

USING EXPERIENTIAL LEARNING TO TEACH EARNINGS MANAGEMENT: A COMPREHENSIVE EARNINGS MANAGEMENT CASE

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ABSTRACT

This paper presents an experiential learning case designed to give students a comprehensive view of earnings management. Student teams are given a common set of transactions and are asked to prepare financial statements. The amounts for some of the transactions are generated from rolls of the dice so that each team's financials are unique. The teams are required to prepare two sets of financial statements. In the first set, the teams prepare financial statements using the most conservative assumptions under GAAP. In the second set, the teams employ earnings management techniques to increase their profit to meet analysts' expectations. The teams are required to present their second set of financials to the class, and the competing teams are challenged to uncover the presenting team's earnings management practices. In essays written after completing the case, students indicate they gained a deeper understanding of the harmful effect of earnings management.

Key words: Earnings management, experiential learning, financial statements

THE CASE

Ame Corporation is a public corporation that manufactures multiple products. The company was founded in 1920 by the Smith family and was privately-owned and managed by members of the Smith family during its first thirty-five years in operation. During the 1950s, the company's growth outpaced the family's financing capacity, and the board of directors, comprised entirely of members of the Smith family, agreed to an initial public offering in 1955.

Upon becoming a publicly-traded corporation, Acme expanded its board of directors to include independent members unrelated to the Smith family. The new board drafted a vision statement for the corporation, dubbed “The Acme Way,” that sought to maintain a corporate environment consistent with the atmosphere of the family-owned business that the Smith family built. Under this vision statement, the new shareholders of the company were to be viewed as family members and all public disclosures made by Acme would be written and communicated as if the information were being delivered to a close, beloved relative.

From 1955 until 2005, a member of the Smith family consistently held the top management position, Chief Executive Officer (CEO), at Acme. However, this came to an end on December 31, 2005 when John Smith, a grandson of one of the founders of Acme, resigned as CEO. As there was no Smith family member qualified to take John’s place, his resignation forced the Acme board, for the first time in its history, to recruit a CEO from outside the family.

In the discussions over the criteria for hiring the new CEO, the Smith family board members had a different philosophy from the independent board members. They wanted to promote from within the company, and name a long-term employee who was familiar with “The Acme Way.” However, the only qualified employees were near retirement age, and naming one of these employees would simply delay the inevitable process of recruiting and hiring a CEO who had not had a long tenure with the company. The independent board members argued that Acme management could benefit from a new, fresh perspective. Acme had a reputation in the market as a company with steady performance; however, in recent years new entrants into Acme’s product lines had started gaining market share. Thus, a status quo strategy could lead to a decline in Acme’s financial position in the long run. The independent board members’ preference was for an experienced CEO with a reputation as a successful leader of a mature public company.

The independent board members’ arguments ultimately prevailed, and in 2006, Acme hired Peter Jones as its new CEO. Peter had held two CEO positions with two different public companies prior to joining Acme. At each position, Peter presided over significant growth in the company’s financial performance; though, he did not have long tenures with either company. The board was impressed with his accomplishments, as well as his energy, drive and results-oriented style of management. However, in his interview, the Smith family board members raised concerns that his lack of tenure with his former employers might clash with Acme’s family-oriented corporate culture. In their view, “The Acme Way” places a premium on loyalty with many Acme employees spending their entire careers with the company. A new CEO who did not have a record of longevity with his former employers may have trouble gaining the respect of Acme employees. Peter assured the Smith family that he was looking to settle down, he shared their values, and he longed to work for a company with a family-oriented culture. The Smith family board members were unconvinced by Peter’s statements in his interview; but, they agreed to hire Peter because the independent board members assured them that a strong, assertive board of directors would be able to monitor and control the CEOs actions.

Soon after Peter joined the company, he asked the board for permission to offer generous early retirement packages to the executive leadership team that John Smith had put in place during his tenure as CEO. The board members had mixed reactions to Peter’s request. The independent board members were supportive of the request, as it is common for new CEOs to replace executives and form their own team. However, the Smith family members argued against the request, as it violated the core value of loyalty under “The Acme Way.” The independent board members suggested a compromise to the early retirement offers: the offers could be optional. That is, the

executives could choose, without penalty, to decline the early retirement offers and maintain their current positions with the company. With a compromise reached, the board authorized Peter to offer optional early retirement packages to Acme's top executives. The Smith family was surprised by the result; within two weeks, all of the executives had accepted the early retirement offers and Peter had hired their replacements.

The first task that Peter gave his new leadership team was to draft a new vision statement for the company. After a week-long strategic planning retreat, the new team emerged with, "There's a New Day at Acme." When Peter introduced the new vision statement to the board, the Smith family members bristled at the implications of a "New Day," but, the independent board members believed that it communicated the right message for a fresh, new start at the company. At the same board meeting, Peter introduced a proposal for a new line of business for Acme. The line showed great profit potential, but it would require a significant investment in research and development (R&D) in 2006 and 2007. If the board approved the new line of business, the increase in R&D costs along with the early retirement payments would cause Acme to significantly miss the analysts' forecasted profit for 2006.

Peter assured the board that he could manage the public relations damage that would result from falling short of the analysts' forecasts. He would explain the decline in profits as part of the natural restructuring that occurs when there is a change in the CEO position, and would persuade the analysts that the lower profits were temporary. In addition, if the new line of business was successful, Acme would be well positioned for profitability in future years. Peter also asserted to the board that current cash flow levels were sufficient to fund the costs of launching the new product line. However, if additional funds were needed, he had long-standing relationships with several banks and was confident that he could negotiate favorable terms for a loan to fund any shortfall.

The board's deliberations over the proposed new line of business broke down along familiar lines. The independent board members were ready to approve the proposal without much discussion, while the Smith family members were reluctant, especially if the new line of business had the potential to increase the company's debt. The independent board members cited the progress that Acme's competition had made in eroding Acme's market share in its existing lines of business, and argued that Acme needed a change in strategy before it was too late. The Smith family members voiced their displeasure with the potential risk that Acme was accepting and the volatility in profits that might result from the strategy that Peter described to the board. Acme had never had to rely on convincing market analysts of anything related to its financial operations. This salesmanship approach to investor relations made the Smith family uncomfortable as it violated "The Acme Way" of treating shareholders as family members. After an extended discussion, the Smith family members conceded and the board approved the proposal for the launch of a new line of business.

As predicted, Acme's 2006 profits fell far below analysts' expectations. On the day that Acme released its 2006 earnings, Peter conducted a conference call with analysts and promoted the company's new vision and strategy. In addition, he explained away the poor performance of the company as partially attributable to one-time, non-recurring restructuring expenses that are the natural consequence of the transition from one CEO to another, and partially attributable to significant investments in R&D that will produce profits in future years. In summary, Peter's message was that the 2006 decline in profits was temporary and 2007 would be a much better year. The analysts' questions on the call were friendly, and Peter seemed to charm them with his vision for a "New Day at Acme." The Smith family board members who listened to the conference call were not as impressed. By their judgment, Peter presented the company's financial results as if he

were selling a used car, and they worried that he may have oversold the potential of his strategy. Once again, the independent board members reassured the Smith family that Peter's behavior was normal for a CEO and that his behavior would not reflect badly on Acme.

Peter's assertions to the board members and to the analysts on the conference call explicitly linked his success at Acme to the successful launch of the new product line. While Peter and his executive leadership team believed that the cash flow from the more established lines of business would amply fund the launch of the new product, Peter soon learned that his team's estimates were too optimistic. During 2007, the launch of the new product was more expensive than he had anticipated. To avoid having to initiate new lines of credit to fund the cost overruns, Peter found other ways to temporarily boost cash flow. Specifically, Peter relaxed the company's pension plan funding policy and authorized a smaller cash contribution to the company's defined benefit plan. In the judgment of the executive leadership team, these contributions could easily be made up in future years by the excess cash flow generated from the new product line. In addition, Peter and his team established a Special Purpose Entity (SPE), Acme Financing, to securitize some of Acme's accounts receivables and therefore generate cash from these receivables more quickly. The staff accountants in the Controller's office took notice of the changes that Peter implemented and skeptically commented to the Controller that there was indeed a "New Day" at Acme.

EARNINGS MANAGEMENT CASE - PART 1

There are three parts to this case. Parts 1 and 2 are team assignments; Part 3 is an individual assignment. For Part 1, each team represents the staff accountants in the Controller's Office of Acme Corporation, all long-term Acme employees. Under the leadership of the Controller, this department adheres to accounting policies that are consistent with "The Acme Way." Financial statements and all accounting disclosures are drafted as if they are being communicated to a beloved family member. In operational terms, this means Acme's financial statements are prepared using the most conservative estimates and GAAP methods to avoid overstating the company's financial position.

A partial trial balance for the company for the year ending December 31, 2007 is presented in Exhibit A. The purpose of Part 1 of the project is to complete the trial balance and prepare an income statement and balance sheet for 2007. The partial trial balance presented in Exhibit A does not include the effects of the transactions described below. The transactions in Section 1 describe the annual sales and cost of goods sold amounts for the established lines of business and the new line of business. The transactions in Section 2 require the Controller's staff accountants to make choices under GAAP or to estimate amounts to record the transaction.

Prepare the journal entries to record the following transactions. Where choices or estimates are required, adhere to the spirit of "The Acme Way;" that is, present the most conservative choices and estimates under GAAP based on the collective judgment of the team. After recording the journal entries, prepare an income statement and a balance sheet for Acme Corporation for the year ending December 31, 2007. Instructions for presenting the journal entries and financial statements follow the transaction descriptions.

Section 1: Annual Sales and Cost of Goods Sold Amounts

- a. Sales Revenue – For the year ending 12/31/2007, Acme earned sales revenue of \$75,000,000 from its established product lines. Forty percent of these sales were credit sales and the remaining 60% were cash sales. These amounts are included in the trial balance; however, the sales revenue for the new line of business has not yet been recorded. **Roll the dice** and

EXHIBIT A**Partial Trial Balance for Acme Corporation**

Acme Corporation
Partial Trial Balance
For the period ending 12/31/2007

	<u>Debit</u>	<u>Credit</u>
Cash	27,660,000	
Accounts Receivable	23,550,000	
Allowance for Doubtful Accounts		170,000
Merchandise Inventory	7,650,000	
Land	2,000,000	
Building	10,000,000	
Machinery & Equipment	5,600,000	
Accumulated Depreciation		4,080,000
Accounts Payable		800,000
Accrued Pension Cost		240,000
Notes Payable		23,000,000
Common Stock [\$1 par value]		80,000
APIC – Common Stock		3,600,000
Retained Earnings		20,540,000
Sales Revenue		75,000,000
Cost of Goods Sold	48,750,000	
Selling & Administrative Expense	<u>2,300,000</u>	
Totals	<u>127,510,000</u>	<u>127,510,000</u>

multiply the result by \$1,500,000. This is the sales revenue for the new line of business started by Peter in 2007. Record this amount as sales revenue assuming that 70% of these sales are credit sales and the remaining 30% are cash sales.

- b. Cost of Goods Sold – For the year ending 12/31/2007, Acme reported a cost of goods sold amount of \$48,750,000 for its established product lines. This amount is included in the trial balance. **Roll the dice** and multiply the result by \$200,000. This is the cost of goods sold amount for the new line of business. As this amount is not included in the trial balance, record this amount as the cost of the sales recorded in a).

Section 2: Transactions Requiring a Choice of Method or Estimates

- a. On January 1, 2007, the Acme board granted stock options to its new executive leadership team. Under the stock option plan, five Acme executives can purchase 6,000 shares (each) for \$50 per share beginning January 1, 2010. The market price per share on the grant date was \$50 per share. The Black-Scholes valuation of the options on the grant date was \$1,850,000; the Binomial valuation of the options on the grant date was \$2,400,000.

- b. On January 1, 2007, the Acme board, as required by Peter's compensation contract, granted him 4,000 shares of restricted stock. The restriction will lapse and Peter will take ownership of the Acme shares on January 1, 2009. The estimated fair market value of the restricted stock on the grant date was \$200,000.
- c. In January 2007, Acme entered into a long-term construction contract. The contract price for the project is \$800,000. Acme had the following activity on the contract during 2007. No journal entries related to this contract have been made for 2007.

Costs incurred as of 12/31 (paid with cash)	\$96,800
Estimated costs to complete (range)	\$308,000-\$343,200
Billings as of 12/31	\$145,000
Collections as of 12/31	\$110,000

- d. In March 2007, a client placed a special order for inventory. The special order required two weeks of work. Upon completion of the order, the inventory was delivered to the client. The contract price for the project was \$600,000, and the cost of the inventory was \$180,000. The terms of the contract included a payment schedule that required the client to pay for the inventory over six months. At the time the contract was negotiated, Acme believed the client would be able to meet the payment terms of the contract. However, the client encountered financial difficulties and Acme now has reason to believe that the collection of the contract price is not reasonably assured. During 2007, Acme received payments totaling \$50,000 from the client. No journal entries have been made for this contract during 2007.
- e. Acme maintains a defined benefit pension plan for its employees. During 2007, Acme had the following information related to its defined benefit plan. Make the journal entry to record pension expense.

Fair Market Value of Plan Assets (1/1/2007)	\$15,800,000
Projected Benefit Obligation (PBO) (1/1/2007)	\$16,040,000
Accrued Pension Cost (1/1/2007)	\$240,000
Service Cost under PBO	5.75% of total sales revenue (all divisions)*
Settlement Rate	8.75%
Expected Return	6.50%
Contributions to Defined Benefit Plan	\$1,050,000

*Do not include revenues from the long-term construction contract in the service cost calculation.

- f. Acme uses the straight-line depreciation method for its property, plant and equipment. The "Building" assets have a 20-year useful life with no salvage value, and the "Machinery & Equipment" assets have a 5-year useful life with no salvage value. Make the annual adjusting entry to record depreciation expense.
- g. At the beginning of 2007, Acme built a research facility adjacent to its manufacturing plant. The facility cost \$325,000 (cash) to construct and has an estimated useful life of 10 years with no salvage value. This facility will be used exclusively for R&D activities. In addition, Acme hired consultants to evaluate its products for improvements and innovations. The

- consultants worked with Acme for the entire year. To determine the consultants' fees, **roll the dice** and multiply the amount by \$50,000. Assume this fee was paid in 2007. The research facility and consulting fees are not included in the trial balance. Make the journal entries to record these costs.
- h. During the fourth quarter, Peter created a Special Purpose Entity (SPE), Acme Financing, to securitize accounts receivables and improve cash flow. Peter structured the SPE so that it would not be consolidated into Acme's financial statements. Instead, Acme used the equity method to account for its investment in Acme Financing. Acme's accounts receivable securitization transaction is as follows. The company transferred 40% of its gross accounts receivables to Acme Financing. (The "gross accounts receivables" is the beginning balance from the trial balance plus/minus the "accounts receivables" transactions recorded from Section 1 and Section 2 a-g). Acme Financing used the accounts receivables as collateral to secure a loan from a bank with which Peter has a long-standing relationship. As the receivables transferred to the SPE carry a very small default risk, assume the loan balance is equal to the total amount of accounts receivables transferred to the SPE. Once the loan agreement was completed, the SPE transferred cash equal to 70% of the amount securitized (the loan balance) back to Acme by year end. Make the journal entries to record these transactions for Acme Corporation; that is, record the transfer of the accounts receivable to the SPE, and the receipt of cash from the SPE. (It is not necessary to make the journal entries for the SPE.)
- i. In December 2007, Acme received \$75,000 from a client for work to be performed in January 2008.
- j. **Roll the dice twice and divide each amount by 1,000.** (If the results are the same, roll again). The two amounts from the rolls of the dice represent the range for accruing bad debt expense under the percentage of sales method. (For example, if you rolled a 2 and a 4, the range for accruing bad debt expense is between .002-.004.) Choose a percentage within the range, and make the journal entry to record bad debt expense. Management bases its annual accrual on the combined total credit sales from all divisions for the year (explained in Section 1, Transaction a). The accrual should include the credit sales from existing lines of business as well as the sales from the new line. The annual accrual for bad debts is not affected by the receivables securitized through the SPE. Throughout 2007, Acme wrote off uncollectible accounts receivables and the effects of these write-offs are already included in the trial balance.

Instructions for preparing the financial statements:

1. Create a General Journal worksheet in Excel. Make the journal entries for the transactions from Sections 1 & 2 (above) in the Excel worksheet. Show all of the relevant calculations. For journal entries that are tied to a roll of the dice, clearly identify the roll of the dice in the general journal.
2. Add a Trial Balance worksheet to the spreadsheet created in 1). Present the Partial Adjusted Trial Balance from Exhibit A in the worksheet and create debit and credit columns in the worksheet to: a) post the journal entries and b) calculate the ending balances for each account.

3. Add a Financial Statement worksheet to the Excel spreadsheet. Use the ending account balances from the trial balance worksheet to prepare an income statement and a balance sheet for the year ending December 31, 2007.

Earnings Management Case – Part 2

When the analysts' released their expectations for 2007, the forecasted profit was higher than Peter anticipated. Acme's Income Statement for 2007, prepared by the Controller's office, showed a profit that was lower than Peter expected; the new line of business was consistently hampered by cost overruns. During 2007, Peter was able to temporarily fund the new line of business by securitizing accounts receivable through the SPE and delaying cash contributions to the defined benefit pension plan; but, he is going to have to secure new lines of credit in 2008 to keep the new line of business going. Peter's reputation in the market and with the board, as well as his ability to negotiate favorable debt terms, will be dependent upon whether or not Acme's 2007 profit meets the analysts' consensus forecast.

Over Peter's short tenure with Acme, the Smith family board members have grown increasingly skeptical of him. In their view, his aggressive management style and salesmanship approach to investor relations are damaging the company's reputation. The Smith family board members are worried that Peter's aggressive management style might lead to aggressive financial reporting practices to justify the success of his strategy. Therefore, they are anxious to see the 2007 financial statements.

For Part 2 of the case, each team represents Peter and his executive leadership team. The profit reported in the financial statements prepared by the Controller's staff accountants in Part 1 falls short of the analysts' forecasted expectations. In order to meet the analysts' consensus forecast, Acme needs a 6% increase in net income over the amount prepared by the Controller's staff accountants. Peter has asked his executive leadership team to relax Acme's accounting policies and alter the net income reported in Part 1. The profit presented in Part 2 should meet or exceed the analysts' forecasted target profit; that is, the net income should be at least 6% greater than the profit reported in Part 1.

For Part 2 of the case, each team should submit:

- a. Financial statements (income statement and balance sheet) that meet or exceed the analysts' forecast, and
- b. An explanation of the earnings management practices employed to improve the profit and the dollar impact that each technique had on the net income for 2007.

On the due date for Part 2, the class period will be devoted to presentations of Parts 1 and 2 of the case. Each team will participate in two rounds of presentations. In the first round, each team, acting as Peter and his executive leadership staff, will briefly present its financial statements prepared for Part 2 of the case. Each presentation will last approximately 15 minutes and will consist of a question and answer period. Each non-presenting team will represent the Acme Board of Directors. During the 15-minute presentation, the non-presenting teams will analyze the presenting team's financial statements and attempt to uncover the earnings management practices employed to improve the net income. The non-presenting teams may ask questions of the presenting team; however, the only information that the presenting team must disclose is its rolls of the dice. All other questions can be ignored or evaded as the presenting team wishes. That is, the presenting team, if

asked, does not have to confirm its earnings management practices to the non-presenting teams in the first round of presentations; rather, it is the non-presenting teams' job to uncover the practices through an analysis of the financial statements. The non-presenting teams will submit, in writing, detailed calculations and explanations of the earnings management practices it uncovers from each presentation.

If the presenting team fools the Board of Directors (i.e., the non-presenting teams do not uncover the earnings management practices), then the presenting team will earn five bonus points. However, if another team or teams successfully uncover the earnings management practices of the presenting team, those teams will take the five bonus points from the presenting team. If multiple teams uncover the presenting team's earnings management practices, they do not have to split the bonus points. Rather, each team that successfully detects all of the earnings management practices will receive five bonus points from the presenting team. In addition, if a presenting team employs multiple earnings management practices and this team partially fools the board but some of its techniques are uncovered by another team(s), then the bonus points will be split between the presenting team and the team(s) representing the board.

After all of the teams have presented their financials from Part 2 of the case, each team must present its financial statements from Part 1. Each team should present comparative financial statements showing the income statements and balance sheets from Parts 1 and 2 of the case. In addition, each team should describe what earnings management techniques it employed to meet or exceed the analysts' expectations and describe the team's collective rationale for choosing the earnings management practices.

Earnings Management Case – Part 3

The final part of the earnings management case is an individual reflective essay. Individual team members will write 500-600 word essays that describe how the completion of the earnings management case will influence the way that they will prepare, audit, or interpret financial statements in the future.

TEACHING NOTES

Teaching notes are available from the editor. Send a request from the "For Contributors" page of the journal website, <http://gpae.bryant.edu>.