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Earning Management in the Context of Pension Accounting: A Case

Stephen R. Moehrle*

Jennifer A. Reynolds-Moehrle†

*University of Missouri - St. Louis

†University of Missouri - St. Louis

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Stephen R. Moehrle and Jennifer A. Reynolds-Moehrle

Abstract

This case simultaneously examines pension accounting and earnings management. It is designed around a real-world company although the company name in the case is fictional. Several key concepts are demonstrated in this case: earnings management incentives, earnings management techniques, pension accounting, and accounting choice. Pension accounting involves several accounting estimates and choices. This case demonstrates how and why managers might make these choices opportunistically to manage earnings. Also, pension accounting is a difficult topic. Thus, learning the concepts in the case format provides a stronger frame of reference for the various concepts and mechanics involved in the calculation of pension expense, the reported pension asset or liability on the balance sheet, and the economic pension asset or liability. Finally, the case provides an excellent frame of reference for understanding how earnings can be managed and why managers might wish to manage earnings.

EARNINGS MANAGEMENT IN THE CONTEXT OF PENSION ACCOUNTING: A CASE

Stephen R. Moehrle

University of Missouri - St. Louis
St. Louis, Missouri
USA

Jennifer A. Reynolds-Moehrle

University of Missouri - St. Louis
St. Louis, Missouri
USA

ABSTRACT

This case simultaneously examines pension accounting and earnings management. It is designed around a real-world company although the company name in the case is fictional. Several key concepts are demonstrated in this case: earnings management incentives, earnings management techniques, pension accounting, and accounting choice. Pension accounting involves several accounting estimates and choices. This case demonstrates how and why managers might make these choices opportunistically to manage earnings. Also, pension accounting is a difficult topic. Thus, learning the concepts in the case format provides a stronger frame of reference for the various concepts and mechanics involved in the calculation of pension expense, the reported pension asset or liability on the balance sheet, and the economic pension asset or liability. Finally, the case provides an excellent frame of reference for understanding how earnings can be managed and why managers might wish to manage earnings.

INTRODUCTION

Hacksaw Manufacturing is a 90-year-old company that manufactures hacksaws and replacement blades. The company is the leader in its competitive industry and is closely and widely followed by the investment community. Consensus analysts' forecasts of the 2004 earnings per share (EPS) are \$0.36, a nearly 6% increase over the \$0.34 EPS reported in the prior year. Management attributes the expected increase to cost-savings measures in Hacksaw operations.

Anne Treston is the controller and you are the assistant controller at the company. The company treasurer is nearing retirement. At that time, Anne and you are in line to become treasurer

and controller, respectively. Because of these imminent promotions to greater responsibilities, Anne encouraged you to earn a Master of Business Administration degree in an evening program at the local university and even allows you to use some time during the day to complete your course work. Anne is pulling together information to finalize the 2004 financial statements. She has set aside this morning to concentrate on the financial reporting for Hacksaw's pension plan for the year ended December 31, 2004. She has gathered the following:

- a. General ledger account balance information and footnote information put together by staff accountant, Jay Wells. See exhibit A.
- b. Actuarial summary information provided by Feldman Actuarial Associates. See exhibit B.

Exhibit A
January 1, 2004 Account balance and footnote information
prepared by Jay Wells

| | |
|--|-----------|
| Prepaid pension cost (Pension asset) | \$139,600 |
| Projected benefit obligation (PBO) | 1,327,000 |
| Plan assets (Market value and market-related asset values) | 1,295,000 |
| Unrecognized prior service cost | 1,600 |
| Unrecognized net loss on plan assets | 170,000 |
| Accumulated benefit obligation | 1,100,000 |

Hacksaw has a policy of recognizing a greater amount of gain or loss amortization than the minimum amount required. The 2004 unrecognized loss amortization based on the company formula is \$10,000.

Hacksaw's average corporate tax rate is 37%.

Exhibit B
Information provided by Feldman Actuarial Associates
For the year ended December 31, 2004

| | |
|------------------------------------|-------------|
| Amortization of prior service cost | \$80 |
| Settlement rate | 8% |
| Expected return on plan assets | 9% |
| Accumulated benefit obligation | \$1,150,000 |

Average remaining service period for active employees is 20 yrs.

Service cost calculation information:

- a. The pension plan pays annual retirement benefits equal to 4% for each full year of service that qualifies for pension credit, based on the average of the employee's three highest annual salaries.
 - b. The company has 30 employees eligible for the pension plan.
 - c. The average retirement date for employees is 20 years from this year end.
 - d. The average employee has an expected retirement period of 10 years.
 - e. The average employee will have a mean of three highest annual salaries totaling \$50,000.
-

- c. Pension fund activity provided by the pension fund administrator, Capital Partners. See exhibit C.
- d. Some information regarding industry pension trends supplied by the Sharp Tool Manufacturers Controllers Association (STMCA). See exhibit D.

Before taking on her morning's task, Anne logs on to the company computer network to check e-mail messages and to check Hacksaw's stock price behavior since the market opened for trading about one hour earlier. Her e-mail includes notice of a meeting later in the afternoon with the CEO and the treasurer to go over the operating results before they are announced to the public. To this end, the CEO requests that Anne bring her best estimate of 2004 earnings to the meeting. Her check of the market finds that Hacksaw stock is having a quiet morning, trading up in price by about .1% on a morning when the overall market is trading up about .1% as well.

Satisfied that this is a normal business day, Anne turns her attention to the pension plan. However, at that moment, her phone rings. The caller is the elementary school nurse. He demands that Anne pick up her son immediately because her son is ill and at risk of infecting other students.

Meanwhile, you had been using some quiet time this morning at the office to catch up on an accounting course-related project that you and your fellow group members are preparing on earnings management (see Exhibit E for an excerpt from the project that was prepared by one of the fellow group members). Anne delegates her pension plan-related questions to you before leaving to care for her ill son. Specifically, Anne gave you the above information and the following instructions:

Required:

1. Prepare a schedule to reconcile the pension plan's January 1, 2004 funded status with the amount presented on the balance sheet at that date.

Exhibit C

**Information provided by pension fund administrator, Capital Partners
For the year ended December 31, 2004**

| | |
|---|-----------|
| Contributions to the pension fund made by Hacksaw, Inc. | \$70,000 |
| Benefits paid to retirees | 65,000 |
| Plan assets at year end | 1,360,425 |

Exhibit D

**Industry information provided by Sharp Tool Manufacturers Controllers Association
For the year ended December 31, 2004**

| | |
|---|-------------|
| Settlement rates used | 7.5% - 9.5% |
| Expected rates of return on plan assets | 7.5% - 9.5% |
| On average, firms amortize 10% of the amount of unrecognized gain or loss in excess of the corridor each year (the low is the lowest allowable under GAAP and the high is 25%). | |
| On average, firms amortize 10% of remaining prior service cost balances (the low is 5% and the high is 25%). | |

Exhibit E
Accounting Project Notes

Background: Earnings management

Schipper (1989) defines earnings management as a “purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain” (p. 92). Healy and Wahlen (1999) define earnings management as occurring when “managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers” (p. 368).

Managers might increase earnings to reach earnings benchmarks. For example, managers may want to avoid reporting a net loss or an earnings decline relative to the same quarter of the prior year (Burgstahler and Dichev, 1997; Burgstahler, 1997; DeGeorge et al., 1999). Also, managers may want to report earnings that meet or exceed analysts’ forecasts (Brown, 2001; Burgstahler and Eames, 2003; DeGeorge et al., 1999; Richardson et al., 2001). The stock price often falls significantly when these earnings targets are missed, even by very small amounts (Skinner and Sloan, 2002).

Managers may also manage earnings as a result of incentives created by contracts written using accounting numbers. First, managers can use accounting discretion to create debt covenant slack to minimize the likelihood of costly technical default (i.e., where the debt covenants are written using accounting numbers)¹. Second, managers can use accounting flexibility to increase net income to reach a compensation bonus threshold.

Other circumstances also create incentives to manage earnings. For example, managers of politically visible firms sometimes decrease net income to avoid monopoly or windfall profits allegations.² Also, managers might increase or decrease net income for special circumstances such as to apply for a bank loan or to position the company for upcoming labor negotiations. Managers might decrease earnings if all desired benchmark earnings are exceeded. In this case, the manager might reduce earnings closer to the highest benchmark while still exceeding it. This activity creates additional hidden reserves that can be used to increase net income in future periods.

-
2. Calculate the amount of the service cost component of pension expense that Hacksaw Manufacturing will report in 2004.
 3. Determine overall pension expense for Hacksaw Manufacturing using the information provided by Feldman Actuarial Associates, Capital Partners, and Jay Wells. (Click [here](#) to access blank pension excel worksheet).
 4. Calculate the unexpected return on plan assets at Hacksaw during 2004.

¹ See Beneish and Press (1993) for a discussion of the costs of technical default.

² See Watts and Zimmerman (1986; 1990) for details regarding political cost and contracting incentives to manage earnings.

5. Prepare a schedule to reconcile the pension plan's December 31, 2004 funded status with the amount presented on the balance sheet at that date.
6. Based on these calculations, determine the prepaid pension costs asset or accrued pension costs liability that Hacksaw should report on the December 31, 2004 balance sheet.
7. Reconcile the difference between the funded status of Hacksaw's pension plan and the reported pension asset or liability on Hacksaw's December 31, 2004 balance sheet.
8. Prepare a memo explaining how this difference between the pension amount reported on the balance sheet and the funded position can be viewed as an off-balance sheet liability.

Anne returns

Anne returned to the office after getting her son home and securing a care-provider. Anne resumes preparing for the afternoon meeting with the CEO by developing her best estimate of earnings. The last expense amount Anne has to add to her net income worksheet is pension expense. For this expense amount, Anne uses the pension expense number from your calculations. You help her out by updating her earnings worksheet, Exhibit F, so that she can see how pension expense impacts earnings. Soon thereafter, Anne comes out of her office and hands you the pension information again. "I'd like you to use the pension plan expected return rate information from the STMCA to calculate a high-end, low-end, and mid-point pension expense, before finalizing our numbers."

Required:

9. Calculate pension expense using the industry assumptions that would produce the lowest current year pension expense, the highest current year pension expense, and the mid-point of current year pension expense.

Later that day

Anne resumes her work on the earnings estimate using the pension information that you provided. As she is going to her meeting with the CEO, she leaves the information with you to prepare the journal entry for pension expense. You record the entry below to the general journal, which is then automatically posted to the appropriate general ledger accounts:

| | | |
|--|--------|--------|
| Pension expense | 85,635 | |
| Accrued pension cost | | 85,635 |
| To record the pension expense for fiscal year 2004 | | |

This number differs slightly from the amount that you generated above, but it is close. You notice from a handwritten change on the pension worksheet that Anne has reduced the unrecognized loss amortization component from \$10,000 to \$9,386.

Required:

10. Does the recorded pension expense amount fall higher or lower in the range of industry norms as estimated using industry high, low, and mid-point assumptions?
11. Adjust the earnings worksheet for Hacksaw, Inc. to reflect the slightly downward revised unrecognized loss component. What does net income and earnings per share become?

Exhibit F
Earnings worksheet for Hacksaw, Inc. 2004

| | |
|---|---------------------|
| Sales | 1,175,500 |
| Less: Cost of goods sold | <u>822,850</u> |
| Gross profit | 352,650 |
| Selling, general, and administrative expenses | 256,920 |
| Interest expense | 70,000 |
| Depreciation and amortization expense | 18,704 |
| Other expenses | <u>1,700</u> |
| Net income before taxes | 5,326 |
| Income tax expense | <u>1,971</u> |
| Net income | <u><u>3,355</u></u> |

Earnings per share (10,000 shares outstanding) \$0.336

Selected information from footnotes:

Included in the total selling, general, and administrative costs is pension expense related to the company's defined benefit pension plan totaling \$86,249.

12. What would net income and earnings per share have been under the three scenarios (e.g., industry high, industry low, and industry mid-point assumptions)? Recall that you must consider the tax implications of revised pension estimates.
13. Is the amortization amount used by Anne above the minimum amortization amount?
14. Why do you think that Anne chose this amount of pension expense from the amounts that you provided them?

After work that day

With your workday finished, you are now able to concentrate on your accounting project on earnings management. When you pick it up and look over it again, however, the events of the day seem to swirl around in your head. Finally, you decide to use your professional experience at Hacksaw as an example for your earnings management project, although you disguise the company so that no confidential information is divulged. You develop the following list of issues that you will address:

Required:

15. List and explain five earnings targets managers might want to reach by using available accounting discretion to increase earnings. Which ones seemed especially important to Hacksaw in this fiscal year?
16. Considering your various pension calculations, comment on the amount of flexibility that Hacksaw Manufacturing has regarding the amount that it will report as pension expense.

BACKGROUND, CASE LEARNING OBJECTIVES, AND IMPLEMENTATION GUIDANCE

Securities and Exchange Commission (SEC) Chairman Arthur Levitt called earnings management a “game among market participants” that “if not addressed soon, will have adverse consequences for America’s financial reporting system” (Levitt, 1998). Academics have called for classroom cases designed to illustrate to students the concept of earnings management.

In the Hacksaw Manufacturing case, which is based on an actual company, students examine key concepts related to earnings management in a pension accounting context. After completing the case, students will have a frame of reference for how firms manage earnings and will recognize incentives for managers to manage earnings. Last, the students will gain a deeper understanding of pension accounting.

The SEC is concerned that firms use pension accounting to manage earnings. In this paper, we develop a case that demonstrates the pension accounting concepts, assumptions and estimates, as well as earnings management incentives and techniques. A pension case provides a rich setting for students to learn pension accounting mechanics as well as earnings management concepts. First, pension accounting is replete with earnings management opportunities. Second, students examine pension accounting near the end of the traditional series of financial reporting courses. Thus, the students have reached a higher level of sophistication in their understanding of financial accounting and the business environment. Third, earnings management using pension accounting can be difficult to detect, but significant in its impact. For example, of \$995 million (59 cents per share) net income reported by Qwest Communications in 2000, \$253 million (15 cents per share) resulted from changes in the company’s pension accounting such as increasing the rate of return on existing plan assets (Blumenthal, 2001).

The case has been used in undergraduate intermediate courses as well as graduate accounting analysis courses. The following are the steps to follow. Students are required to read the case and calculate the service cost component and total pension expense before the class meeting. The rest of the case requirements can be completed outside of class or during the class meeting. These requirements usually produce excellent classroom discussion of the issues. For example, for the sixth requirement, each group can be asked to develop a set of pension assumptions that would produce an expense number approximating that produced by the controller in the case.

Incremental Learning Using the Case

We have used variants of this case for eight semesters in a senior-level undergraduate class. While we have no objective data regarding incremental learning, we have observed a deeper understanding of both pension accounting as well as earnings management concepts. The rigorous nature of the computations appears to provide students a real-world setting for making pension calculations and understanding the relevance of the calculations in the overall pension accounting scenario. The earnings management setting provides students with a frame of reference for flexibility in financial reporting and its impact on the financial statements. Most importantly, it provides students with a concrete example of how and why earnings management occurs.

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>.

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