



## Regular Paper

## Enhancing the learning experience in intermediate accounting



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## ABSTRACT

This paper provides an example of how an accounting educator can build upon an intermediate accounting assignment of using practical real-world examples of earnings management by introducing to students the academic research that explains earnings management behavior. Students improve their critical thinking skills because of the connection to the real-world example. Accounting educators can provide this opportunity to students at a minimal cost of resources and time. In addition, a seed is planted for the development of the next generation of accounting academics because of this exposure to research at the undergraduate level.

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## 1 Introduction

The structural content of undergraduate accounting courses are to a great extent standardized across universities in North America. Intermediate Accounting I and II courses begin with the informational value of accounting information as a means to efficiently allocate resources in the economy, proceed through the Financial Accounting Standards Board's (FASB's) Conceptual Framework, discuss the specific financial reports (i.e., balance sheet, income statement, and statement of cash flows), and then painstakingly work through the components of the balance sheet. Rarely is the rich body of empirical and behavioral academic research mentioned in accounting textbooks. Even rarer is the discussion of such research in the classroom. When opportunities present themselves, accounting professors should bring into the classroom the results of accounting academic research. Students will enjoy a richer learning experience because researchers' results help explain real-world events in the world of accounting. Linking real-world events to relevant accounting research provides accounting professors with a pedagogical tool that enables students to develop crucial critical thinking skills.

The purpose of this paper is to illustrate how a group assignment of investigating a securities-related accounting violation in an intermediate accounting II course resulted in bringing accounting academic research into the classroom. Accounting professors would find this example interesting and hopefully will seek out opportunities to integrate accounting academic research into their classroom experiences.

The paper is organized as follows:

- Accounting research on earnings management around earnings thresholds;
- A practical example of earnings management around earnings thresholds; and
- Conclusion.

## 2 Accounting research on earnings management around earnings thresholds

Human beings have a tendency "to divide the world into categories" (Glass & Holyoak, 1986, p. 149). From an accounting perspective, this is what DeGeorge et al. (1999) call a "threshold mentality." That is, financial statement users prefer to classify continuous financial data into a discrete form. For example, firms' earnings can be classified into those firms with positive (profitable firms) or negative (loss firms) earnings. The "threshold" of zero earnings is a critical mark in accounting because profits are considered the norm for going concern business organizations.

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Degeorge et al. (1999) identify three critical thresholds in accounting:

1. to report positive earnings;
2. to achieve earnings that meet or exceed the prior period's earnings; and
3. to achieve financial analysts' earnings forecasts.

Each threshold is important because satisfying the threshold represents positive reinforcement regarding a firm's performance. The first threshold, positive earnings, means that the firm is accumulating retained earnings and providing a positive return to shareholders. The second threshold, meeting or exceeding the prior period's earnings, means that the change in current and prior period's earnings is positive. Thus, the firm is sustaining its most recent performance level. The third threshold, achieving financial analysts' earnings forecasts, means the firm is meeting expectations. Overall, these three thresholds are significant in accounting because they enable financial statement users to benchmark a firm's performance.

Given the importance of thresholds to benchmark and measure firms and their managers' performance, it is not unreasonable to assume that the firms' managers will manipulate earnings to achieve one or more particular thresholds. Most shareholders of publicly traded companies are not active managers in their company's business operations, thus they enter into contracts with the company's managers (e.g., CEO). These contracts attempt to align managers' and shareholders' interests (i.e., goal congruency) for the best overall interests of the company. Compensation contracts between managers and shareholders form the cornerstone of the goal congruency objective (i.e., "The Contracting Process"; Watts & Zimmerman, 1986). The compensation contracts outline the components of managerial compensation (e.g., salary, bonus, stock-based incentives, etc.) as well as how managers are to earn each component. Frequently, managers earn the bonus portion of their compensation when the company meets an earnings-related threshold.

Accounting researchers have investigated this phenomenon of earnings management to achieve a threshold. Two prominent studies in this area are by Burgstahler and Dichev (1997) and by Degeorge et al. (1999). Burgstahler and Dichev (1997) focus on the first two thresholds – (1) to report positive earnings (or to avoid zero losses); and (2) to achieve earnings that meets or exceeds the prior period's earnings (or to avoid earnings decreases). The authors examine the distributions of earnings and earnings changes. If no earnings management is present, then the distributions should show no discontinuities near (i.e., just above or below) the thresholds. By providing histograms of the distributions, Burgstahler and Dichev (1997) provide visual evidence of the discontinuities near the two thresholds.

In addition, Burgstahler and Dichev (1997) provide the following estimates of the extent of earnings management to attain earnings-related thresholds:

- 8% to 12% of firms with small pre-managed earnings declines manage earnings to achieve earnings increases;

- 30% to 44% of firms with small pre-managed losses manipulate earnings to report positive earnings; and
- levels of earnings management can be as low as 0.5% to 1.0% of the market value of equity; however, 7% of the market value of equity is typical.

Degeorge et al. (1999) extend the Burgstahler and Dichev (1997) study by adding a third threshold, to achieve financial analysts' earnings forecasts. In addition, the authors develop a threshold model of earnings management explaining a manager's earnings management behavior to achieve a bonus under various degrees of uncertainty for the firm's true ("latent") earnings. For example, when managers estimate the true pre-managed earnings with certainty and the estimate is just below the earnings threshold, they can manage earnings just enough to achieve the threshold. The managers are essentially borrowing against the following year's earnings to cross the threshold (e.g. delay incurring an expense until the following period). In this manner the threshold is attained and the managers receive their bonuses. However, if the true pre-managed earnings are substantially below the threshold, the managers may view the cost of borrowing the following year's earnings as excessive. Thus, the managers may be inclined to lower earnings further (e.g. increase the allowance for doubtful accounts) and "take a big bath." In this situation, the managers are "saving for tomorrow" and will find it less difficult to achieve the threshold in the following year.

When Degeorge et al. (1999) introduce uncertainty to the estimate of true pre-managed earnings, similar results are found except the imprecision in estimating the true pre-managed earnings leads to imprecision in the earnings management. Thus, managers would likely exceed the threshold by a greater degree after manipulating earnings. Finally, Degeorge et al. (1999) provide empirical evidence to support the results of their threshold model.

Further to the Degeorge et al. (1999) study, critics (e.g. Warren Buffett, 2001) warn against firms' alleged dysfunctional behavior to achieve analysts' earnings forecasts and the role of firms' earnings guidance. Earnings guidance are "projections about future performance" predominantly disclosed by publicly traded companies (King, 2015). Recent studies by King (2013, 2015) provide evidence of the current state of earnings guidance. Conclusions from King (2013) suggest:

- about 60% of S & P 500 firms gave either quarterly and annual guidance, or both;
- guidance can be a point estimate, range, or boundary (i.e., earnings threshold);
- guidance follows industry lines with health care related firms providing the most guidance and energy related firms providing the least guidance; and
- differences in reputational risk from missing a guidance estimate may provide the reason for the variation in guidance activities between industries.

The King (2015) study addresses financial executives' perceptions of earnings guidance and earnings management. The survey of 359 finance and accounting professionals' perceptions found:

- as firms increase in size, the extent of their investor relations and earnings guidance also increases;
- financial executives agree that both real (e.g., reducing travel and entertainment expenditures to increase reported earnings) and accrual (e.g. adjusting the estimate for bad debts expense) earnings management activities occur in firms;
- the perceived range of firms' accrual earnings management activities declines as firms' size increases, suggesting that larger firms possess stronger corporate governance structures;
- earnings management is perceived as more likely to occur, where missing an earnings target is considered a "big deal," suggesting that firms' focus on short-term results and corporate culture impacts earnings management activities; and
- there are "no simple relationships" existing between earnings guidance and earnings management, indicating the complexity of the relationship.

Concerning the effect of corporate culture, these results also suggest that a management's attempt to establish a corporate culture focused on short-term results could be constrained by stronger corporate governance and internal control measures.

Overall, these studies provide a foundation of theory and empirical evidence that identifies and explains earnings management behavior around earnings thresholds. However, as is the case with most accounting research, the lack of identifying specific real-world examples makes the research more difficult for students to comprehend. The next section details a specific case that allows students to better connect the academic research to a real-world example.

### 3 A practical example of earnings management around earnings thresholds

During a spring semester of teaching Intermediate Accounting II, students while working in groups had to research and investigate a company's Securities and Exchange Commission (SEC) violation. Each group would search the SEC's database for an Accounting and Auditing Enforcement Release (AAER) pertaining to a particular company. Each group had to receive the professor's approval for the particular AAER and company selected. This was done to prevent more than one group from selecting the same AAER and company. One group selected Thor Industries, Inc. (Thor) – a company that manufactures recreational vehicles (RV's) and buses. Thor's SEC violation involved a senior-level manager at one of Thor's subsidiaries. The manager manipulated earnings over a period of several years to secure bonuses that he otherwise would not have earned. After reading the group's report, the incident at Thor was used as a means to educate students about the accounting research related to earnings benchmarks or thresholds. The SEC's database provides the accounting professor with a low cost and easily accessible tool to craft interesting and thought provoking assignments.

Based from the company's annual report filing (10-K) with the SEC for the year-ending July 31, 2006, it was found

that Thor was founded in 1980 and manufactures and sells a variety of RV's and buses in the U.S. and Canada. Thor operates the following subsidiaries: Airstream, Inc.; Cross Roads RV; Dutchmen Manufacturing, Inc. (Dutchmen); Four Winds International, Inc.; Keystone RV Company; Komfort Corp.; Citair, Inc.; Thor California, Inc.; Damon Corporation; Champion Bus, Inc.; El Dorado National California, Inc.; El Dorado National Kansas, Inc.; and Goshen Coach, Inc. (SEC, 2007).

Thor was cited on May 13, 2011 under AAER No. 3280 for violation of SEC rules concerning the proper maintenance of books and records and internal controls (SEC, 2011). Specifically, the Vice President of Finance (VP Finance) at the Dutchmen subsidiary made manual journal entries to shift cost of sales to various balance sheet accounts over a four year period (i.e., 2003 to 2006). The reason for this malfeasance was to secure bonuses from the company that he otherwise would not have been entitled to. Dutchmen's internal controls failed to detect the adjusting entries.

Thor's key income statement line items are presented in Exhibit 1, panels A to C for the years 2004 to 2006 respectively. For 2004, cost of goods sold is understated by \$2,578,000, resulting in a direct increase in gross profit. Interestingly, the effect on the gross profit percentage is negligible as the difference between the original and restated percentage figures is 1/10 of 1% (i.e., 13.7% vs. 13.6%). The difference in net income of \$1,572,000 did not change the profit margin percentage (i.e., 4.8%), however, as a percentage of the market value of equity, the earnings management represents a .2% overstatement.

For 2005, there is an increase in the cost of goods sold manipulation to \$4,021,000. The overstatement to gross profit results in a .2% difference in gross profit percentage between the original and restated figures (i.e., 13.3% vs. 13.1%). The overall effect on net income is a \$2,624,000 overstatement. As a percentage of the market value of equity, the earnings overstatement increases to .3%.

For 2006, the trend of increasing earnings management continues. The cost of goods sold understatement and gross profit overstatement is \$14,312,000, resulting in a difference of .4% in gross profit percentage between the original and restated figures (i.e., 14.5% vs. 14.1%). The effect on net income is an overstatement of \$9,059,000. As a percentage of the market value of equity, the earnings overstatement increases to .6%.

The discovery of Thor's earnings management episode at its Dutchmen subsidiary leads to the following question: What was the earnings threshold that influenced the VP Finance's behavior? Thor's Schedule 14A filing with the SEC provides an insight into the possible motivation for the VP Finance's earnings management behavior. Schedule 14A provides details about Thor's executive compensation plans. The following information was from Thor's July 31, 2005 Schedule 14A, under "Compensation Committee Report on Executive Compensation" (SEC, 2005a):

The Compensation Committee believes that the Company has been successful in attracting and retaining management of its operating subsidiaries because of its policy of compensating management personnel based upon the profitability of such operating subsidiaries. The

**Exhibit 1**

Key income statement items for Thor Industries, Inc.

	Original	%	Restated	%	Restatement adjustment
Panel A – July 31, 2004 (amounts in thousands)					
Sales	\$2,187,739	100.0	\$2,187,739	100.0	–
Cost of goods sold	1,887,202	86.3	1,889,780	86.4	\$2,578
Gross profit	300,537	13.7	297,959	13.6	(2,578)
Income before Income taxes	168,220	7.7	165,642	7.6	(2,578)
Income taxes	62,135	2.8	61,129	2.8	(1,006)
Net income (NI)	106,085	4.8	104,513	4.8	(1,572)
Market value of equity (MVE)	789,786		789,786		789,786
NI / MVE (%)	13.4		13.2		0.2
Panel B – July 31, 2005 (amounts in thousands)					
Sales	\$2,558,351	100.0	\$2,558,141	100.0	(210)
Cost of goods sold	2,218,585	86.7	2,222,606	86.9	4,021
Gross profit	339,766	13.3	335,535	13.1	(4,231)
Income before Income taxes	193,610	7.6	189,379	7.4	(4,231)
Income taxes	71,843	2.8	70,236	2.7	(1,607)
Net income (NI)	121,767	4.8	119,143	4.7	(2,624)
Market value of equity (MVE)	1,007,767		1,007,767		1,007,767
NI / MVE (%)	12.1		11.8		0.3
Panel C – July 31, 2006 (amounts in thousands)					
Sales	\$3,066,276	100.0	\$3,066,276	100.0	–
Cost of goods sold	2,620,506	85.5	2,634,818	85.9	\$14,312
Gross profit	445,770	14.5	431,458	14.1	(14,312)
Income before Income taxes	270,423	8.8	256,111	8.3	(14,312)
Income taxes	97,959	3.2	92,706	3.0	(5,253)
Net income (NI)	172,464	5.6	163,405	5.3	(9,059)
Market value of equity (MVE)	1,524,717		1,524,717		1,524,717
NI / MVE (%)	11.3		10.7		0.6

Sources: SEC, 2004.

SEC, 2005b.

SEC, 2007.

Sales minus cost of goods sold equals Gross profit. Cost of goods sold is underlined because it is subtracted from Sales to determine Gross profit. Gross profit is underlined because it is a summary total. The next line item, Income before taxes, begins another sequence. Income before income taxes minus Income taxes equals Net income. Net income is underlined because the sequence ends with Net income. Market value of equity is another individual line item that is used to calculate the ratio of NI/MVE.

management of each operating subsidiary is provided with incentive based compensation consisting generally of 13% to 20% of their operating subsidiary's pre-tax profits in excess of targets established by the Company's President and Chief Executive Officer.

Thus, managerial motivation at Thor is based on a financial incentive tied to the subsidiary's operating earnings. The VP Finance's manipulation of cost of goods sold increases the Dutchmen's reported gross profit and operating earnings. Clearly, the VP Finance would not be motivated to manipulate an income statement item below the line of operating earnings because it would have no effect on the bonus. Thus, the earnings management has to occur above the line of the threshold tied to the bonus calculation (i.e., operating earnings).

In addition, the VP Finance's pattern of increasing the cost of goods sold adjustment each year results in transferring greater amounts of future earnings into the current period's earnings. Watts and Zimmerman (1986, p. 208) call this process the "Bonus Plan Hypothesis":

Ceteris paribus, managers of firms with bonus plans are more likely to choose accounting procedures that shift reported earnings from future periods to the current period.

Over the three year period (i.e., years ending July 31, 2004 to 2006), the manipulation of cost of goods sold increased net income by \$1,572,000 in 2004, \$2,624,000 in 2005, and finally \$9,059,000 in 2006.

Typically, the degree of earnings management that is significantly material to exceed an accounting threshold grabs the headlines. For example, WorldCom's 2002 restatement of previously capitalized line costs that should have been expensed under GAAP totaled \$7.1 billion (Cooper, 2008, p. 299). The company's earnings management was "simply to meet earnings guidance" (Cooper, 2008, p. 299). However, as Burgstahler and Dichev (1997) point out, levels of earnings management can be as low as 0.5% to 1.0% of the market value of equity. The Dutchmen's VP Finance did not have to make significant adjustments to cost of goods sold to secure the bonuses. In fact, the overstatement of net income resulting from the earnings management represented only .2% (2004), .3% (2005), and .6% (2006) of the market value of equity. From an auditor's perspective, each year's earnings management may not be considered material from a quantitative standpoint; however qualitatively, shareholders would not be pleased to see executive officers receiving bonuses through earnings manipulations. Also, the fact that Thor was cited by the SEC for weak internal controls supports the conclusions drawn from the King (2015) study.

Students benefit from a discussion of real-world examples like Thor. Corporate incentives such as bonuses that are intended to motivate a company's executive officers to increase profits can be manipulated for personal gain. Accounting academics' work involving surveys, empirical-archival research, and contracting theory provides the foundations for explaining the real-world event of earnings management at Thor. Accounting educators can make use of integrating academic research with real-world examples to enhance students' critical thinking skills. Further, the information and data to provide this type of learning experience are achieved at a minimal cost because of the public availability of companies' filings with the SEC.

#### 4. Conclusion

The purpose of this paper is to showcase an example of enhancing students' critical thinking skills by linking real-world examples of earnings management with accounting research and theories. A practical example is provided, the SEC enforcement action of a company and one of its subsidiary's executive officers, as a basis of integrating accounting research with the real-world. Accounting educators that merge accounting research with real-world examples in the classroom will likely see benefits in students' learning, and perhaps, plant a seed for the next generation of accounting academics.

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