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Case

Financial accounting choice and earnings management

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Abstract

This paper presents a case that exposes students in graduate accounting or MBA financial accounting classes to the concepts of accounting choice and earnings management. In the case, students role-play as a manager who, facing conflicting incentives, must make and defend three expense estimates for a hypothetical company. Students also read selected business press articles that introduce earnings management and that highlight the importance of the issue to the business community. The articles give students some background from which to approach the choices they will make with respect to the financial statements. © 2001 Elsevier Science Ltd. All rights reserved.

1. Introduction

The overall objective of this case is to increase students' understanding of the concepts of accounting choice and earnings management. Earnings management is the process of taking deliberate steps within the constraints of Generally Accepted Accounting Principles (GAAP) to bring about a desired level of reported earnings.[1] The case requires students to read about the practice of earnings management and to role-play in a scenario in which accounting choices must be made in the presence of incentives to report both lower and higher net income. The case is most beneficial in graduate financial accounting courses in an accounting or MBA program.

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[1] See Dechow and Skinner (2000) for additional definitions of earnings management.

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2. Case

You are the CEO of a regional cable television company, Southeastern Cable Company, operating in several southeastern states. The company's stock is publicly traded on NASDAQ under the ticker symbol SETV. You are currently in the process of reviewing financial reports for the year ending December 31, 1999. The company's accountants have drafted preliminary financial statements, found in Exhibit 1, that cannot be finalized until you make decisions on the following issues.

1. Although traditionally serving urban cable customers, the company recently acquired the rights to provide cable service to several rural areas. This is the first year that the company has served these customers. Your accountants state that for other publicly traded companies with a similar mix of customers, annual bad debts are normally between 4 and 10% of the accounts receivable balance.
2. A review of the company's franchises indicates that several have no future service potential. Your accountants estimate that between $40,000 and $80,000 of the franchises are now worthless and should be written off. (Ignore any related accumulated amortization.)
3. The company recently purchased $300,000 in new equipment to serve its increasing customer base. You have yet to decide whether to depreciate the new equipment using the straight-line method or the double-declining-balance method. The accountants estimate the useful life at 10–15 years with no salvage value. The company takes a full year of depreciation in the year of acquisition.

Other information is as follows:

1. Several stock market analysts follow the company, and the consensus forecast of earnings per share for the year ending 12/31/1999 is $1.13.
2. Your company's legal counsel is currently meeting with several congressional leaders of a state in which you have a large market share. The legislators claim that cable television companies are gouging the citizens of their state. In a previous year, the legislators enacted rate reductions on utility companies that reported earnings that the legislators considered excessive.
3. The debt covenant of the company's Note Payable states that the company must maintain a current ratio of 1.0. If the ratio falls below this benchmark at any time, the bank holding the note will impose a fine of 1% of the note balance (due immediately) and will increase the interest rate on the note from 8 to 9%.

Required:

1. References to business articles and to Arthur Levitt's 1998 speech entitled "The Numbers Game" are listed in Exhibit 2 (Appendix). Collect and read the speech and one article of your choice. Be prepared to discuss both Levitt's speech and the selected article when this case is covered in class.

2. Prepare finalized financial statements that reflect your decisions about the three expense estimates identified above (uncollectible accounts, franchise obsolescence, and depreciation expense). Prepare a written explanation of the reasons for your estimates. Include in your explanation how the analysts' expectations for earnings per share, the political process of setting rates, and the note covenant affected your decisions.
3. Prepare finalized financial statements that reflect the most and least conservative expense estimates, respectively, that you can make for each of the three financial statement issues. Be prepared to discuss in class what effect these two sets of estimates have on meeting analysts' forecasts of earnings per share, on the political process of setting rates, and on compliance with the note covenant.

3. Teaching notes

3.1. Case overview and intended audience

This case introduces students to the issues of accounting choice and earnings management. The salient premise of the case, which is borne out through business press readings and student role-playing and decision making, is that accounting choice can be influenced by managerial incentives. The case enriches classroom experience by introducing a current practice that, according to Securities and Exchange Commission (SEC) Chairman Arthur Levitt, is widespread among publicly-traded companies (Levitt, 1998; MacDonald, 1998). The case is a fairly straightforward treatment of earnings management concepts. An instructor interested in related materials could consider assigning Wiedman's (1999) case subsequent to this case. Weidman's case is more involved and focuses on detecting earnings manipulation in a set of financial statements.[2]

Financial statements provided in the case are complete except for expense estimates associated with uncollectible accounts, franchise obsolescence, and depreciation. Students playing the role of CEO are required to estimate these expenses from a range of feasible options. To provide realistic tensions for their accounting choices, the case includes a consensus analyst earnings forecast, a current ratio constraint from a lender, and an implied threat from state authorities to force the company to cut rates. The scenario is designed so that there are conflicting motivations for the desired level of earnings. For example, the current ratio constraint encourages the reporting of higher earnings while the political pressure encourages the reporting of lower earnings.

The case is most appropriate for MBA financial accounting courses or graduate-level accounting program courses that address advanced topics and/or the financial reporting process. These types of courses are likely to have flexibility in topics and instructor discretion with respect to class materials. Accounting students in particular

[2] Weidman (1999) uses a model based on empirical work by Beneish (1997). Beneish (1999) contains a brief note with respect to Weidman's case.

should have a solid understanding of the accounting issues discussed in the articles, and MBA students tend to be aware of capital markets, which is captured in the case by the analysts' consensus forecast.

The material has been used several times in an introductory MBA financial accounting course. The case has been assigned toward the end of the term because students' general accounting knowledge has been developed throughout the term. For graduate accounting courses, the case can be used at any time but is especially useful if the instructor has a section of the class devoted to the quality of financial reporting. On average, class discussion of the case takes approximately 45 minutes. Materials prepared by students have been collected for grading. Since there is no one "correct" answer, grades are usually a function of how well the student explains his or her choices.

When assigning the case, we have provided students with an Excel spreadsheet template containing the company's income statement, statement of retained earnings, and balance sheet. The template is provided so that students can focus on the main objectives of the case rather than spending time setting up a spreadsheet. In addition, the instructor can ensure correct calculations by building in necessary formulas that tie the statements together. For example, income tax payable is equal to income tax expense and therefore changes as students enter their expense estimates into the spreadsheet. The template is available from the first author upon request.

3.2. Teaching plan and solutions

Classroom coverage of this case can vary due to instructor preferences. Our suggestions for class coverage are as follows.

The instructor can begin the case discussion by presenting the three expense calculations and the financial statements that result from the most and least conservative choices. Table 1 shows these calculations and the resulting range of possible values for earnings per share and the current ratio. Earnings per share ranges from $1.02 to $1.27, and the current ratio ranges from 0.99 to 1.01 for the most and least conservative accounting choices, respectively. Students should note whether their calculations are correct and whether earnings per share and the current ratio fall within the possible ranges. It may be necessary at this point, especially in an MBA class with non-accounting majors, to explain to students that in accounting, *most conservative* implies higher expenses and *least conservative* implies lower expenses. Some students may have the opposite impression.

Once the calculations and financial statements are understood, the instructor can inquire whether any student made either of the most or least conservative choices. Based on our experience, it is likely that few students, if any, will do so. Discussion should focus on the ramifications of these choices. For example, the most conservative choices result in a missed earnings target and a violation of the debt covenant but also reduce the likelihood of political scrutiny of the firm. In contrast, the least conservative choices result in a positive earnings surprise and maintenance of the debt covenant but increase the likelihood of political scrutiny of the firm.

After presentation and discussion of the most and least conservative cases, several students can then present their finalized financial statements. Students should state

Table 1
Solutions for most and least conservative accounting choices

Most conservative accounting choices		Least conservative accounting choices	
Accounts Receivable		*Accounts Receivable*	
A/R balance	$1950	A/R balance	$1950
× Percentage	0.10	× Percentage	0.04
Balance required	$195	Balance required	$78
Less: existing balance	$50	Less: existing balance	$50
Bad debt expense	$145	Bad debt expense	$28
Franchises		*Franchises*	
Franchise write down	$80	Franchise write down	$40
Depreciation (double declining balance)		*Depreciation (straight line)*	
Cost of equipment	$300	Cost of equipment	$300
Estimated life	10 years	Estimated life	15 years
Depreciation expense	$60	Depreciation expense	$20
Overall effects		*Overall effects*	
Decrease in income before taxes	$285	Decrease in income before taxes	$88
Tax savings ($285*20%)	$57	Tax savings ($88*20%)	$18
Net decrease in earnings	$228	Net decrease in earnings	$70
Earnings per share	$1.02	Earnings per share	$1.27
Current ratio	0.99	Current ratio	1.01

whether their earnings per share figure is below, equal to, or above the $1.13 analysts' forecast and whether a current ratio of 1.0 is maintained. While the degree of political scrutiny cannot be judged quantitatively, students should explain that a higher (lower) earnings per share should increase (decrease) political scrutiny. Students should also explain how the earnings forecast, the potential political scrutiny, and the debt covenant affected their specific choices, if at all. Our experience has been that students can be very creative in their reasoning.

After students have presented their financial statements, the instructor should address the specific issue of earnings management. In doing so, the instructor can highlight some information from the material that students read prior to class.[3] The following questions can be used to guide the discussion:

1. What is earnings management?
2. What factors encourage earnings management?
3. What are some ways that companies accomplish earnings management?
4. What are the ramifications of earnings management?
5. Who should be aware of earnings management and why?
6. What is your opinion of earnings management and why?

[3] A useful tool for periodically updating the reading material is to set up a personal portfolio in the *Wall Street Journal*'s Interactive Edition. In the portfolio, news articles for the past 30 days that contain words and phrases selected by the user will be displayed. Also, the Dow Jones News Retrieval Service, if available to the instructor, is an excellent way to update the case material.

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Appendix A

Exhibit 1 — Southeastern cable company income statement for the year ended 12/31/1999 (In 000s, except for per share data)

Sales revenue		$5,145
Costs and expenses:		
Operating expenses	$2,115	
Selling, general, and admin	$2,193	
Depreciation expense	$463	
Depreciation expense: new	$0	
Bad debt expense	$0	$4,771
Net income from operations		$374
Non-operating items:		
Investment income	$1,080	
Interest expense	($380)	
Franchise write down	$0	$700
Net income before taxes		$1,074
Tax expense at 20%		$215
Net income		$859
Earnings per share		$1.39

Exhibit 1 (continued) — Southeastern cable company balance sheet as of 12/31/1999 (In 000s, except for share data)

Current assets			
Cash		$121	
Accounts receivable	$1,950		
Less: Allowance	($50)	$1,900	
Investments		$2,103	
Other current assets		$540	$4,664
PPE			
Land		$592	
Plant and equipment	$5,432		
Less: accum depreciation	($2,598)	$2,834	$3,426

Intangibles		
Franchises	$5,782	
Less: accum amortization	($1,129)	$4,653
Total assets		$12,743
Current liabilities		
Accounts payable	$2,433	
Accrued liabilities	$1,740	
Line of credit	$236	
Income tax payable	$215	$4,624
Long-term liabilities		
Note payable		$4,356
Total liabilities		$8,980
Stockholders' equity		
Common stock, 620,000 outstanding	$63	
Additional paid in capital	$2,410	
Retained earnings	$1,290	$3,763
Total Liabilities & Equity		$12,743
Current Ratio = 1.009		

Exhibit 2 — Selected articles on earnings management

Byrnes, Nanette, et al., Earnings hocus-pocus: How companies come up with the numbers they want, October 5, 1998, cover story for *Business Week*.

Davis, Ann, SEC claims profit 'management' by grace, *The Wall Street Journal*, April 7, 1999, p. C1.

Hilsenrath, On the books, more facts and less fiction, *New York Times*, February 16, 1997, p. 1.

Kahn, Jeremy, Presto chango! Sales are huge! March 20, 2000, *Fortune*, pp. 90–96.

Levitt, Arthur, The numbers game, Speech given at the NYU Center for Law and Business, September 28, 1998, available from the American Accounting Association at the following: www.rutgers.edu/Accounting/raw/aaa/newsarc/pr101898.htm.

Loomis, Carol, Lies, damned lies, and managed earnings, August 2, 1999, cover story for *Fortune*.

MacDonald, Elizabeth, & Brett Nelson, Quarterly Mayhem, July 24, 2000, *Forbes*, pp. 354–358.

MacDonald, Elizabeth, SEC's Levitt pushes harder for changes in fiscal reporting, and some cry foul, *The Wall Street Journal*, November 17, 1998, p. A2.

McGough, Robert, Executive critical of 'managed' earnings doesn't mind if the street criticizes him, *The Wall Street Journal*, April 16, 1999, p. C1.

Smith, Lippen, and Naj, How general electric damps fluctuations in its annual earnings, *The Wall Street Journal*, November 3, 1994, p. A1.

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