatement:
(1) "Sales contingencies not disclosed to accounting or management
(2) Sales booked before delivery completed
(3) Significant rights of return existed
(4) Software revenue recognized before underlying services were performed
(5) False sales agreements and documentation
(6) Bill-and-hold sales not deferred (p. 55)."

In the recent years, the list of top accounting issues related to restatement has sightly changed. Revenue recognition and expense are not the top 2 issues anymore although they are still in the top 10 lists.

Audit analytics 2021 summarizes the Top 10 issues related to restatement showing in Figure 4.

Figure 4
Top 10 Accounting Issues for Restatements (Year 2021)



The U.S. Financial Accounting Standard Board (FASB) has revised and updated the revenue recognition in year 2018 and the lease accounting standards in year 2019. The new lease and revenue accounting standards seemly work. Revenue and expense issues are still in the top 10 list, but they do not occupy the top two positions like previously. Academic studies support this observation, generally. For example, Hubbard (2023) conducted a comprehensive study to examine the effect of the new revenue recognition standard (ASC 606) on earnings management. The findings of this study suggest that the implementation of ASC 606 significantly changed revenue recognition practices by increasing the level of discretion in revenue recognition and firm characteristics impact management's choices to manage revenue.

Management's choice to manage earnings can be impacted by many factors. The imperfection inheres in the accounting standards, the motives of the management to engage in earnings manipulation, whether the company has a sound internal control and corporate governance, and whether the capital market has an effectives regulation etc. all impact whether management's earning management discretion and practice. In the next section, I will discuss the reasons for the increase of restatements and the impact of restatements on various users.

2.4. Impacts of Restatement on Various Users' Groups

Due to the occurrence of accounting scandals frequently in the early 2000s, the SEC, independent auditors, and companies themselves devoted more attention to misstatement issues and, to some extent, this may have caused the increased number of restatements. Coffee (2003) provided two explanations for the increasing "accounting irregularity" cases around year 2000. The first is the deterrence explanation and the second is the irrational market story. The deterrence explanation postulates that the decreased costs of legal liability and increased benefits of being acquiescent caused auditors do not play their watchdog role. A series of the Supreme Court's decisions and legislative Acts in 1990s significantly decreased auditors' legal liabilities in securities fraud. However, simultaneously, the benefits of being acquiescent increased rapidly. This may explain why external auditors did not play their roles. The second explanation is "the irrational market story" explanation. Investors tended to use heuristic judgment rather than rely on financial accounting information and auditor's opinion to make investment decision.

Offering stock options to key employees without booking stock options expense could be another reason. In the 1990s, with the booming in the Internet industry, more and more high-tech companies offered stock options to their key employees, a fact overlooked by non-professional investors. Profit from exercising options motivated key employees to take efforts to manage earnings up, which mislead and attracted investors to buy their stocks, and thus pushed their stock prices up.

In response to the above criticism, the U.S Congress passed SOX, in which management's legal responsibilities, external auditor's roles, corporate governance are tightly defined and mandated, and FASB updated the relevant accounting standards regarding stock-based compensation, in which stock-based compensation is measured per fair market value and treated as business expense.

Earnings management affects stock price, market capitalization, and investors' confidence. Firstly, "the stock prices of the restating publicly traded companies decreased by 10% in the three trading days surrounding the initial announcement of a restatement and in total, these companies lost $100 billion in market capitalization (GAO-03-138, 2002; p. 24)." Secondly, the increased number of financial restatements caused restatement companies losing billions of dollars in market capitalization in a short time period surrounding a restatement announcement. In particular, restatement involving revenue recognition caused relatively greater losses (GAO-03-138, 2002; p. 25). This study also found that restatements may have a longer-term effect on the market capitalization of these companies. Restatement increases the cost of capital for these firms. Thirdly, restatements negatively affect investors' confidence. "According to UBS/Gallup survey-based index, as of June 2002, investors' confidence decreased greatly and it was even lower than the period just after September 11, 2001(GAO-03-138, 2002; p. 32)." Investors' confidence is the most important to the capital market. If investors do not have confidence in the stock market, they would not be willing to make investments.

With the enaction of SOX, more and more financial restatements are caught and thus the number of restatements increased dramatically (GAO-06-678, 2006). Restatements have a negative impact on investor's confidence, generally. Cianci et al. (2019) "find that pre-restatement managerial reputation and the announcement of managerial corrective actions jointly influence investors' managerial fraud prevention assessments, which mediate their trust in management. These trust perceptions in turn affect investors' investment" (p. 297). How to rebuild investor's confidence following restatements is a

critical issue for management to consider and fix. In the next section, I will review three earnings management cases occurred in the early of 2000s and then discuss what we could learn from the history.

III. THREE EARNING MANAGEMENT CASES

3.1. Enron Corporation

Enron Corporation was a NYSE listed company. It provided products and services related to natural gas, electricity, and communications to wholesalers and retailers (GAO-03-138, 2002). It was the seventh largest firm in the U.S. and its gross revenue was over $100 billion at the end of year 2000 (Harris & Kramer, 2003). Enron continually reported "great accounting numbers" from 1997 to the second quarter of 2001. However, on October 16, 2001, Enron suddenly announced a net loss of $618 million for the third quarter of 2001. On November 2001, Enron filed a further restatement of its financial statements for the period from 1997 to 2001. On December 2, 2001, Enron and 13 of its subsidiaries filed for Chapter 11 bankruptcy protection.

Enron had a variety of SPEs (special purpose entity). The most notable are JEDI, Chewco, and LJM (including LJM1 and LJM2). Enron and California public employees' retirement system (Calpers) established JEDI in 1993. Chewco, created by the CFO of Enron in 1997, bought out the interest of Calpers investment in JEDI, and therefore, Chewco was a related party of Enron that invested in JEDI. JEDI was also one of Enron's SPEs (GAO-03-138, 2002).

In November 1997, Enron began including Chewco' activities into its consolidated financial reports, but it did not include JEDI' activities in its consolidated financial reports until the first quarter of 2001. GAAP requires that an outside investor must have an equity investment in at least 3% of the SPE's total capital for the SPE to be viewed as separate from the sponsoring organization. Enron alleged that Chewco owned more than 3% of JEDI's interests, and therefore, it should not include JEDI's financial activities in its consolidated financial reports from November 1997. However, Chewco was NOT an outside investor but a related party of Enron. Enron should include the gains or losses of both Chewco and JEDI' financial activities in its consolidated financial reports since November 1997. However, it did not do so. LJM1 was a wholly owned subsidiary of Enron. Enron should include LJMI' financial activities in its consolidated financial statements beginning in 1999, however, it did not do so either (GAO-03-138, 2002). Without including the losses from these related parties, Enron overstated the consolidated net earnings dramatically. When Enron include losses from its subsidiaries and restated its financial reports from 1997 to 2001, its earnings greatly decreased.

3.2. Xerox Corporation

Xerox Corporation produced hardware, software, services and business solutions products. On April 11, 2002, The SEC filed suit against Xerox Corporation. The SEC alleged that "in order to meet or beat Wall Street expectations, Xerox used a variety of undisclosed accounting methods, most of which violated generally accepted accounting principles (GAAP), to accelerate the company's recognition of equipment revenue by over $3 billion and increased its pre-tax earnings by about $1.5 billion (SEC, 2002-52; p. 1)."

On June 16, 2000, Xerox disclosed its Mexican business publicly. On June 22, 2000, the SEC started to investigate the accounting treatments related to Xerox's operation in Mexico. On May 31, 2001, Xerox restated its financial reports for the years 1998 and 1999. On April 1, 2002, per the SEC call of restatement, Xerox restated its

consolidated financial reports again for the year 1997, 1998, 1999, and 2000 (GAO-03-138, 2002).

Restatements were primarily due to revenue recognition of leasing arrangement. “Xerox’s revenue from customer leases had 3 components: the revenue of the lease equipment; revenue received for servicing the equipment; and financing revenue received on loans to its lessees. Under GAAP, for the sales type leases, the revenue from the equipment should be recognized at the beginning of the lease, but revenue from servicing and financing should be recognized over the life of the entire lease. Xerox used its favored accounting treatment, which violated the GAAP and shifted most of lease revenue to the equipment and that it could recognize these revenues at the beginning of the lease (SEC, 02-CV-2780, p. 2).”

Xerox also used its preferred accounting treatment to artificially improve its operating revenue by $ 1 billion. “It used “cushion” or “cookie jar” reserves to recognize gains from a one-time event. This is an improper accounting treatment and it also failed to disclose these accounting treatments (SEC, 02-CV-2780, p. 2).”

Xerox improperly recognized leasing revenue in the current accounting period. These revenues should be recognized in the future. Per these improper accounting actions, Xerox improved its revenue by $400 million in the sales of leases in the current accounting period. Xerox should also disclose but it did not disclose the impact of its improper accounting treatments on current income (SEC, 02-CV-2780, p. 2).

3.3. Critical Path, Inc.

Critical Path, Inc was founded in 1997. Its primary revenue sources were from providing messaging, software products and related service. In 1998, Critical Path had revenue of $879,000 and reported a net loss by $11.4 million. It went public in 1999. Although Critical Path’s reported revenue continually increased and its reported revenues continually beat revenue forecasts in 1999 and the first two quarters in 2000, it did not make a profit in the first 4 years. Its CEO predicted that it would report a profit for the first time in the fourth quarter of 2000 (SEC, 3-1069; p2).

“In February 2002, the SEC found that in the third and fourth quarters of 2000, Critical Path materially overstated its revenue and materially understated its costs to announce a profit at the end of 2000 (SEC, 3-1069; p2).” In the third quarter of 2000, Critical Path and a software company signed a barter transaction contract. Per this contract, the software company would purchase a royalty obligation for $2.8 million and $240,000 of software from critical path. Meanwhile critical path would purchase about $4 millions of software and service from this software company. According to APB No.29, the basic accounting principle of non-monetary transactions is based on the fair values of the assets or services exchanged. A gain or loss should be recognized based on the difference between the fair value of the asset traded-off and its carrying value (Steinberg, 1999). Critical path recorded $3.09 millions of sales revenue for this barter transaction, although it did not establish the fair value of either the software it received from or the software it sent to the software company, and it did not determine whether the value reflected critical path’s expected use of the software. Per the GAAP, this is not allowed (SEC, 3-10693; p. 3).

Another misstatement was due to revenue recognition for a $536,000 contact with an Internet Portal company. Critical path’s president extended the payment terms beyond the company’s payment standards. The president put the extension in a side letter and did not inform the finance department. Under the GAAP, extended payment can prevent a sale from being immediately recognized as revenue. The Software Revenue Recognition

Principles generally require that software revenue should be recognized when the following criteria (SOP 97-2) are met: "(1) persuasive evidence of an arrangement exists; (2) the software has been delivered; and (3) Fixed or determinable fees; and (4) collectability is probable (SEC, 3-10693; p8)." Since the finance department was not informed about the extension of the payment terms, accountants booked revenue based on the original payment terms. This violation of the GAAP made critical path misstate revenue by $ 536,000 (SEC, 3-10693, P3). In the third quarter of 2000, critical path recognized revenue from three software license transactions at a total of $1.395 million. The revenue from these 3 software license transactions should be recognized at the first quarter of 2001 per SOP 97-2 (SEC, 3-10693; P3).

The techniques used in the above three cases were not uncommon. However, the auditors and the boards of directors of the three companies did not detect their earnings management problems at the first place. Why did not the external auditors and the boards of directors play their roles in these cases? What do we learn from these cases? The next section of this paper will discuss these issues and the implications of earnings management on accounting and auditing.

IV. WHAT DO WE LEARN FROM THESE CASES?

These cases are "old". But they are not irrelevant. History repeats itself. Human beings tend to repeat mistakes. For example, in 1998, waste management Inc. a publicly traded US waste management company, was found to engage in earnings manipulation by reporting over $1.7 billion faked earning. The company's owner and former CEO, Dean L Buntrock, was found guilty, along with several other top executives. Waster Management Inc's external auditors, Arthur Anderson, was fined over $7 million. Waste management settled shareholder's lawsuit for $457 million (Corporate Finance Institute, 2023). Management and external auditors did not learn a lesson from this accounting scandal, however. Shortly after, a few business "Giants" such as Enron and WorldCom engaged in earnings manipulations and Author Anderson, the external auditor, was caught again for failing to play its "watchdog" role in the accounting scandals in the early 2000s. The former top executives of these companies were sentenced and put into prisons, the companies were bankrupted, employees lost jobs and retirement benefits, millions of investors suffered from losses. In response of the occurrence of the series of accounting scandals, the U.S. Congress passed SOX 2002 to hold the top executives responsible for the accounting information provided to the public and set a high standard for business to maintain an efficient Internal Control and corporate governance system. After SOX was enacted, accounting scandals continually occurred although not as popular as previously. In 2008, Lehman Brothers hid over $50 billion loan and disguised the loans as sales. Bernie Madoff engaged in financial fraud and caused investors lose over 64.8 billion. In 2022, the SEC announced that Rollins Inc. agreed to pay $8 million to settle charges that it engaged in improper accounting practices in order to boost its publicly-reported quarterly earnings per share (EPS) to meet research analysts' consensus estimates" (The Securities & Exchange Commission, 2022). The SEC found that Rollins reduced it accounting reserves improperly to booster its quarter EPS under the order of the CFO, Paul Edward Northen, from 2016 through 2018. The list of accounting scandals will not be stopped here. More scandals could occur in the future. It is important for us to learn from our mistakes.

4.1. Accounting

What do we learn from these cases? Besides the failure of management, external auditors, and corporate governance, the U.S. accounting standard setters are responsible

too. First, the U.S. GAAP is believed to be more rules-based and it provides more detailed and precise guidance for management and may have enabled them to structure transactions to achieve technical compliance while evading the intent of the standard. The cases of earnings management suggested that detailed accounting rules cannot eliminate the earnings management problem as accounting standard setters intended/thought. On the contrary, managers tended to exploit highly technical accounting rules to achieve their earnings management goals. The precise, detailed, and complex accounting instructions provide opportunities to smart and experienced accountants to abuse accounting rules without being detected and/or challenged by regulators and investors (Tweedie, 2002; Kang et al., 2023). Andy Fastow, the former Chief Financial Officer of Enron, believed that they had followed GAAP exactly and did not violate any rules and that they were not guilty. In fact, external auditors and the board of directors never questioned whether Enron's financial statements accurately and faithfully represented the financial position of the company (Kang et al., 2023). Accounting researchers have criticized a rules-based accounting practice and believed that it may create loopholes to get around the rules while making auditors and other "watchdogs" difficult to challenge loopholes that comply with GAAP (Kang et al., 2023).

FASB has been working with the International Accounting Standard Board (IASB) on several projects that intend to reform U.S. GAAP and overcome the weakness of it. However, FASB is not willing to adopt IFRS and make U.S. GAAP more principle-based accounting standards (Kang et al., 2023).

Second, the U.S GAAP still included a lot of bright-lines in the current accounting standards. The 3% bright- line had been removed from the SPE accounting standard and the relevant accounting standard is revised after Enron. However, the bright lines do not go away from the U.S GAAP because American accounting partitioners prefer "precise" over "vague" guidance. Do Bright- lines cause problems? Kunda (1990)'s motivated reasoning theory suggested that when people have directional and accuracy goals, they will take effort to reach these goals and to persuade the others that the means they used to reach these goals are reasonable. This theory can explain why it is so easy for bright lines to attract management to meet these lines. Nelson (2003) believes that precise standards, in particular, numerical thresholds can create targets that managers use to achieve particular accounting objectives. Levitt (1998) and Kang et al. (2023) argued that bright-lines and the concept of materiality should not be used in accounting systems.

The third problem in the current accounting system is that GAAP often provides several alternatives and exceptions for an accounting affair. Bratton (2003) argued that this provides opportunities to practitioners to take advantage of GAAP's rule structure when they design aggressive treatments. Practitioners may rely on inappropriate accounting actions but are still within GAAP to boost revenue and reduce expense. The proposal of adopting a principle-based accounting system may overcome the weaknesses of the current rule-based accounting, however, if there is not a strong accounting regulation system, effective auditing committee and corporation governance and if there is not an effective way to minimize the incentives and motivations of earnings management, neither rule-based accounting nor principle based accounting cannot eliminate earning management, because it is always necessary for managers and accounting practitioners to exercise subjective judgment to select accounting treatments under any accounting standards (Kang et al., 2023).

4.2. Auditing

"Corporate governance is the process by which a corporation's management is held accountable to its shareholders (Harris & Kramer, 2002; p. 1)." However, when looking at the restatement cases, the oversight of corporate governance was missing. The board of directors and the auditing committees were silent in these cases. The external auditors did not play their gatekeeper role in these cases. For example, when I read the audit report of WorldCom of fiscal year 2001 prepared by Andersen, I found that the audit report alleged that the balance sheet and the income statements were fairly presented in accordance with accounting principles generally accepted in the United States and all accounting items were properly booked (Andersen Report to the Audit Committee Year Ended December 31, 2001 WorldCom. www.findlaw.com). However, on June 25, 2002, WorldCom released its intention to restate its 2001 and the first quarter 2002 financial statement (http://www.sec.gov/news/wcreponse.htm). CGA (2002) critiqued that the inefficient audit committee is responsible for failing to detect Enron's problem at the first place. The members of Enron's audit committee were inexperienced and they did not have the ability to find out Enron's irregularities. CGA (2002) suggests that auditors should build a strong relationship with the audit committee and the audit committee should be composed of competent individuals who are able to capture problems in financial information. Sarbanes-Oxley act stresses the composition, independence, and authority of the audit committee. This would be helpful to detect and control earnings management internally. However, audit committee alone cannot fix all problems. Many factors impact management's earning management. For example, a country's economic, social, and political environment, institutional structure in the company's home-country, corporate governance characteristics, and management's compensation structure etc. may interact and then impact earnings management (Beuselinck et al., 2020). The detection and mitigation of earnings management and protecting investor's confidence is a systematic project. Capital market regulator, accounting standard setters, auditors, management, and investors need to work together to build a healthy and sound stock market.

V. CONCLUSION

The pervasiveness of earnings management around the year 2000 greatly hurt investors' confidence and restatement companies themselves. Investor confidence is the foundation of the capital market. It is the most important to protect investors' confidence in the capital market. First, the capital market regulators and accounting standard setters should consider how to minimize incentives for earnings management via stock market and accounting regulations and standard setting. Expensing equity-based compensation is a good start. More actions needed to take to reduce management's motives for earning management. Second, revenue recognition and cost/expense are the leading issues that cause more than 20% of the numbers of restatement. This evidence suggests that there may be problems in the implementation of revenue recognition and cost/expense standards. Accounting standard setters should consider how to reform the accounting conceptual framework and how to effectively control earnings management related to these issues. After working with the International Accounting Standard Board for years, FASB released the new converged revenue recognition standard, effective from January 2018 for public companies and the new lease accounting standards, effective from January 2019 for public companies. Whether the new revenue recognition and lease accounting standards can effectively improve the quality of accounting information and mitigate earnings management may be observed gradually in the future. Third, the

oversight of auditors and corporate governance was missing in most of earnings management cases. Sarbanes Oxley (SOX) may help to reconstruct accounting regulations and improve the oversight of auditors and corporate governance. However, the effectiveness of corporate governance is greatly influenced by corporate culture and climate and management's leaderships. Beuselinck et al. (2020) suggest that corporate governance characteristics of multinational corporations and the institutional structure in their home-country influence earnings management. The incentives and opportunities of engagement of earnings manipulation for the parent companies can be contagious and that impact the subsidiary-level financial reporting quality. How corporate governance is influenced by corporate culture and climate and management's leaderships could be the research questions for future research.

REFERENCES

Audit Analytics an Ideagen Solution. (2022, May). *2021 financial restatements a twenty-one-year review.* https://www.auditanalytics.com/doc/2021_Financial_Restatements_A_Twenty-One-Year_Review.pdf.

Bartov, E., Givoly, D., & Hayn, C. (2002). The rewards to meeting or beating earnings expectations. *Journal of Accounting & Economics*, *33*(2), 173-204.

Beuselinck, C., Deloof, M., & Vanstraelen, A. (2020). Earnings management contagion in multinational corporations. *The Accounting Review, 94*(4), 45-76. Https://doi.org/10.2308/accr-52274.

Bratton, W. W. (2003). *Enron, Sarbanes-Oxley, and accounting: Rules versus principles versus rents*. Working Paper No. 064. The George Washington Law School.

Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting* & *Economics*, *24*(1),99-126.

Cianci, A., M., Clor-Proell, S., M., & Kaplan, S., E., (2019). How do investors respond to restatements? Repairing trust through managerial reputation and the announcement of corrective actions. *Journal of Business Ethics*, *158*(2), 297-312.

Coffee, J. C. (2003). *What caused Enron? A capsule social and economic history of the 1990's*. Working Paper No.214; Columbia Law School; New York.

Corporate Finance Institute. (2023). *Top accounting scandals.* https://corporatefinanceinstitute.com/resources/accounting/top-accounting-scandals/.

Cuccia, A. D., Hackenbrack, K., & Nelson, M. W. (1995). The ability of professional standards to mitigate aggressive reporting. *The Accounting Review*, *70*(2), 227-248.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firm subject to enforcement actions by the SEC. *Contemporary Accounting Research*, *13*(1), 1-36.

GAO-03-138 (General Accounting Office, US Congress). (2002, October 4). *Financial statement restatements. Trends, market impacts, regulatory responses, and remaining challenges*. https://www.gao.gov/products/gao-03-138.

GAO-06-678 (General Accounting Office, US Congress). (2006, July 24). *Financial restatements: Update of public company trends, market impacts, and regulatory enforcement activities*. https://www.gao.gov/products/gao-06-678.

Harris, A. B., & Kramer, A. D. (2003, June). *Corporate governance: Pre-Enron, post-Enron* (pp. 1-35). https://growthorientedsustainableentrepreneurship.wordpress.com/wp-content/uploads/2016/07/gv-corporate-governance-pre-enron-post-enron.pdf.

Healy, P. M., & Wahlen, J. M. (1999, December). A review of the earnings management literature and its implications for standard setting. *Accounting Horizon*, *13,* 365-383. http://dx.doi.org/10.2308/acch.1999.13.4.365.

Hubbard, B. G. (2023). *The impact of ASC 606 and firm characteristics on revenue manipulation*. ProQuest Dissertations Publishing, Purdue University. https://docs.lib.purdue.edu/dissertations/AAI30499155/.

Kang, G., Raquel, T. S., & Shin, M. (2023). An exploratory study of international financial reporting standards (IFRS) from a Christian perspective. *Journal of Biblical Integration of Business*, *26*(1), 35-46.

Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin, 108*(3), 480-498.

Lev, B. (2003). Corporate earnings: Facts and fiction. *Journal of Economic Perspectives*, *17*(2), 27-50.

Levitt, A. (1998). *The "number games"*. http://www.sec.gov/news/speech/speecharchive/1998/spch220.txt.

Magrath, L., & Weld, L. G. (2002). Abusive earnings management and early warning signs. *The CPA Journal*, *72*(8), 50-55. https://www.researchgate.net/publication/261357290_Earnings_Management.

McNichols, M., & Wilson, P. (1988). Earnings management evidence from provision for bad debts. *Journal of Accounting Research*, *26*, 1-31.

Moriarty, G. B., & Livingston, P. B. (2001, July/August). Quantitative measure of the quality of financial reporting. *Financial Executive*, *17*, 53-56.

Murphy, M. L. (2020). Report: 2019 restatements at 19-year low; revenue still top issue. *Accounting & Auditing*. https://www.complianceweek.com/accounting-and-auditing/report-2019-restatements-at-19-year-low-revenue-still-top-issue/29421. article.

Nelson, M. W. (2003). Behavioral evidence on the effects of principles- and rules-based standards. *Accounting Horizons*, *17*(1), 91-104.

Nelson, M. W., Elliot, J. A., & Tarpley, R. L. (2002). Evidence from auditors about manager' and auditors' earnings management decision. *The Accounting Review*, *77*, 175-202.

The Securities & Exchange Commission (SEC) 02-CV-2780. (2002, April 11). *Securities and exchange vommission V. Xerox corporation, civil action no. 02-CV-2780 (DLC) (S.D.N.Y)*. http://www.sec.gov/litigation/litreleases/1r17465.htm.

The Securities & Exchange Commission (SEC). (2002). Administrative proceeding file no. 3-10693. http://www.sec.gov/litigation/admin/34-45393.htm

The Securities & Exchange Commission (SEC). (2002-52). *Xerox settles SEC enforcement action charging company with fraud*. http://www.sec.gov/news/headlines/xeroxsettles.htm.

The Securities & Exchange Commission (SEC). (2022). *Atlanta-based pest control company, former CFO charged with improper earnings management*. https://www.sec.gov/news/press-release/2022-64.

Vinciguerra, B., & O'Reilly-Allen, M. (2004, January). An examination of factors influencing managers' and auditors' assessments of the appropriateness of an accounting treatment and earnings management intentions. *American Business Review*, *22*(1), 78-87.

Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Englewood Cliffs, New Jersey: Prentice-Hall, Inv.