

An Investigation of Earnings Management Practices: Examining Generally Accepted Accounting Principles

Nasrollah Ahadiat

Hassan Hefzi

Accounting Department
College of Business Administration
California State Polytechnic University
Pomona, CA 91768, USA

Abstract

Earnings management is the act of intentional manipulation of the corporate financial data with the intent to achieve a specific objective. The purpose of this study is to examine the perceptions of business professionals about specific cases of earnings management practices and evaluate the impact of such practices on the public's perceptions. The data for this research was collected by using a questionnaire developed by starting with the examples of earnings management practices noted by auditors and expanding on that using the work of previous researchers. The results of this research add to the existing body of knowledge by identifying management's decisions that might be well within generally acceptable accounting principles and yet considered unacceptable by the public or business professionals.

Introduction

Earnings management is the act of intentional manipulation of the corporate financial data with the intent to achieve a specific objective. Specific objectives may include market incentives, contracting incentives, and regulatory incentives (Spear, 2007). Market incentives may be triggered by one of two motivations either to manage earnings prior to initial public offerings and management buyouts, or to manage earnings in order to smooth earnings or to meet the expectations of financial analysts. Contracting incentives may be performed for the purpose of avoiding violation of lending covenants that require certain accounting numbers, as well as managing earnings to optimize earnings based management compensations. Regulatory incentives refer to those activities aimed to satisfy certain industry regulations, to reduce the risk of political exposure, and to take advantage of certain governmental benefits and grants (Belski, et. al., 2008).

Because of its potential to distort reported corporate results which may lead to wrong economic decisions, earnings management and earnings quality are often used as interchangeable concepts. It is generally believed that the higher the use of earnings management the lower the quality of earnings (Healy and Wahlen, 1999; Makar, et. al., 2010). This is perhaps why corporate stakeholders are concerned about the phenomenon and may view certain earnings management practices unethical. The purpose of this study is (1), to examine the perceptions of business professionals about specific cases of earnings management practices. (2), to distinguish between the accounting and operating decisions leading to earnings management. (3), to test the results using statistical analysis to compare the responses by significant demographic attributes and draw inferences, and finally (4), to present the findings, draw conclusions and evaluate the impact of such practices on the public perceptions.

How Management Manipulates Earnings

Earnings management is primarily accomplished through accounting transactions that are designed to achieve desired earnings level. Prior research suggests that managers have both personal and business motivations to display impressive or at the very least satisfactory performance in their reports on a consistent basis (DeFond and Park, 1997; Greenfield et, al, 2008). However, due to a variety of reasons (e.g., changes in the economy such as recession and increased competitions), sustainability of such a performance may nearly be impossible. In these circumstances managers may decide to use their discretions in the application of accounting principles and procedures which can result in altering the business operations to a more favorable outcome?

Although Generally Accepted Accounting Principles (GAAP) offer managers a great deal of discretion in the choices they may make in financial reporting, the expectation is that management will apply professional judgment and integrity in their selection of the standards that best fit the firm's financial condition. Prior research suggests that GAAP leads to earnings management in two ways; the amounts of revenue to recognize and how much expenses to record during a given accounting period (Han and Tan, 2010). GAAP provides the rules which allow management to use judgment in structuring transactions (Kaplan, 2001). Although such transactions are considered earnings management practices, they are completely within the realms of GAAP. These activities may be classified into a change in accounting principle and a change in accounting estimate, both of which are within the boundaries of the generally acceptable accounting principles (GAAP), (herein called Accounting Decisions). Accounting transactions can also be used to allow entities to report revenue that has not yet been earned or expenses that have not been incurred. These latter practices are not sanctioned by GAAP and considered violations of the accounting standards.

A third approach that may be used to manipulate the accounting results is the decision to change the timing of certain transactions such as a delay in the replacement of manufacturing facilities, (herein called Operating Decisions). Management can achieve some earnings objectives through these operating decisions. For example, it can manipulate revenue by giving salespersons' additional incentives and can manipulate expenses by delaying major repairs and maintenance. While most of these manipulations are generally legal, corporate investors as well as other users may have a different judgment about the ethicality of such actions. Also, a common criticism of them is that they reduce transparency by obscuring the "true" earnings of the company. Significant harm can be done to all stakeholders if managers choose to engage in fraudulent financial reporting. What really motivates managers to resort to the use of such activities may be exactly the same as the Accounting Decisions. Although earnings management practices are not new to the accounting profession, strategies for implementing these actions are well-kept secrets among corporate executives. There is a very thin line that separates earnings management and management fraud and managers are reluctant to even discuss the linking of these two concepts (Brown, 1999; Makar, et. al., 2010). The negative intentions and consequences of earnings management seem to support the SEC's call to identify and deter this practice (Levitt, 1998). While, GAAP provides guidelines for the preparation of financial statements, it does not offer any detailed or specific directions concerning when earnings management may cross ethical boundaries.

Background

Over the past two decades earnings management has been the subject of great debate. While many researchers have looked into the apparent symptoms in an attempt to discover how companies manage earnings (Barua, et. al., 2010; Jackson, et. al., 2010; Chang, et. al., 2011), relatively few have examined the mindset that leads to or the consequences of resorting to the earnings management practices (Merchant and Rockness, 1994; Kaplan, 2001, Belski, et. al., 2002; Kaplan, et. al., 2007). In a study by Belski, et. al., (2002), the authors examined individuals' ethical judgments of actions related to specific earnings management activities. The study contained two independent variables: earnings management intent and manner of manipulation. The subjects were business school students who were asked to read and answer a number of questions on each one of the six vignettes which were comprised of three situations where management behaves in a strictly opportunistic manner and three situations where management behaved in a manner consistent with firm value and efficient contracting. A number of other important independent variables were excluded in this study. These were the materiality of the manipulation, direction of the manipulation, period of effect, GAAP consistency, and user group. The objective of this study was to examine how the intent and the type of manipulation could affect individuals' view of the ethicality of manager's action in each of the earnings management related vignettes.

The experiment was conducted using business school students. Two main groups were used: (1) Junior and senior Management and Finance majors who had taken a minimum of three accounting courses, and (2) first year business school and non-business students with little or no accounting background. All students were from one university and included 147 usable responses. The results of the study suggested that students thought earnings management that was used to help the company was more ethical than earnings management actions taken with more personal and selfish motives. The study also found out that the method of earnings manipulations was also important. In another study, Kaplan, et. al., (2007), asked 159 evening MBA students to assume the role of a manager in a company and respond to a scenario in which another manager has the opportunity to apply earnings management.

Participants assessed the morality of the manager's actions, and indicated whether they would change their judgments about the manager's reputation. The study examined the participants' views to determine the consequence if the manager chose to engage in earnings management. The authors concluded that managers who resort to earnings management may face some loss of reputations among other managers, which may serve as a disincentive towards engaging in earnings management. The third and final study outlined here is by Greenfield, et, al, (2008) who used 376 senior business students to test for the effects of one's moral character on the decision to commit to earnings management. The authors adapted the earnings management practice used by Clikeman and Henning (2000). A 20-questions survey was used with half dealing with one's realism and the other half examining relativism of respondents. The results indicated that people with idealistic ethical characters are less likely to engage in earnings management. It was also posited that there is a negative relationship between personal financial benefit and one's moral character.

Finally, the authors discovered that the more the personal commitment the lower the tendency to engage in earnings management practices. Most of the prior studies examined extreme instances of earnings management. They focused primarily on instances of earnings management that severely biased the audited financial statements and attracted enforcement by the SEC or public attention. Yet, many earnings management practices are applied in subtle ways, and therefore not subject to public scrutiny. In this study attempts are made to examine practical accounting and operating earnings management cases to determine the level of their acceptance among business professionals. Unlike previous research which their subjects were selected from university students, we have used business professionals who may be involved with the preparation and use of financial statements.

Hypotheses

1. Previous research by Greenfield, et, al, (2008) have suggested that experienced professionals exhibit a higher level of commitment and ethical behavior compared to those at the entry level. This means that ethical orientation and professional commitment are positively correlated with one's work experience and tenure. Our first hypothesis is basically designed to test the above assumption.
Hypothesis 1: The higher the work experiences of business professionals the lower the acceptability of earnings management practices.
2. The results of this investigation could provide a basis for understanding the significance of work experience and change in individuals' attitudes as they mature in the organizational hierarchy.
3. Greenfield, et, al, (2008) also point out that the level of professional commitment and ethical orientation could be influenced by the individuals' field of work. In other words, managers that are operating in different areas of business specialization might exhibit different ethical dispensations towards preparation of financial statements. The following hypothesis has been designed to test this proposition.
Hypothesis 2: Business professionals operating in different areas of specialization exhibit significantly different levels of acceptability of earnings management practices.
4. Prior studies by Elias (2002) and Belski, et, al, (2008) suggest that use of generally accepted accounting principles to accomplish earnings management objectives is considered more unethical than the operating decisions. Thus, the following hypothesis has been developed to test this proposition.
Hypothesis 3: There is no significant difference between the acceptability of accounting and operating decisions in achieving earnings management objectives.
5. In a later study, Kaplan, et. al, (2007) implied that individuals with investment experience are more likely to appreciate management's earnings management practices compared to those with little or no experiences. Therefore, the next hypothesis has been designed to test this proposition.
Hypothesis 4: The higher the investment experience of the individuals the lower the acceptance of earnings management practices.
6. Kaplan, et, al, (2007) further indicate that additional studies are necessary to understand how managers react to unethical earnings management opportunities compared to their peers in the organization. In addition, according to Akers, et, al, (2007) although accounting educators attempt to make students aware of the earnings management abuses, more is needed to educate business students on how to detect and deter earnings management practices. The following hypothesis is intended to examine whether field of studies plays a significant role in the view towards the earnings management schemes.
Hypothesis 5: There is no significant difference between the acceptability of earnings management practices and the field of studies.

Data Collection

The data for this study was collected through a survey. The subjects included 500 business professionals randomly selected from the memberships of the Institute of Management Accountants (IMA). The means of data collection was a questionnaire which was prepared on a 5 point Likert-scale with “1” representing “Highly Acceptable” and “5” representing “Highly Unacceptable”. Unlike previous research the survey questions used in this study were prepared by starting with the examples from auditors reported by Nelson, et, al, (2003) and expanding on that using the work of other researchers (Merchant, 1989; Merchant and Rockness, 1994). SurveyMonkey.com was employed for the design and delivery of the survey to the participants. The participants were assured strict anonymity and asked to complete all sections of the questionnaire including demographic questions.

Results

The survey responses within the allotted time frame included 187 returns representing a 37.4% response rate. Of these returns 11 responses were incomplete and deemed unusable. The remaining responses, representing a rate of over 35%, were used in the study. Table 1 contains the details of participants responses to the demographic questions

The overall composition of the respondents reveals that 53% are male while 47% are female. The majority of the participants or 85% possessed an undergraduate degree while the remaining 15% had graduate education. Most of the respondents or 92% indicated accounting as their area of studies with the remaining 8% from other areas of business. Nearly one-third of the participants had only one year of work experience with another one-third having greater than 5 years of experience.

Table 1: Demographic Results

Gender		Education		Field of Studies		Work Experience	
Group	%	Level	%	Field	%	Years	%
Male	53	Undergraduate	85	Accounting	92	1	33
Female	47	Graduate	15	Finance	2	2-3	22
				Other Business	6	4-5	15
						>5	31
Total	100%	Total	100%	Total	100%	Total	100%
Field of Work		Age		Ethnicity		Investment Experience	
Area	%	Years	%	Race	%	Years	%
Accounting	40	21-25	62	Hispanic	19	0	54
Marketing	2	26-30	19	Asian	47	1	15
Management	6	Over 30	19	Black	3	2-5	15
Sales	2			Hawaiian	2	>5	16
Distribution	27			White	22		
Others	23			Others	7		
Total	100%		100%		100%		100%

Accounting was the field of work with the highest percentage (40%) followed by distribution. 23% of the respondents did not declare their field of employment. The completed responses were more skewed towards younger professionals as nearly two-thirds (62%) were between the ages of 21-25 years with only 19% representing professional over 30 years of age. The largest ethnic group who returned the survey was the Asians (47%) followed by Whites (22%) and Hispanics (19%). Because of the young age of the respondents, 54% indicated having no investment experience and only 15% had more than 5 years of investment experience.

Analysis

Our analysis begins with examining the mean ratings of the responses. Table 2 includes the means and variances of earnings management cases by type. The survey items were first classified into the two main categories, Accounting Manipulations and Operating Manipulations. Then they were further grouped into Expense and Revenue classifications. Finally, each of these later groups was divided into Overstatements and Understatements. Once the classifications are complete, paired t-tests were performed to examine differences between related groups.

Table 2: Earnings Management Cases by Type of Manipulation

Type of Manipulation	No. of Questions	Mean	Variance
Accounting	32	3.45	0.20
• Expenses	17	3.21	0.32
➤ Overstatements	10	3.39	0.19
➤ Understatements	7	3.43	0.13
• Revenues	15	3.24	0.38
➤ Overstatements	11	3.46	0.29
➤ Understatements	4	3.62	0.16
Operating	5	2.31	0.25

Further analyses were performed to test the research hypotheses. *Hypothesis 1* examines whether the level of work experience is correlated with the management's view towards earnings management. Unlike the conclusion reached by Greenfield, et, al, (2008) that claimed experienced professionals show a higher level of ethical behavior compared to those at the entry level, we did not the same results.

Greenfield, et, al, (2008) also point out that the level of professional commitment and ethical orientation could be influenced by the individuals' field of work. *Hypothesis 2* was designed to test this proposition. The results did not support the notion that professional field of studies made any difference in their ratings of earnings management cases.

The third hypothesis, *Hypothesis 3*, was designed to test whether the accounting manipulations carried out by using generally accepted accounting principles are viewed as unethical as the operating manipulations. As with the previous studies (Elias, 2002; Belski, et, al, 2008), our study suggests that use of generally accepted accounting principles to accomplish earnings management objectives is considered more unethical than the operating decisions.

The next hypothesis, *Hypothesis 4*, is based on the conclusions reached by Kaplan, et. al, (2007) suggesting that individuals with investment experience are more likely to appreciate management's earnings management practices compared to those with little or no experiences. However, our results do not corroborate the conclusions reached by the above research as no significant differences were found between professionals' investment experience and commitment to earnings management practices.

Finally, no significant differences were found between the managers' field of studies and their commitment to earnings management. Thus, *Hypothesis 5* was not supported.

Conclusion

There are many factors that should be considered while judging the ethicality of earnings management, such as one's upbringing, moral philosophy and ethical ideology. What is considered as ethical to one person may be completely unethical to the others. The concept of ethics is relative and may differ based on the individual.

Thus, the primary limitation of this research is that it only includes membership of the IMA as business professionals and therefore it lacks a wide representation. A broader sample of business professionals with a complete set of ethical ideology could result in a completely different test results.

This study used a questionnaire to investigate the ethics of earnings management practices. As with other survey research, the present study is subject to certain limitations. First, surveys examine attitudes and perceptions and not the respondents' actions. And second, surveys are subject to biases including sampling and non-response biases. While the present survey returned a 37.4% response rate, extreme caution must be used in generalizing the results.

Unlike previous investigations that used hypothetical cases of earnings management, this study is based on the actual cases that were identified by auditors. As was indicated by Elias (2002) the scenarios developed by Merchant (1989) and used by most of the previous research might be outdated and not reflective of the more recent practices employed by companies.

Table 3 The Top Most Unacceptable Earnings Management Cases Ranked by Mean Ratings

Question	Mean	Standard Deviation	Acceptability Rate
A company decides to understate allowance for loan losses such that liabilities, total assets, and current earnings were overstated.	4.27	0.959	10.2%
A company altered dates of shipping documents of next January's sales as sales in December of the current year.	4.20	1.143	14.8
A company used inappropriate transfer-pricing methodologies that record less revenue than would be recorded in an arm's length transaction.	3.99	1.178	13.6
A division of a company self-constructed a significant amount of fixed assets during the year that were virtually completed and were being used, but kept the assets in construction in progress at year end. Division intentionally left assets in construction in progress to increase Return on Asset and increase bonus.	3.98	1.235	17.0
A company received an insurance settlement and rather than recording the credit as misc. income they recorded credits to reserves for bad debt and inventory obsolescence.	3.95	1.160	15.3
A company delivered material that was not needed to the shop floor in order to recognize higher revenue under percentage of completion.	3.92	1.178	18.8
A company extended the close of the current fiscal year beyond December 31 so that some sales of next year would be included in the current year.	3.84	1.357	22.7
A company sold its products to related parties and recognized profit, then it purchased same products back from related parties to recognize profit on related parties' books.	3.80	1.324	25.0
A company recorded rebates received for bulk product purchases made throughout the year as revenue received in the fourth quarter rather than reducing the related cost of the inventory.	3.79	1.168	20.6
A company chooses not to write down an impaired non-operating asset.	3.73	1.239	25.0
A company over-allocated a portion of the price paid to acquire another company to in-process R&D, so as to take a huge write-off in the year of purchase and limit amount of amortization in future periods.	3.68	1.239	25.0
In applying purchase accounting and determining the fair value of pension liability, a company utilized a higher discount rate than what the actuary felt was reasonable. This resulted in recording a lower pension liability and ultimately a lower amount of goodwill.	3.67	1.276	25.0
A company would enter into sales agreements with a customer, and instead of shipping would segregate the goods in a separate location for the customer until the customer requested delivery. The company would record revenue and cost of sales when the goods were segregated. This accounting overstated A/R, sales, and cost of sales and understated inventory.	3.65	1.322	27.3
A company has a distributor arrangement whereby the distributor/retailer has right of return of all product and does not have to pay for product received until it has been sold by the distributor/retailer to a third party for the current period. The company was recording all product shipped as revenue.	3.60	1.454	30.7
A company extended useful lives of a long-lived asset by a few years in order to meet the cost reduction numbers which were directly tied to his/her supplemental contractual stock option bonus.	3.55	1.286	33.0
A company sold inventory to a buyer whose financial condition was questionable. The buyer made an initial immaterial payment with the remainder of proceeds extended over a long period of time. The management recognized total sales revenues in the current period.	3.52	1.426	34.1
A company made a large provision for loan losses in a quarter that was not necessarily supported by the facts and circumstances. Earnings for the current year were better than expected and the company wanted to reduce future provisions for loan losses, so they changed to the higher level of the acceptable range of loan loss reserve.	3.40	1.270	39.8
A company managed earnings by not shipping product that was available for shipment merely because their quarter then ending had already reached their budgeted sales levels.	3.30	1.346	40.9
A company increased estimates of cost to complete long term contracts in order to reduce the amount of revenue recognized.	3.26	1.286	38.1
A company changed accounting policy to writing off all debt issue costs as incurred rather than amortizing them over the related debt period.	3.26	1.385	38.6
A company has guaranteed stockholders an increase in the quarterly earnings per share. Although business grew, it did not at the rate which management had promised. Thus, Management decided to change inventory valuation method from LIFO to FIFO in order to secure the increase in EPS it has sworn to.	3.24	1.365	40.9

The results of this research add to the existing body of knowledge by identifying management's decisions that might be well within generally acceptable accounting principles and yet considered unacceptable by the business professionals. Table 3 demonstrates the earnings management practices that received the highest ratings and thus were viewed most unacceptable. These results are further testimony that in teaching generally accepted accounting principles accounting faculty should include a discussion of the impact of each principle and whether these practices are ethical and in the public's best interest.

References

- Akers, Michael D., Don E. Giacomino, and Jodi L. Bellovary, (2007), "Earnings Management and Its Implications, Educating the Accounting Profession." *The CPA Journal* (August).
- Barua, Abhijit, Steve Lin, Andrew M Sbaraglia, (2010), "Earnings Management Using Discontinued Operations." *The Accounting Review*, September, Vol. 85 No. 5 pp. 1485-509.
- Belski, William H., Joseph D. Beams, John A. Brozovsky, (2008), "Ethical Judgments of Accounting: An Examination on the Ethics of Managed Earnings," *Journal of Global Business Issues.*, Vol. 2, Issue 2, pp.59-69.
- Brown, P., (1999). "Earnings management: A subtle (and troublesome) twist to earnings quality." *Journal of Financial Statement Analysis*, (Winter), pp. 61-63.
- Chang, Ruey-Dang, Yee-Chy Tseng, Ching-Ping Chang, (2011), "The Issuance of Convertible Bonds and Earnings Management: Evidence from Taiwan." *Review of Accounting and Finance*, Vol. 9 Issue: 1 pp. 65 – 87.
- Chen, Jean Jinghan, Peng Cheng, and Xinrong Xiao, (2011), "Related Party Transactions as a Source of Earnings Management." *Applied Financial Economics*, February, Vol. 21, No. 3, p. 165.
- Clikeman, P. and S. Henning, (200), "The Socialization of Undergraduate Accounting Students." *Issues in Accounting Education*, 15 (February), pp. 1-17.
- DeFond, M. and C. Park, (1997) "Smoothing Income in Anticipation of Future Earnings." *Journal of Accounting and Economics*, Vol. 23, pp. 115-139.
- Elias, Rafik Z., (2002) "Determinants of Earnings Management Ethics Among Accountants." *Journal of Business Ethics*, 40, pp. 33-45.
- Greenfield, A. C., Carolyn Strand Norman, and Benson Wier, (2008), "The Effect of Ethical Orientation and Professional Commitment on Earnings Management Behavior." *Journal of Business Ethics*, 83, pp. 419-435.
- Jackson, Scott B, Xiaotao Liu, (2010), "The Allowance for Uncollectible Accounts, Conservatism, and Earnings Management." *Journal of Accounting Research*, June, Vol. 48, No. 3 p. 565-601.
- Levitt, A., Jr., (1998), "The Numbers Game", *The CPA Journal*, 68, pp. 14-19.
- Makar, Steven D., Pervaiz Alam, and Michael A. Pearson, (2010), "When Does Juggling the Numbers Become Fraud? *Association of Certified Fraud Examiners*, January/February.
- Merchant, Kenneth. A., (1989) *Rewarding Results: Motivating Profit Center Managers*. Harvard Business School Press, Boston, MA.
- Merchant, Kenneth. A., and Joanne. Rockness, (1994) "An Ethics of Managing Earnings: An Empirical Investigation." *Journal of Accounting and Public Policy.*, Vol. 13, pp. 79-94.
- Kaplan, S. E., (2001), "Further Evidence on the Ethics of managing Earnings: An Examination of the Ethically Related Judgments of Shareholders and Non-shareholders., *Journal of Accounting and Public Policy.*, Vol. 20, pp. 27-44.
- Kaplan, Steven E., James C. McElroy, Susan P. Ravenscroft, Charles B. Shrader, (2007), "Moral Judgment and Causal Attributions: Consequences of Engaging in Earnings Management," *Journal of Business Ethics.*, Vol. 74, pp. 149-164.