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An Analysis of Financial Accounting Fundamentals Through Case Studies

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AN ANALYSIS OF FINANCIAL ACCOUNTING FUNDAMENTALS THROUGH
CASE STUDIES

By
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A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of
the requirements of the Sally McDonnell Barksdale Honors College.

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Approved by

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ABSTRACT

The purpose of this thesis is to analyze and discuss a broad range of financial reporting topics. This paper was developed over the course of a year in the Honors Accountancy Independent Study class led by Dr. Victoria Dickinson. It is organized into a series of 12 case studies that each examine a specific accounting issue or topic. This required using all resources available to research and understand the specific topics and companies at hand. This process gave me an advanced knowledge of financial accounting beyond the traditional accounting classroom lectures and textbooks. As a result, writing this thesis acquainted me to what accounting looks like in a real-world context.

TABLE OF CONTENTS

CASE 1: Financial Reporting Decisions	PAGE 1
CASE 2: Profitability and Earnings Persistence	PAGE 7
CASE 3: Accounts Receivable	PAGE 16
CASE 4: Bad Debt Reporting	PAGE 25
CASE 5: Property, Plant and Equipment	PAGE 31
CASE 6: Research & Development Costs	PAGE 40
CASE 7: Data Analytics	PAGE 47
CASE 8: Long-Term Debt	PAGE 54
CASE 9: Shareholder's Equity	PAGE 64
CASE 10: Marketable Securities	PAGE 72
CASE 11: Deferred Income Taxes	PAGE 81
CASE 12: Revenue Recognition	PAGE 89

CASE 1: FINANCIAL REPORTING DECISIONS
Glenwood Heating, Inc. and Eads Heaters, Inc.

Introduction

This case follows two companies, Eads Heater, Inc. and Glenwood Heating, Inc., who sell home heating units. The two companies have exactly the same operations during the year. However, the managers make different decisions when applying generally accepted accounting principles. I learned to trace the transactions to financial statements in order to compute key numbers such as net income, retained earnings, and the balance of accounts. This case gave me new experience in Excel. Developing transactions into financial statements in Excel and Word taught me to organize data in an efficient way to best analyze and compare the information provided. This takes planning, double checking, and precision. It equipped me with a new skill set to carry on to my future career.

Executive Summary

When analyzing the two sets of financial statements, it is easy to compare the two companies. When looking at the big picture, I would choose to invest in Glenwood Heating, Inc. Comparing the two company's Income Statements shows Glenwood Heating has a higher net income for the year. Most important, Glenwood Heating, Inc. has significantly more retained earnings than Eads Heater, Inc. retains. This money is invested back into the company and allows cushion to cover debt. Moreover, they didn't choose to capitalize their lease on equipment. Ultimately, the management of Glenwood Heating, Inc. made better decisions to support their company's financials.

APPENDIX 1: Financial Statements of Glenwood Heating, Inc. and Eads Heaters, Inc.

GLENWOOD HEATING, INC.			
Income Statement			
For Year Ended December 31, 20X1			
Sales			398,500
Cost of Goods Sold			<u>177,000</u>
Gross Profit			221,500
Operating Expenses			
	Selling Expenses		
	Other Operating Expenses	34,200	
	Administrative Expenses		
	Bad Debt Expense	994	
	Depreciation Expense-Building	10,000	
	Depreciation Expense-Equipment	9,000	
	Rent Expense	<u>16,000</u>	
		35,994	<u>70,194</u>
Income From Operations			151,306
Other Expenses and Losses			
	Interest Expense		<u>27,650</u>
Income Before Income Tax			123,656
Income Tax			<u>30,914</u>
Net Income for the Year			<u><u>92,742</u></u>

GLENWOOD HEATING, INC.	
Statement of Retained Earnings	
For Year Ended December 31, 20X1	
Retained Earnings, January 1	0
Add: Net Income	<u>92,742</u>
	92,742
Less: Dividends	<u>23,200</u>
Retained Earnings, December 31	<u><u>69,542</u></u>

GLENWOOD HEATING, INC.**Classified Balance Sheet****December 31, 20X1****Assets**Current Assets

Cash		426
Accounts Receivable	99,400	
Less: Allowance for Doubtful Accounts	<u>994</u>	98,406
Inventory		<u>62,800</u>
Total Current Assets		161,632

Property, Plant, and Equipment

Land		70,000
Building	350,000	
Less: Accumulated Depreciation	<u>10,000</u>	340,000
Equipment	80,000	
Less: Accumulated Depreciation	<u>9,000</u>	71,000
Total Property, Plant, and Equipment		<u>481,000</u>
Total Assets		<u><u>642,632</u></u>

Liabilities and Stockholder's EquityCurrent Liabilities

Accounts Payable		26,440
Interest Payable		<u>6,650</u>
Total Current Liabilities		33,090

Long Term Liabilities

Note Payable		<u>380,000</u>
Total Liabilities		<u><u>413,090</u></u>

Stockholder's Equity

Common Stock		160,000
Retained Earnings		<u>69,542</u>
Total Owner's Equity		<u><u>229,542</u></u>

Total Liabilities and Stockholder's Equity		<u><u>642,632</u></u>
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EADS HEATERS, INC.			
Income Statement			
For Year Ended December 31, 20X1			
Sales			398,500
Cost of Goods Sold			<u>188,800</u>
Gross Profit			209,700
Operating Expenses			
	Selling Expenses		
	Other Operating Expenses	34,200	
	Administrative Expenses		
	Bad Debt Expense	4,970	
	Depreciation Expense-Building	10,000	
	Depreciation Expense-Equipment	20,000	
	Depreciation Expense- Leased Equipment	<u>11,500</u>	46,470
			<u>80,670</u>
Income From Operations			129,030
Other Expenses and Losses			
	Interest Expense		<u>35,010</u>
Income Before Income Tax			94,020
Income Tax			<u>23,505</u>
Net Income for the Year			<u><u>70,515</u></u>

EADS HEATERS, INC.	
Statement of Retained Earnings	
For Year Ended December 31, 20X1	
Retained Earnings, January 1	0
Add: Net Income	<u>70,515</u>
	70515
Less: Dividends	<u>23,200</u>
Retained Earnings, December 31	<u><u>47,315</u></u>

EADS HEATERS, INC.**Classified Balance Sheet****December 31, 20X1****Assets**Current Assets

Cash		7,835
Accounts Receivable	99,400	
Less: Allowance for Doubtful Accounts	<u>4,970</u>	94,430
Inventory		<u>51,000</u>
Total Current Assets		153,265

Property, Plant, and Equipment

Land		70,000
Building	350,000	
Less: Accumulated Depreciation	<u>10,000</u>	340,000
Equipment	80,000	
Less: Accumulated Depreciation	<u>20,000</u>	60,000
Leased Equipment	92,000	
Less: Accumulated Depreciation	<u>11,500</u>	80,500
Total Property, Plant, and Equipment		<u>550,500</u>
Total Assets		<u><u>703,765</u></u>

Liabilities and Stockholder's EquityCurrent Liabilities

Accounts Payable	26,440
Interest Payable	6,650
Lease Payable	<u>83,360</u>
Total Current Liabilities	116,450

Long Term Liabilities

Note Payable	<u>380,000</u>
Total Liabilities	<u><u>496,450</u></u>

Stockholder's Equity

Common Stock	160,000
Retained Earnings	<u>47,315</u>
Total Owner's Equity	<u><u>207,315</u></u>

Total Liabilities and Stockholder's Equity	<u><u>703,765</u></u>
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CASE 2: PROFITABILITY AND EARNINGS PERSISTENCE
Molson Coors Brewing Company

Introduction

This case focuses on the Income Statement in the context of a brewing company, titled Molson Coors Brewing Company. This case emphasized the concepts and interpretations behind the Income Statement, rather than just the quantitative aspects. It asked the “why” question frequently to allow for deeper investigation and understanding of each individual item appearing on the statement. This helped to grow and expand my knowledge on this financial statement in particular as I thought of the specifics behind each detail. Knowing the purpose of each item is just as important as knowing the amount associated with it. Moreover, it is essential to recognize where each item finds its place. The Generally Accepted Accounting Principles has very strict standards for reporting on the Income Statement, however allows for some judgment. For example, discontinued operations involve judgment to discern the contents reported under this title.

We were asked to write this case as if writing to a bookkeeper or someone clerical. This involved molding accounting concepts, their definitions, and explanations so a bookkeeper can understand them with ease. In doing this, I had to be careful to maintain the true integrity and meaning of the accounting concepts. This gave me experience I will take with me for years to come. The accounting profession demands much more than just accounting skills. It expects writing, analyzing, and organization skills as well. In this case, I had to think about the items on the Income Statement, but even more, the distinction between each item. This took analysis and reasonable thought beyond pure accounting.

Concepts

A. What are the major classifications on an income statement?

The major classifications on an income statement are as follows:

- Sales: This is presented as sales less discounts, allowances, and returns to arrive at net sales.
- Cost of Goods Sold: This item shows the cost of goods that were sold to produce the sales.
- Gross Profit: Gross Profit is a subtotal computed by subtracting cost of goods sold from net sales.
- Operating Expenses: This section includes all revenues and expenses resulting from central operations.
 - Selling Expenses: This outlines all expenses resulting from the company's efforts to make sales.
 - Administrative Expenses: This lists all expenses from general administration.
- Income from Operations: This subtotal is calculated by subtracting operating expenses from gross profit.
- Other Revenues and Gains: This subsection falls under the Nonoperating section of revenues (including usual and infrequent gains) resulting from secondary activities.
- Other Expenses and Losses: Other Expenses and Losses also falls under the Nonoperating section but instead lists the expenses (including usual and infrequent losses) resulting from secondary activities.
- Income before Income Tax: This subtotal is the net of the operating and nonoperating sections.

- Income Tax: This is calculated by applying the tax rate to the income before income tax.
- Discontinued Operations: This section reports the gain or loss from disposal of a component or segment and results of operations or a segment that has been disposed of.
- Noncontrolling Interest: This section details the allocation of income to noncontrolling shareholders. This portion relates to minority interest.
- Net Income: This total encompasses all sections before it.
- Earnings Per Share: EPS is a measure of performance required on the face on the income statement. It should be presented for income for continuing operations and discontinued operations if it exists. First, calculate net income less preferred dividends. This number represents income not available to common stockholders. Divide this by weighted average common shares outstanding. This is for common stockholders.

B. Explain why, under U.S. GAAP, companies are required to provide “classified” income statements.

Under U.S. GAAP, companies are required to provide *classified* income statements.

Classified in this context means the financial statement items are split into classifications.

A classified income statement separates operating transactions from nonoperating transactions, and matches cost and expenses with related revenues. This practice also emphasizes the difference between regular and non-recurring or incidental activities. The operating section allows users to focus on a pure measure without considering investment and secondary performances. These revenues and expenses related to core business

activities offer insights into the performance of a company. A classified income statement highlights certain intermediate components of income as well that allow users to assess operating effectiveness of company and the efficiency of management. When broken out, users can evaluate which sectors are performing well or poorly. Moreover, it shows gross profit; a tool investors and creditors use to make decisions. Overall, a classified income statement walks the user through the details of sales to net income, and finally, earnings per share. Therefore, users can see a company transforms net revenue realized into a profit or loss.

C. In general, why might financial statement users be interested in a measure of persistent income?

Persistent income excludes events and transactions that prove atypical from transactions that will continue to occur in the core operations of the company. A measure of the permanent, persistent income provides implications for the future. It provides a forecast of the future discounted for unusual events. Potential investors or creditors can distinguish regular activities from incidental and nonrecurring ones to assess the amount, timing and uncertainty of future cash flows. Thus, these users are able to assess the risk. Furthermore, a measure of persistent income allows a better measure of comparison, in trend analysis, as non-recurring activities will most likely not continue into future periods at the same level. Internal management can use this as a tool for planning and budgeting.

D. Define comprehensive income and discuss how it differs from net income.

Comprehensive income has a broader scope than net income. It includes all revenues, gains, expenses and losses. Net income shows income from day-to-day operations whereas comprehensive income shows all changes in equity (net assets) of a company

during a period except those resulting from investments by owners and distribution to owners. Thus, it includes items such as unrealized holding gains and losses on trading securities and certain pension adjustments.

Process

E. The income statement reports “Sales” and “Net sales.” What is the difference?

Why does Molson Coors report these two items separately?

Sales is the gross amount of revenue received in exchange for something of value (a product or service). This amount doesn't encompass sales discounts, returns and allowances. Additionally, it shows sales before they are impacted by excise taxes.

Reporting them separately allows them to assess trends more easily. By putting excise tax here, they are trying to convey that they are not paying this specific tax but instead, they levy this tax onto their consumer. Therefore, it is treated as a reduction in sales and not as a regular tax. This is because taxes collected from the customers are liabilities and consequently must be reduced when handed over to the tax authority.

F. Consider the income statement item “Special items, net” and information in Notes 1 and 8.

i. In General, what types of items does Molson Coors include in this line item?

Molson Coors includes a section titled “Special Items, net”. Here, they disclose items they believe are not indicative of their “core operations”. Molson Coors claims they do not expect these gains and charges incurred to occur regularly. Items included in this line item are as follows: restructuring charges, impairments or asset abandonment charges, atypical employee-related costs, fees on termination of significant operating agreements, and gains or losses on disposal of investments. For example, during 2013, Molson Coors

recorded losses and related costs of \$5.4 million in their Europe business in relation to significant flooding in Czech Republic. This loss and the related flood loss insurance reimbursement fell under the “Special Items, net” line item.

- ii. Explain why the company reports these on a special line item rather than including them with another expense item. Molson Coors classifies these special items as operating expenses. Do you concur with this classification? Explain.

I do not agree with this classification. Special items can be seen as a red flag to investors. Just because these items are under the special items title does not mean they are not recurring. “Special Items” are subjective in nature. Therefore, putting these separately creates uncertainty and negatively impacts the ability to assess their performance. They reflect deceptive manipulation of the user. Before the Statement of Financial Accounting Standard No. 154, certain cumulative effects of changes in accounting were given special treatment on the Income Statement. However, since 2005, this practice is not permitted. Gains and losses from extraordinary items are no longer considered extraordinary items. Impairment or asset abandonment related losses fall under continuing operations. Unusual or infrequent items should be reported in the nonoperating item section. Moreover, restructuring charges should be presented in the non-operating section. Disposal of investments should be reported in the discontinued operations.

- G. Consider the income statement item “Other income (expense), net” and the information in Note 6. What is the distinction between “Other income (expense), net” which is classified as nonoperating expense, and “Special items, net” which Molson Coors classifies as operating expenses?

Other Income and Expenses fall under the nonoperating section. This is where Molson Coors reports revenues and expenses arising from *secondary* activities of the company. Here, they outline their gains and losses that are not considered part of the discontinued operations. For example, Molson Coors recorded the gain on sale of non-operating assets related to selling their 14.6 percent interest in the Colorado Rockies Baseball Club, Ltd. This amount also included gains related to the sale of water rights and other secondary transactions.

H. Refer to the statement of comprehensive income.

i. What is the amount of comprehensive income in 2013? How does this amount compare to net income in 2013?

Molson Coors Brewing Company had a comprehensive income of \$760.2 million in 2013. Their net income was much lower at \$572.5 million.

ii. What accounts for the difference between net income and comprehensive income in 2013? In your own words, how are the items included in Molson Coors' comprehensive income related?

The "dirty surplus" accounts for the difference between net income and comprehensive income in 2013. This comprises gains and losses on foreign currency translations, derivative assets and liabilities, pension adjustments, and unrealized securities available for sale. These are sometimes reported on the bottom on the income statement but often, they are reported on the Statement of Stockholder's Equity.

J. Consider the information on income taxes, in Note 7.

i. What is Molson Coors' effective tax rate in 2013?

Their effective tax rate in 2013 is 12.8 percent. This is calculated by dividing the income tax expense (84) by the pretax income (654.5). This is much lower than the statutory federal corporate tax rate, 35 percent, as a result of their foreign deferred tax benefits. In Note 7, their reconciliation outlines how they are able to decrease their taxes.

CASE 3: ACCOUNTS RECEIVABLE
Pearson PLC

Introduction

This case, titled Pearson PLC, focuses on the Accounts Receivable account and its accompanying contra accounts. Explaining the concepts behind these accounts in plain English helps solidify my understanding of them. Contra accounts emphasize the importance behind the revenue and expense recognition principles which provides the basis and foundation of accrual accounting.

The “Process” section includes creating the T-accounts, the journal entries, and the connections between them. Certain numbers from one T-account would plug into the next one so it became a puzzle to connect the dots. Understanding and following these connections is essential to take a step further in knowledge beyond the basic grasp I previously held. I was forced to recognize the flow of information. Following a flow allows me to understand and retain the process much better than merely memorizing steps and what goes where. Furthermore, this case asks to indicate which accounts were on the balance sheet accounts and which were on the income statement. This practice helps visualize the bigger picture and not just the components separated into pieces. Overall, these cases continue to simulate real word financials which facilitates and pairs with my other accounting classes; making abstract concepts more concrete. Moreover, answering questions in short answer or essay form poses a different task than just knowing the concept for a test. I found myself going back to the basics, looking in my Accounting 201 and 202 book to revisit foundational concepts, ones that I know but couldn't explain well. The case originates in the United Kingdom, so it adds a taste of different practices seen in other countries' financials.

Concepts

A. What is an account receivable? What other names does this asset go by?

An account receivable is the amount of money owed by entities outside of the company.

It is an asset account. Accounts Receivable is also called Trade Receivables.

B. How do accounts receivable differ from notes receivable?

Both Accounts Receivable and Notes Receivable are asset accounts. Accounts Receivable are sales on credit or sales on account. They are held by a seller and indicate the promise or obligation of a customer to pay the seller. Notes Receivable represents a written promise of another entity to pay a specified sum of money on a specified date in the future to the holder of the note. Thus, Notes Receivable differ as they indicate money lent to a borrower, whereas Accounts Receivable represent money owed as a result of an operating transaction. In addition, Notes Receivable are often interest-bearing, whereas Accounts Receivable are not.

C. What is a contra account? What two contra accounts are associated with Pearson's trade receivables (see Note 22)? What types of activities are captured in each of these contra accounts? Describe factors that managers might consider when deciding how to estimate the balance in each of these contra accounts.

A contra account offsets an account. Contra accounts have the opposite normal balance of the account they connect to. They are subtracted from the other account's balance. When using accrual accounting, these contra accounts must be estimated in order to follow the Expense Recognition Principle (based on matching revenues with the expenses incurred to generate them). There are two contra accounts associated with Pearson's Trade Receivables: Allowance for Sales Returns and Allowances and Allowance for Doubtful

Accounts. Note: As Pearson PLC operates in the United Kingdom, they use different terminology in certain instances. Their financial statements label allowance account as provisions. The Allowance for Sales Returns and Allowances contra account estimates the losses arising from customer returns and allowances. These losses result from customers returning damaged or defective items. Sales Allowances occur when customers keep the damaged or defective item in return for a reduction of the original selling price. This account is deducted from Sales. Pearson's other contra account, titled Allowance for Doubtful Accounts, estimates the uncollectible amounts so that receivables are reported at their net realizable value. Managers must use and consider many factors to estimate these account amounts. They are based on the amount of bad debts or sales the company has experienced in past years, general economic conditions, how long the receivables are past due, their credit history, and other factors.

D. Two commonly used approaches for estimating uncollectible accounts receivable are the percentage-of-sales procedure and the aging-of-accounts procedure.

Briefly describe these two approaches. What information do managers need to determine the activity and final account balance under each approach? Which of the two approaches do you think results in a more accurate estimate of net accounts receivable?

Uncollectible account estimates can be calculated by using one of two methods. The percentage-of-sales method assumes a certain percent of receivables is uncollectible. This percent is then multiplied by the total dollar amount of receivables to find the total uncollectible amount. The percent is based upon the past experience, economic conditions, and the company's trends. The aging-of-accounts procedure examines both

past and current receivables. This approach requires classification of each receivable by the amount of time past due. As this time increases, the likelihood it becomes uncollectible increases proportionally. Next, a percent is assigned and applied to each class to determine the estimated balance of uncollectible accounts. Ultimately, the aging-of-accounts method proves more reliable and accurate as it examines each account separately.

- E. If Pearson anticipates that some accounts will be uncollectible, why did the company extend credit to those customers in the first place? Discuss the risks that managers must consider with respect to accounts receivable.

Accounts Receivable allows customers to make purchases without cash or checks. However, anytime something is purchased on credit, the firm is extending a great amount of trust. Credit sales increases convenience which in turn increases revenue. In order to gain maximum revenue, uncollectible accounts are a risk that a firm must take. In the long run, the risk proves worthwhile for all the sales made on credit. This is why uncollectible accounts are viewed as an expense to generate Sales. In summary, uncollectible accounts are a consequence of convenience and maximizing Sales Revenue.

Process

- F. Note 22 reports the balance in Pearson's provision for bad and doubtful debts (for trade receivables) and reports the account activity ("movements") during the year ended December 31, 2009. Note that Pearson refers to the trade receivables contra account as a "provision." Under U.S. GAAP, the receivables contra account is typically referred to as an "allowance" while the term provision is used to

describe the current-period income statement charge for uncollectible accounts (also known as bad debt expense).

- i. Use the information in Note 22 to complete a T-account that shows the activity in the provision for bad and doubtful debts account during the year. Explain, in your own words, the line items that reconcile the change in account during 2009.

Allowance for Doubtful Account

All figures in £ millions

5	(72)
20	(26)
	(3)
	(76)

-£72 million represents the beginning balance of the Allowance for Doubtfuls account whereas -£76 million represents the ending balance on the account. The line items to the right of the T-account are credit movements, which represent the Bad Debt Expenses for 2009, which Pearson calls Income Statement movements. These decrease the account balance. The line items to the left of the T-account show the write offs of the Accounts Receivable, called “Utilised”. These increase the account balance.

- ii. Prepare the journal entries that Pearson recorded during 2009 to capture 1) bad and doubtful debts expense for 2009 (that is, the “income statement movements”) and 2) the write-off of accounts receivable (that is, the amount “utilised”) during

2009. For each account in your journal entries, note whether the account is a balance sheet or income statement account.

1. Bad Debt Expense (I/S account)	£26 million
Allowance for Doubtful Accounts (B/S acct)	£26 million
2. Allowance for Doubtful Accounts (B/S acct)	£20 million
Accounts Receivable (B/S acct)	£20 million

iii. Where in the income statement is the provision for bad and doubtful debts expense included?

The allowance for bad and doubtful debts expense is included under the operating expense section on the income statement as it is a loss associated with normal credit sales.

G. Note 22 reports that the balance in Pearson's provision for sales returns was £372 at December 31, 2008 and £354 at December 31, 2009. Under U.S. GAAP, this contra account is typically referred to as an "allowance" and reflects the company's anticipated sales returns.

i. Complete a T-account that shows the activity in the provision for sales returns account during the year. Assume that Pearson estimated that returns relating to 2009 Sales to be £425 million. In reconciling the change in the account, two types of journal entries are required, one to record the estimated sales returns for the period and one to record the amount of actual book returns.

Allowance for Sales Returns and Allowances	
All figures in £ millions	
	372
443	425
	354

ii. Prepare the journal entries that Pearson recorded during 2009 to capture, 1) the 2009 estimated sales returns and 2) the amount of actual book returns during 2009. In your answer, note whether each account in the journal entries is a balance sheet or income statement account.

- | | |
|--|--------------|
| 1. Sales Returns and Allowances (I/S acct) | £425 million |
| Allowance for Sales Returns and Allowances (B/S acct) | £425 million |
| | |
| 2. Allowance for Sales Returns and Allowances (B/S acct) | £443 million |
| Accounts Receivable (B/S acct) | £443 million |

iii. In which income statement line item does the amount of 2009 estimated sales returns appear?

On the income statement, the amount of 2009 estimated sales returns appears under Sales Revenue. It is deducted from Sales because it is a contra account. This provides the *Gross Sales Revenue* amount.

H. Create a T-account for total or gross trade receivables (that is, trade receivables before deducting the provision for bad and doubtful debts and the provision for sales returns). Analyze the change in this T-account between December 31, 2008 and 2009. (Hint: your solution to parts f and g will be useful here). Assume that all sales in 2009 were on account. That is, they are all “credit sales.” You may also assume that there were no changes to the account due to business

combinations or foreign exchange rate changes. Prepare the journal entries to record the sales on account and accounts receivable collection activity in this account during the year.

Gross Trade Receivables (Gross A/R)	
All figures in £ millions	
1,474	
5,624	5,216
	20
	443
1,419	

Trade Receivables	£5,624 million
Sales Revenue	£5,624 million
Cash	£5,679 million
Accounts Receivable	£5,679 million

The beginning balance for gross trade receivables, £1,474 million, can be found in Note 22 in the total trade receivables line item under the 2008 column. Gross Trade Receivables slightly decreased between December 31, 2008 and December 31, 2009. This T-account reconciles the beginning balance by first adding gross credit sales of the year, £5,624 million, which is adjusted for the Estimated Sales Returns and Allowances. Then, cash collections, write-offs of accounts receivables, and sales returns are credited (subtracted) to yield the ending amount of Gross Trade Receivables, which is £1,419 million.

CASE 4: BAD DEBT REPORTING
Step-by-Step Guide

Introduction

For this case, I chose to work a problem on a topic I felt unsure about. This problem is about receivables and bad debt reporting. It can be found in the Intermediate Accounting book by Kieso, Weygandt, and Warfield in chapter seven. The problem is a series of unrelated situations. By providing a step-by-step guide, it enabled me to gain a greater understanding on the previously unfamiliar topic. The problem has a series of questions so it allowed me to master different components of the topic.

Problem along with the Step-By-Step Guide:

Problem P7-2:

Answer the questions related to each of the five independent situations as requested:

1. Halen Company's unadjusted trial balance at December 31, 2017, included the following accounts.

	<u>Debit</u>	<u>Credit</u>
Accounts Receivable	\$53,000	
Allowance for doubtful accounts	4,000	
Net Sales		\$1,200,000

Halen Company estimates its bad debt expense to be 7 percent of gross accounts receivable. Determine its bad debt expense for 2017.

To find the bad debt expense, start by multiplying Halen Company's accounts receivable amount, \$53,000 by the percentage indicated, 7 percent. This calculation solves for the ending balance of Allowance for Doubtful accounts, which equals \$3,710. Next, create a T-account titled Allowance for Doubtful accounts. \$3,710 plugs in as the ending balance. The beginning balance, \$4,000 is given in the problem. Thus, all you must solve for is the credit balance, on the right-hand side of the T-account. This is a simple calculation: $x - 4,000 = 3710$ where x equals bad debt expense. So, Halen Company has \$7,710 as its bad debt expense for 2017.

<u>Allowance for Doubtful Accounts</u>	
4,000	7710
	3710

2. An analysis and aging of Stuart Corp. accounts receivable at December 31, 2017, disclosed the following.

Amounts estimated to be uncollectible	\$180,000
Accounts Receivable	1,750,000
Allowance for doubtful accounts (per books)	125,000

What is the net realizable value of Stuart's receivables at December 31, 2017?

Net realizable value is essentially the net accounts receivable. Thus, to solve for it, subtract the amounts estimated to be uncollectible (\$180,000) from accounts receivable (\$1,750,000). This calculation finds the NRV as 1,570,000.

3. Shore co. provides for doubtful accounts based on 4 percent of gross accounts receivable, the following data are available for 2017.

Credit sales during 2017	\$4,400,000
Bad debt expense	57,000
Allowance for doubtful accounts 1/1/17	17,000
Collection of accounts written off in prior years (customer credit was reestablished)	8,000
Customer accounts written off as uncollectible during 2017	30,000

What is the balance in Allowance for doubtful accounts at December 31, 2017?

Start with the beginning balance 1/1/17, \$17,000 and add the collection of accounts written off in prior years. Then, multiply the accounts receivable amount by the percentage, which equals \$176,000. Finally, subtract the customer accounts written off as uncollectible (\$30,000). This reconciles the account for the ending balance as 171,000 December 31, 2017.

Allowance for doubtful accounts 1/1/17	17,000
Collection of accounts written off in prior years	8,000
(4,400,000* 4 percent)	176,000
Customer accounts written off as uncollectible	<u>(30,000)</u>
Allowance for Doubtful accts, 12/31/17	171,000

4. At the end of its first year of operations, December 31, 2017, Darden Inc. reported the following information.

Accounts receivable, net of allowance for doubtful accounts	\$950,000
Customer accounts written off as uncollectible during 2017	24,000
Bad debt expense for 2017	84,000

What should be the balance in accounts receivable at December 31, 2017, before subtracting the allowance for doubtful accounts?

First, subtract the accounts written off as uncollectible during 2017 from the bad debt expense.

Bad Debt Expense	84,000
Uncollectible	<u>(24,000)</u>
	60,000

Next, deduct the answer found above from accounts receivable, net of allowance for doubtful accounts to find the ending balance, before subtracting the allowance for doubtful accounts.

Net Accounts Receivable	950,000
	<u>(60,000)</u>
12/31/17 Balance	1,010,000

5. The following accounts were taken from Bullock Inc.'s trial balance at December 31, 2017.

	<u>Debit</u>	<u>Credit</u>
Net credit sales		\$750,000
Allowance for doubtful accounts	\$14,000	
Accounts receivable	\$310,000	

If doubtful accounts are 3 percent of accounts receivable, determine the bad debt expense to be reported for 2017.

First multiply the accounts receivable amount (310,000) and the percentage (3 percent).

This gives the bad debt expense, before adjustment. Next add the amount given for the

allowance for doubtful accounts (\$14,000). Thus, the bad debt expense reported for 2017 is \$23,300.

Accounts receivable	310,000
Percentage	<u>*.03</u>
Bad debt expense, before adjustment	9300
Allowance for doubtful accounts	<u>14,000</u>
Bad debt expense	23,300

CASE 5: PROPERTY, PLANT, AND EQUIPMENT
Palfinger AG

Introduction

This case highlights the property, plant, and equipment section on the balance sheet. These are noncurrent assets such as land, buildings, machinery, fixtures, and more. These tangible assets are not used in operations or held for resale. This allowed me to learn this specific section on the balance sheet in greater depth.

This case gave me exposure to a few things I had never seen before such as government grants and the account “self-constructed assets”. Moreover, it offered comparisons of the depreciation methods and the resulting impact on the financial statements when using one or the other. Each impacts income differently by causing gains or losses. Comparisons give context to the methods; which proves more useful or practical. Additionally, this case gave me more experience in Excel, which equips me with important skills needed in my future career. Excel is an excellent tool for computation, comparisons, and organization.

Concepts

Note: Palfinger reports all financial statement information is in thousands.

A. Based on the description of Palfinger above, what sort of property and equipment do you think the company has?

Palfinger AG makes knuckle boom cranes, timber and recycling cranes, and telescopic cranes. They also provide container handling systems, tailgates, aerial work platforms, transportable forklifts and railway system solutions. For this, they need heavy machinery. Additionally, they need a lot of depleting resources such as steel. They need a lot of construction equipment and transport devices to move this heavy equipment.

Furthermore, this kind of manufacturing requires a lot of square footage for their plants.

B. The 2007 balance sheet shows property, plant, and equipment of €149,990.

What does this number represent?

€149,990 represents the amount of money invested into the equipment, plant and property used to produce the products they manufacture. This number is adjusted for depreciation because assets should be recorded at net realizable value.

C. What types of equipment does Palfinger report in notes to the financial statements?

Palfinger reports a few types of equipment in the notes to the financial statements. First, they have their own buildings and investments in third party buildings. They also have plant and machinery equipment. Finally, the report fixtures, fittings, and equipment.

D. In the notes, Palfinger reports “Prepayments and assets under construction.”

What does this sub-account represent? Why does this account have no

accumulated depreciation? Explain the reclassification of €14,858 in this account during 2007.

The sub-account titled “Prepayments and assets under construction” represents their self-constructed assets. These are the assets the company builds themselves. This makes sense because they produce the same items necessary to build their production items. This account has no accumulated depreciation because something under construction is not depreciated. Assets start accumulating depreciation only after completion when it is available for use. Companies temporarily use a clearing account called construction in progress. The costs are collected here and treated as an asset. When they are finished they are removed and debited to actual Property Plant and Equipment. This explains the reclassification of €14,858 (representing it moving departments, from under construction to the administration department).

E. How does Palfinger depreciate its property and equipment? Does this policy seem reasonable? Explain the trade-offs management makes in choosing a depreciation policy.

Palfinger depreciates its property and equipment with the straight-line method.

This seems reasonable because the straight-line method is appropriate where benefits from an asset will be realized evenly over its useful life. It is also reasonable for Property, Plant and Equipment with longer useful lives. Double declining balance is used for things with shorter lives. Additionally, the straight-line depreciation method is easier to use.

However, the double declining balance method is more accurate.

F. Palfinger routinely opts to perform major renovations and value-enhancing modifications to equipment and buildings rather than buy new assets. How does Palfinger treat these expenditures? What is the alternative accounting treatment?

Palfinger opts for major modifications over buying new assets. When performing maintenance and repair work, Palfinger treats these as current expense in the year in which they occur. Palfinger capitalizes replacement investments and value-enhancing investments and depreciates them over either the new or the original useful life. Thus, they treat major and extraordinary repairs as capital expenditures. Alternatively, they could treat them as operating expenses.

Major and extraordinary repairs are treated as capital expenditures. Thus, these repairs can be capitalized.

Process

G. Use the information in the financial statement notes to analyze the activity in the “Property, plant and equipment” and “Accumulated depreciation and impairment” accounts for 2007. Determine the following amounts:

i. The purchase of new property, plant and equipment in fiscal 2007.

€61,444 represents the purchase of new property, plant and equipment in fiscal 2007.

This results from the following calculation: $12,139 + 2,020 + 15,612 + 10,673 + 21,000$.

These numbers are found in the “additions” row in the financial statement notes.

ii. Government grants for purchases of new property, plant and equipment in 2007. Explain what these grants are and why they are deducted from the property, plant and equipment account.

The government grants for purchases of new property, plant and equipment amount to €733. This is calculated by €417 and €316. To account for government grants, they are deducted from the carrying amount of the asset. This is done to match them with the related costs, for which they will compensate. This is why they are reductions to property, plant and equipment.

iii. Depreciation expense for fiscal 2007.

The depreciation expense is €12,557.

iv. The net book value of property, plant and equipment that Palfinger disposed of in fiscal 2007.

The net book value of property, plant and equipment of disposal is €1501, which is the difference between €13,799 and €12,298.

H. The statement of cash flows (not presented) reports that Palfinger received proceeds on the sale of property, plant and equipment amounting to €1,655 in fiscal 2007. Calculate the gain or loss that Palfinger incurred on this transaction.

Hint: use the net book value you calculated in part G iv, above. Explain what this gain or loss represents in economic terms.

Palfinger incurs a €154 gain. This is the difference between €1,655 and €1,501. This represents the excess amount over the book value resulting from the sale. It increases income.

I. Consider the €10,673 added to “Other plant, fixtures, fittings, and equipment” during fiscal 2007. Assume that these net assets have an expected useful life of five years and a salvage value of €1,273. Prepare a table showing the depreciation

expense and net book value of this equipment over its expected life assuming that Palfinger recorded a full year of depreciation in 2007 and the company uses:

- i. Straight-line depreciation
- ii. Double-declining-balance depreciation

	Straight Line Depreciation	Double Declining Balance
Gross Book Value	€ 10,673	€ 10,673
Depreciation Expense 2007	1,880	3,760
Net Book Value 2007	8,793	6,913
Depreciation Expense 2008	1,880	2,435
Net Book Value 2008	6,913	4,478
Depreciation Expense 2009	1,880	1,577
Net Book Value 2009	5,033	2,901
Depreciation Expense 2010	1,880	1,022
Net Book Value Year 2010	3,153	1,879
Depreciation Expense 2011	1,880	606
Net Book Value Year 2011	€ 1,273	€ 1,273
Depreciation Expense Formula		
	Straight Line Depreciation = (Purchase Price of Asset - Salvage Value) /estimated useful life	Double Declining Balance = 2 × Straight-line depreciation rate × Book value at the beginning of the year

J. Assume that the equipment from part I was sold on the first day of fiscal 2008 for proceeds of €7,500. Assume that Palfinger's accounting policy is to take no depreciation in the year of sale.

i. Calculate any gain or loss on this transaction assuming that the company used straight-line depreciation. What is the total income statement impact of the equipment for the two years that Palfinger owned it? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment (i.e. the amount from part i.i)

Using straight-line depreciation, there would be a gain of €1,293. This would increase income. As the original cost was €10,673 and the accumulated depreciation was €1,880, the book value at the time of disposal was €8,793. Considering the cash proceeds of €7,500, the loss is €1,293 (calculated as €8,793-€7,500 = €1,293).

ii. Calculate any gain or loss on this transaction assuming the company used double-declining balance depreciation. What is the total income statement impact of this equipment for the two years the Palfinger owned them? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment (i.e. the amount from part i. ii)

The original cost was €10,673 and the accumulated depreciation was €4,269. As such, the resulting book value at the time of the disposal was of €6,404. Considering the cash proceeds of €7,500, the gain is calculated as €7,500 – €6,404 = €1,096. This would negatively impact the income statement by decreasing income.

iii. Compare the total two-year income statement impact of the equipment under the two depreciation policies. Comment on the difference.

Using the straight-line depreciation method yields a higher income, €11,261 (calculation: €9968 + €1293) than the income resulting from using double declining balance. Under double declining balance, the income is €9,381 (the difference between €9968 and €587).

CASE 6: RESEARCH & DEVELOPMENT COSTS
Volvo Group

Introduction

This case focused on research and development costs. This case broadened my horizons, as I have never dealt with this particular subject matter. I learned what kind of costs fall into this category and how they are handled on the financial statements. There are two differing treatments: under U.S. GAAP or under IFRS. Thus, research and development costs can either be expensed or capitalized. I also assessed the impact of how they are handled.

When comparing companies, it gave me a better perspective on how Volvo Group dealt with their own financials. Further, looking at the proportion of the research and development costs to the net sales allows for even greater comparison. Moreover, working with excel on regular basis this semester has solidified my skills. I enjoyed this case because it gave me experience in a new area.

Concepts

- A. The 2009 income statement shows research and development expenses of SEK 13,193 (millions of Swedish Krona). What types of costs are likely included in these amounts?

Research and development expenses can include a broad range of costs. In terms of research, this expense includes costs to cover the laboratory research directed at the discovery of new knowledge and data. For development expenses, some costs stem from the design of new possible products or process alternatives and construction of prototypes. The costs associated with R&D activities cover the salaries for the research staff working on the developments. It also includes the engineering costs incurred to advance new commercial vehicles or engines. Additionally, it would include the costs of materials, equipment and facilities used in these projects. Volvo Group would incur costs to test the prototype and design modifications. Indirect costs are associated with research and development expenses as well. Finally, the costs to obtain patents or copyrights are likely included in this amount.

- B. Volvo Group follows IAS 38—Intangible Assets, to account for its research and development expenditures (see IAS 38 excerpts at the end of this case). As such, the company capitalizes certain R&D costs and expenses others. What factors does Volvo Group consider as it decides which R&D costs to capitalize and which to expense?

Under GAAP, Volvo Group expenses research and development costs when incurred. In contrast, under IAS 38, research and development costs are treated differently. In this

case, Volvo Group can only capitalize the development costs if they meet three criteria. They must expense all research costs.

- C. The R&D costs that Volvo Group capitalizes each period (labeled Product and software development costs) are amortized in subsequent periods, similar to other capital assets such as property and equipment. Notes to Volvo's financial statements disclose that capitalized product and software development costs are amortized over three to eight years. What factors would the company consider in determining the amortization period for particular costs?

Some intangible assets have an infinite life. Volvo discloses that their capitalized product and software development costs have a finite life. They choose to amortize their costs over three to eight years. They must consider the speed of software development innovation. To determine this, they can look at their own past. Moreover, they can look at other companies' innovations and similar technology. Product and software development is constantly improving and changing and this rate of change must be considered.

- D. Under U.S. GAAP, companies must expense all R&D costs. In your opinion, which accounting principle (IFRS or U.S. GAAP) provides financial statements that better reflect costs and benefits of periodic R&D spending?

The two contrasting standards under U.S. GAAP and IFRS majorly impacts comparability of the financial statements across companies. In my opinion, the accounting principle under U.S. GAAP better reflects costs and benefits of periodic R&D spending as it follows the revenue and cost recognition and matching principles.

Process

- E. Refer to footnote 14 where Volvo reports an intangible asset for “Product and software development.” Assume that the product and software development costs reported in footnote 14 are the only R&D costs that Volvo capitalizes.
- i. What is the amount of the capitalized product and software development costs, net of accumulated amortization at the end of fiscal 2009? Which line item on Volvo Group’s balance sheet reports this intangible asset?

The amount of the capitalized product and software development costs, net of accumulated amortization at the end of fiscal 2009 is \$11,409. This is show on the last line item under the “Product and software development” column. The first table only shows the gross amount so the amortization must be subtracted out.

- ii. Create a T-account for the intangible asset “Product and software development,” net of accumulated amortization. Enter the opening and ending balances for fiscal 2009. Show entries in the T-account that record the 2009 capitalization (capital expenditures) and amortization. To simplify the analysis, group all other account activity during the year and report the net impact as one entry in the T-account.

Capitalized Product and Software, net			
Beginning Balance	12,381		
Amounts Capitalized	2,602	3,126	Amortization
		448	Other activity
Ending Balance	11,409		

F. Refer to Volvo's balance sheet, footnotes, and the eleven-year summary. Assume that the product and software development costs reported in footnote 14 are the only R&D costs that Volvo capitalizes.

i. Complete the table below for Volvo's Product and software development intangible asset.

(in US \$ millions)	2007	2008	2009
Total R&D costs incurred during the year, expensed on the income statement	375	384	433
Net sales, manufactured products	11,910	14,339	11,300
Total assets	11,448	10,390	10,028
Operating income before tax	(73)	191	359

	2007	2008	2009
1) Product and software development costs capitalized during the year	2,057	2,150	2,602
2) Total R&D expense on the income statement	11,059	14,348	13,193
3) Amortization of previously capitalized costs (included in R&D expense)	2,357	2,864	3,126
4) Total R&D costs incurred during the year = 1 + 2 - 3	10,759	13,634	12,669

iii. What proportion of Total R&D costs incurred did Volvo Group capitalize (as product and software development intangible asset) in each of the three years?

In 2007, Volvo Group capitalized 19.11 percent of total R&D costs. In 2008, they capitalized 15.77 percent of total R&D costs. Finally, in 2009, Volvo Group capitalized 20.54 percent of their total R&D costs.

G. Assume that you work as a financial analyst for Volvo Group and would like to compare Volvo's research and development expenditures to a U.S. competitor, Navistar International Corporation. Navistar follows U.S. GAAP that requires that all research and development costs be expensed in the year they are incurred. You gather the following information for Navistar for fiscal year end October 31, 2007 through 2009.

i. Use the information from Volvo's eleven-year summary to complete the following table:

(in SEK millions)	2007	2008	2009
Net sales, industrial operations	276,795	294,932	208,487
Total assets, from balance sheet	321,647	372,419	332,265

ii. Calculate the proportion of total research and development costs incurred to net sales from operations (called, net sales from manufactured products, for Navistar) for both firms. How does the proportion compare between the two companies?

Navistar	2007	2008	2009
Total R&D	375	384	433
Net Sales from Operations	11,910	14,339	11,300
R&D/Net Sales	3.15%	2.68%	3.83%
Volvo			
Total R&D	10,759	13,634	12,669
Net Sales from Operations	276,795	294,932	208,487
R&D/Net Sales	3.89%	4.62%	6.08%

As this table illustrates, in all three years, Volvo Group has a higher proportion of total R&D incurred to net sales from operations in comparison with Navistar.

CASE 7: DATA ANALYTICS

Hadoop

Introduction

Case #7 gave me much needed knowledge in data analytics through researching a specific software tool called Hadoop. Hadoop is a widely used tool for big data. I learned a lot about the background of the tool such as the overall purpose, the history and how it is used to make more informed business decisions by many highly acclaimed corporations. This case was research intensive but forced me to use creative and critical thinking skills to apply the research to real life business scenarios. This helped me to view the accounting world through the lens of data analytics. Accountants face an exciting era where if they adapt to the new perspectives, they possess the ability to be the link between corporations, their strategies, and information technology. However, accountants can only do so if they keep up to pace with the technology. Exposure is the first step for students like me to gain a foundational knowledge. This case gave me that exposure opportunity.

Concepts

1. Identify the history and purpose of this tool and describe, in general, how it is used to make business decisions. Be specific about what kind of technology platform it uses, etc. and other resources that need to be in place to fully utilize the functionality of the tool.

Hadoop is a software framework to store, manage, and analyze any kind of data on commodity hardware. It is an open-source tool possessing massive capacity for data storage and incredible processing power. Hadoop started as a search engine called Nutch in the early 2000s. The establishment of the World Wide Web was a major driving factor in the need for and creation of automated search engines to efficiently find relevant information. Doug Cutting and Mike Cafarella created Nutch as an open source web search engine that used calculations and data to both speed up the information search process and allow simultaneous web interactions. Cutting combined with Yahoo which in turn split his Nutch project into two divisions. One remained the web search called Nutch and the other evolved to a computing and processing mechanism named “Hadoop”. Cutting also pulled ideas from Google’s early innovations. It was officially released by Yahoo in 2008. Apache Software Foundation now runs Hadoop.

Hadoop allows companies to process big data by running applications at a low cost. Moreover, it has the capacity to process this data, at different volumes and varieties, in a flexible manner and at a high speed. Additionally, there is a fault tolerance system put in place for consistency, backup, and assurance. Hadoop’s purpose is to better inform decision makers through data analytics so their resolves will in turn be better and faster.

For example, Facebook, LinkedIn, Netflix, and more use Hadoop to predict customer preferences in real time, creating systems like “people you may know” or “similar items you may like”. Insights like these allow for continuous improvement and opportunities.

2. What special skills are needed to use this tool to aid in business decision making. How might a student like yourself gain those skills?

Using Hadoop to aid in business decision making requires advanced programming and coding skills. This creates a gap in knowledge and expertise. Majority of other data analytics tools use SQL so finding programmers proficient in Java is the key to success with MapReduce. To complement these more advanced skills, a foundational knowledge of operating systems and hardware is necessary. This requires familiarity with databases, data mining, querying and things of the like. Finally, analytical skills are needed to make pivotal business decisions such as problem solving. Accounting systems is a great introduction class to skills in data analytics.

3. How, specifically, would you use the tool in the following business settings?

Create at least three specific scenarios for each category in which the tool would lead to more efficiency and/or better effectiveness. Be sure to describe what kinds of data your tool would use for each scenario.

A. Auditing

1. Audit involves assessing estimates. Therefore, the audit department can use Hadoop to better predict estimates and see if with more data, if the estimate can be more precise. For example, it can predict an accounts receivable balance with associated collection periods to create models.

2. Hadoop can allow auditors to assess the general ledger for discovery to verify completeness and existence of liabilities and assets. It can search through massive data to make sure every liability is complete. It can also scan to make sure each asset exists. Data serves as evidence to validity and reliability and the more data that can be evidenced, the better the audit. Instead of using a small sample of the client's overall data, Hadoop can create a more complete perspective to increase accuracy.

3. Hadoop can be used to audit internal controls with continuous monitoring. It has the capacity to flag abnormal behavior in real time. This is a revolutionary way to detect fraud and reduce risk by analyzing patterns and usage models that depict normal behavior from the company's history. It can analyze transactions as they flow in against departmental history. Further, it can use filters to be more efficient and reduce human error.

B. Tax Planning

1. The goal of tax planning is to minimize legal worldwide tax payment while simultaneously maximizing profitability. Hadoop can help recommend optimal locations in the United States and the world to expand operations in order to best address those two opposing goals. This is accomplished through predictive analytics. CPA's can use Hadoop to find trends in tax rates and income to avoid any surprises at year end. Furthermore, they can look at data to assess how certain changes in controls or investments can improve tax obligations.

2. Hadoop can check a massive assortment of facts and numbers at once to ensure total compliance with state, federal and international tax programs.

3. Tax professionals can use Hadoop to make comparisons in similar companies' taxes by searching for patterns in order to find possible anomalies and candidates for examination.

C. Financial Statement Analysis/Valuation/Advisory

1. Hadoop can allow the advisory department to improve. They can analyze unstructured data about their clients to assess customer satisfaction and suggest improvements. This means looking at social media, emails, complaint logs, online forums, and unmonitored interactions. This will enable CPAs to look at market trends and customer behavior to better drive sales or customer interaction.

2. Advisory can also use Hadoop for diagnostic analytics to look at past problems and find the causes. Here, they can use variance analysis to pinpoint areas to improve or change going forward.

3. Financial services can now reach their clients on the go. They no longer have to sit in the corporate on location sites. They can access all this data remotely, through the cloud, which reduces overall cost and increases convenience.

4. Write a few paragraphs to your future public accounting partner explaining why your team should invest in the acquisition of and training in this tool. Explain how the tool will impact the staffing and scope of your future engagements.

Hadoop offers a wide variety of valuable tools that can be applied to accounting. For starters, it will set precedent and allow our company to retain more informed knowledge on our clients to access for future reference and continuous improvement. With the introduction of powerful and innovative big data technology, our company can cut down on manpower; and thus staffing. This transforms tedious, time consuming, and therefore, expensive tasks to become more productive and efficient. With anywhere from 10

percent to 50 percent more time from departmental professionals, staff can be redeployed to more value-added activities.

It is in our team's best interest to invest in the talent necessary and training to implement Hadoop. This tool has enormous capacity to save time and money.

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CASE 8: LONG TERM DEBT

Rite Aid Corporation

Introduction

The Rite Aid case focuses on long-term debt. This matches up exactly with the content I am currently learning in my Intermediate Accounting class. It helped to advance my knowledge in this specific area on the balance sheet. As a future auditor, I will have to reconcile what is found on the balance sheet with the footnotes. This gave me practice for that by verifying the numbers for total debt. It also gave me a real-life example of a company's varying types of debt with ranging interest rates. Practice makes perfect and the opportunity to apply journal entries, amortization schedules, and analysis on an actual company solidified my understanding of the different aspects of long term debt. Working hands on with the numbers instead of just concepts allowed me to separate in my mind the differences between secured and unsecured debt and effective interest rate method versus the straight-line method.

Concepts

A. Consider the various types of debt described in note 11, Indebtedness and Credit Agreement.

i. Explain the difference between Rite Aid's secured and unsecured debt. Why does Rite Aid distinguish between these two types of debt?

Secured debt is debt backed by collateral to reduce the risk associated with lending.

These debts are tied to specific assets. Therefore, unsecured debt is not backed by collateral. Distinguishing between the two is important as it distinguishes the risk level. A secured debt means the company has a lot more to lose than just avoiding the obligation.

ii. What does it mean for debt to be "guaranteed"? According to note 11, who has provided the guarantee for some of Rite Aid's unsecured debt?

Rite Aid's wholly-owned subsidiaries guarantee their unsecured debt. The subsidiaries are the third party who guarantees the debt in case Rite Aid defaults. This means they hold responsibility over paying the debt.

iii. What is meant by the terms "senior," "fixed-rate," and "convertible"?

"Senior" is in reference to senior debt securities which is issued in the form of senior notes or senior loans. It simply labels the debt as priority over other unsecured or lesser than debt owned by the issuer. A good way to think of it is having more seniority in the issuer's capital structure. Senior notes must be paid before other unsecured notes in an event of liquidation. These notes have a lower coupon rate as it has greater security and less risk. Moreover, Rite Aid uses the term "fixed-rate" to describe a senior note. This means it requires the same amount of interest for its entire term. Additionally, the term "convertible" means the notes are convertible into shares of Rite Aid's common stock at

a set conversion price (in this case at \$2.59 per share) at any time. This is only an option that a holder can use or forgo.

- iv. Speculate as to why Rite Aid has many different types of debt with a range of interest rates.

Ultimately, Rite Aid needs to protect their cash flow. Different types of debt with ranging interest rates allows more flexibility on their liquidity.

Process

- B. Consider note 11, Indebtedness and Credit Agreement. How much total debt does Rite Aid have at February 27, 2010? How much of this is due within the coming fiscal year? Reconcile the total debt reported in note 11 with what Rite Aid reports on its balance sheet.

As found under note 11, titled Indebtedness and Credit Agreement, Rite Aid has \$6,370,899 in total debt at February 27, 2010. This can be reconciled with what is found on the balance sheet. It can be broken down into current maturities of long-term debt and lease financing obligations of \$51,502, long-term debt of \$6,185,633 and lease financing obligations of \$133,764.

- C. Consider the 7.5 percent senior secured notes due March 2017.

- i. What is the face value (i.e. the principal) of these notes? How do you know?

The 7.5 percent senior secured notes due March 2017 had a face value of \$500,000. It can be inferred the notes were issued at par because there is no discount associated.

- ii. Prepare the journal entry that Rite Aid must have made when these notes were issued.

Cash	500,000
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Note Payable 500,000

This increases assets and liabilities.

iii. Prepare the annual interest expense journal entry. Note that the interest paid on a note during the year equals the face value of the note times the stated rate (i.e., coupon rate) of the note.

Interest Expense 37,500

Cash or Interest Payable 37,500

This decreases net income and increases liabilities.

iv. Prepare the journal entry that Rite Aid will make when these notes mature in 2017.

Notes Payable 500,000

Cash 500,000

This decreases liabilities and decreases assets.

D. Consider the 9.375 percent senior notes due December 2015. Assume that interest is paid annually.

i. What is the face value (or principal) of these notes? What is the carrying value (net book value) of these notes at February 27, 2010? Why do the two values differ?

At February 27, 2010, the face value of the note is \$410,000 and the carrying value (the net book value) is \$405,951. The current carrying value is the face value less the unamortized discount (or plus the unamortized premium). Thus, the carrying value is calculated by subtracting \$4,049 from the face value of \$410,000. The fair value is based

on a market to market accounting basis whereas the carrying value is computed through figures on the balance sheet such as amortization.

ii. How much interest did Rite Aid pay on these notes during the fiscal 2009?

Rite Aid paid \$38,438 in interest on these notes during the fiscal year 2009. The cash interest payments are calculated by multiplying the principle (\$410,000) by the rate (.09375) by the time (12/12 months).

iii. Determine the total amount of interest expense recorded by Rite Aid on these notes for the year ended February 27, 2010. Note that there is a cash and a noncash portion to interest expense on these notes because they were issued at a discount. The noncash portion of interest expense is the amortization of the discount during the year (that is, the amount by which the discount decreased during the year).

Cash interest payments will always stay the same unless under special circumstances. Therefore, the cash interest paid by Rite Aid on these notes for the year ended February 27, 2010 is \$38,438. This must be added to the discount amortized of \$705 to equal \$49,143 in total for amount of interest expense recorded by Rite Aid on these notes for the year ended February 27, 2010.

iv. Prepare the journal entry to record interest expense on these notes for fiscal 2009. Consider both the cash and discount (noncash) portions of the interest expense from part iii above.

Interest expense	39,143
Discount on Notes Payable	705
Cash	38,438

This entry decreases net income and assets.

The interest expense is found by adding the discount on notes payable and cash. It is easiest to back into the numbers here by first finding the discount on notes payable to then solve for interest expense. The discount is found by subtracting the two amortized discounts (\$4,754-\$4,049).

v. Compute the total rate of interest recorded for fiscal 2009 on these notes.

The total rate of interest recorded for fiscal 2009 on these notes is 9.659 percent. To find the interest rate, the interest expense of \$39,143 must be put into the numerator. The denominator is the carrying value from the beginning of the period. This is found by subtracting the unamortized discount of \$4,754 from the face value of \$410,000. The result is \$405,246. Thus the rate is found by dividing \$39,143 by \$405,246 which equates to 9.659 percent.

E. Consider the 9.75 percent notes due June 2016. Assume that Rite Aid issued these notes on June 30, 2009 and that the company pays interest on June 30th of each year.

i. According to note 11, the proceeds of the notes at the time of issue were 98.2 percent of the face value of the notes. Prepare the journal entry that Rite Aid must have made when these notes were issued.

Cash	402,620
Discount on Bonds Payable	7,380
Bonds Payable	410,000

This entry increases assets and liabilities.

The amount credit under bonds payable represents the face amount. The cash proceeds are found by multiplying the face value of \$410,000 by 98.2 percent. This percentage is found in the footnotes on page 87. The notes indicate the 9.75 percent senior secured notes due June 2016 were issued at 98.2 percent par. Finally, the discount is the face value of \$410,000 less the cash proceeds of \$402,620. It equals \$7,380.

ii. At what effective annual rate of interest were these notes issued?

The effective annual rate of interest on these notes issued is 10.1212 percent. This can be found easily through excel formulas. Using the excel formula builder for RATE, the number of periods, cash interest payment for one period, cash proceeds, and the fair value can be plugged in. The cash interest payment and the face value must be plugged in as negative. This appears as “=RATE (7,-39975,402620,-410000)” on the excel document in formula bar and result in 10.1212 percent in the cell.

iii. Assume that Rite Aid uses the effective interest rate method to account for this debt. Use the table that follows to prepare an amortization schedule for these notes. Use the last column to verify that each year’s interest expense reflects the same interest rate even though the expense changes. Note: Guidance follows the table.

Date	Interest Payment	Interest Expense	Discount Amortization	Net Book Value of Debt	Effective Interest Rate
6/30/09				\$ 402,620	10.1212%
6/30/10	\$ 39,975	\$ 40,750	\$ 775	403,395	
6/30/11	39,975	40,828	853	404,248	
6/30/12	39,975	40,915	940	405,188	
6/30/13	39,975	41,010	1,035	406,223	
6/30/14	39,975	41,115	1,140	407,363	
6/30/15	39,975	41,230	1,255	408,618	
6/30/16	39,975	41,357	1,382	<u>\$ 410,000</u>	

June 30, 2009 Net Book Value of Debt is the initial proceeds of the bond issuance, net of costs. The face value of this debt is \$410,000; the discount is \$7,380; the coupon rate is 9.75 percent and the effective rate (including fees) is 10.1212 percent. Interest Payment is the face value of the bond times the coupon rate of the bond. Interest Expense equals opening book value of the debt times the effective interest rate. The difference between the interest payment and interest expense is the amortization of the bond discount. This is equivalent to saying that interest expense equals the interest paid plus the amortization of the bond discount. Amortizing the discount increases the net book value of the bond each year.

- iv. Based on the above information, prepare the journal entry that Rite Aid would have recorded February 27, 2010, to accrue interest expense on these notes.

Interest expense	27,167
Discount on Notes Payable	517
Interest Payable	26,650

This decreases net income and increases liabilities.

The discount on the note payable is found by multiplying 775 by (8/12). The interest payable reflects the cash payment of \$39,975 multiplied by the time (8/12).

v. Based on your answer to part iv., what would be the net book value of the notes at February 27, 2010?

The net book value of the notes at February 27, 2010 is \$403,137. This results from the last carrying value (\$402,620) plus the amortization up to February 27 (\$517). This number is off on the balance sheet because Rite Aid chose to use the straight-line method over the effective interest rate method as they decided the difference is not material. Using the straight-line method, the discount on notes payable is greater at \$703. The calculation for it is as follows: $(\$7,380/7) = \$1,054 * (8/12 \text{ months}) = \703 .

CASE 9: SHAREHOLDER'S EQUITY
Merck & Co., Inc.

Introduction

This case zoomed in on stockholder's equity. It gave me experience in finding, differentiating and calculating shares authorized, issued, and outstanding. It also conceptualized the *purpose* of treasury stock and dividends. It asked the important "why" questions: why companies pay dividends and why companies repurchase their own shares. Additionally, the ability to reconcile numbers found with notes or financial statements is a crucial skill to verifying answers. This skill appears again and again in these financial reporting cases. Finally, this case uses a chart to analyze differences across years. The chart shows dividends in the big picture and how it relates to net income, stock price, total assets, and more. In conclusion of the case, I have a greater understanding and clarity of stockholder's equity and its many confusing components.

Concepts

A. Consider Merck's common shares.

i. How many common shares is Merck authorized to issue?

Merck is authorized to issue 5,400,000,000 shares. The maximum amount of stock authorized is called a charter. This is found on the balance sheet in the equity section. It is the highest number with issued shares as the second highest (unless they equal outstanding shares). Outstanding shares is the third category. Outstanding shares can never be greater than shares issued but can equal to the shares issued.

ii. How many common shares has Merck actually issued at December 31, 2007?

At December 31, 2007, Merck has issued 2,983,508,675 common shares.

iii. Reconcile the number of shares issued at December 31, 2007, to the dollar value of common stock reported on the balance sheet.

The par value is 1 cent. When the par value is multiplied by the number of shares issued (2,983,508,675), this equals the \$29.8 million as reported on the balance sheet.

$(2,983,508,675 * .01 = 29,835,086.75)$

iv. How many common shares are held in treasury at December 31, 2007?

There are 811,005,791 shares held in treasury at December 31, 2007. Treasury stock represents the shares the company has bought back. There are two ways Merck can buy back their stock. They can buy their shares through the open market. This is called an "open market repurchase" and means they pay the market rate. Alternatively, Merck can make a tender offer which entails making offers to specific people.

v. How many common shares are outstanding at December 31, 2007?

There are 2,172,502,884 common shares outstanding at December 31, 2007. Outstanding shares can be calculated by subtracting shares of treasury stock from shares issued.

vi. At December 31, 2007, Merck's stock price closed at \$57.61 per share.

Calculate the total market capitalization of Merck on that day.

Market capitalization is the number of shares outstanding multiplied by the market price per share. This calculation ($1,605,485,534 * \$57.61$) yields the total market capitalization on December 31, 2007 as 92.5 billion.

C. Why do companies pay dividends on their common or ordinary shares? What normally happens to a company's share price when dividends are paid?

When a company pays dividends on their common shares, this signals financial strength and suggests positive projections for future earnings. As a result, the stock more appealing for an investor. Dividends help to maintain investor confidence and loyalty so to encourage long term investments. Furthermore, it helps keep cash flow in check. Finally, it returns money back to the shareholder who indirectly contributes to the company profits. When dividends are paid, the company's share price decreases by the amount of dividend payment.

D. In general, why do companies repurchase their own shares?

Companies buy back their own shares for many reasons. First, repurchasing shares boosts the earnings per share and return on equity to make business appear more successful. Moreover, they may wish to consolidate more ownership back from private investors. This means reducing the number of stockholders in order to avoid takeover attempts. If a stock is undervalued, the company may want to repurchase stock in order to sell later once the market is favorable. In addition, repurchasing shares is a common way to handle

excess cash. Finally, companies may reacquire shares to provide stock for employee compensations plans or to prepare for possible merger needs.

Process

E. Consider Merck's statement of cash flow and statement of retained earnings.

Prepare a single journal entry that summarizes Merck's common dividend activity for 2007.

Retained Earnings	3310.7	(found on the Statement of Retained Earnings)
Cash	3307.3	(found on the Statement of Cash Flows)
Dividend Payable	3.4	(3310.7-3307.3=3.4)

G. During 2007, Merck repurchased a number of its own common shares on the open market.

i. Describe the method Merck uses to account for its treasury stock transactions.

Merck uses the cost method to account for its treasury stock transactions. This is the most widely used method across the board. The cost method debits the treasury stock account for the reacquisition cost. This reports the balance as a deduction from the total paid-in capital and retained earnings. The name "cost method" derives from the fact that it maintains the treasury stock account at the cost of the shares purchased.

ii. Refer to note 11 to Merck's financial statements. How many shares did Merck repurchase on the open market during 2007?

Merck repurchased 26.5 million on the open market during 2007. This appears on the "purchases" row of note 11.

iii. How much did Merck pay, in total and per share, on average, to buy back its stock during 2007? What type of cash flow does this represent?

On average, Merck paid in total \$1,429.7 million in total which means \$53.95/share during 2007. This represents a financing activity. This number can be found on the statement of cash flows on the row titled purchases of treasury stock.

iv. Why doesn't Merck disclose its treasury stock as an asset?

Assets, by definition, are probable future economic benefits. Treasury stock does not include voting rights or preemptive rights. Moreover, treasury stock does not receive cash dividends or assets upon corporation liquidation. Thus, it does not make sense to disclose treasury stock as an asset. If Merck disclosed its treasury stock as an asset, this would improperly imply that they own part of itself. Treasury stock actually reduces assets and stockholders' equity.

Analysis

i. Determine the missing amounts and calculate the ratios in the tables below. For comparability, use dividends paid for both companies rather than dividends declared. Use the number of shares outstanding at year end for per-share calculations. What differences do you observe in Merck's dividend-related ratios across the two years?

Merck		
	2007	2006
Dividends paid (in millions)	3,307.3	3,322.6
Shares outstanding	2,172,502,884	2,167,795,445
Net income (in millions)	3,275.4	4,433.8
Total assets (in millions)	48,350.7	44,569.8
Operating cash flows (in millions)	6,999.2	6,765.2
Year-end stock price	57.61	41.94
Dividends per share	1.52	1.53
Dividend yield (dividends per share to stock price)	2.64	3.65
Dividend payout (dividends to net income)	1.01	0.75
Dividends to total assets	0.07	0.07
Dividends to operating cash flows	0.47	0.49

2006 paid higher dividends. Additionally, 2006 had substantially higher net income. The stock price was much lower in 2006. However, the dividends per share for both years was almost equal. The stockholders had a better dividend yield in 2006 at 3.65 versus 2.64 in

2007. The other dividend related ratios involving total assets and operating cash flows are very similar between the two years.

CASE 10: MARKETABLE SECURITIES
State Street Corporation

Introduction

The case on State Street Corporation focuses on marketable securities. It helped me differentiate the three classifications (trading, available-for-sale, and held-to-maturity), their unique qualifiers, and the accounting for each. There are three ways to make money off marketable securities: appreciation, dividends and interest payments. Investment appreciation means buying low and selling high. Equity securities earn dividends. Finally, interest payments arise from debt securities. I practiced the journal entries for each classification in the case of dividend revenue, interest revenue, and an increase in market value. Furthermore, this case gave me additional practice on the appropriate treatment for gains and losses. To recognize income, the stock does not have to be sold. Unrealized holding gains and losses can be recognized without a sale. Realized gains and losses are included in income as they are converted to cash. This case helped me to contextualize marketable securities in the big picture, as State Street Corporation had all three types.

Concepts

A. Consider trading securities. Note that financial institutions such as State Street typically call these securities “Trading account assets.”

i. In general, what are trading securities?

The term “trading securities” is one of the three possible classifications for marketable securities. Trading securities are debt or investment securities where management’s intent is to buy and sell in a rapid fashion to generate profit. Profits arise from short term differences in prices. They are meant to be short term investments of about 3 months or less. Furthermore, they are reported at fair market value with unrealized holding gains and losses reported as part of net income.

ii. How would a company record \$1 of dividends or interest received from trading securities?

Cash	1	
Dividend Revenue		1
Cash	1	
Interest Revenue		1

iii. If the market value of trading securities increased by \$1 during the reporting period, what journal entry would the company record?

Fair Value Adjustment—Trading	1	
Unrealized Holding Gain—Income		1

B. Consider securities available-for-sale. Note that State Street calls these, “Investment securities available for sale.”

i. In general, what are securities available-for-sale?

Available-for-sale securities are those debt or equity securities that are neither held-to-maturity or trading. They are recorded at fair value with any unrealized holding gains or losses recognized as other comprehensive income (a separate component of stockholder’s equity)

ii. How would a company record \$1 of dividends or interest received from securities available-for-sale?

Cash	1	
Dividend Revenue		1

Cash	1	
Interest Revenue		1

iii. If the market value of securities available-for-sale increased by \$1 during the reporting period, what journal entry would the company record?

Fair Value Adjustment—AFS	1	
Unrealized Holding Gain—Equity		1

C. Consider securities held-to-maturity. Note that State Street calls these, “Investment securities held to maturity.”

i. In general, what are these securities? Why are equity securities never classified as held-to-maturity?

A debt security is classified as held-to-maturity if it has both the positive intent and the ability to hold the securities to maturity. They are accounted for at amortized cost. Equity securities do not have maturity dates by definition. They are not limited in life and therefore cannot be classified as held-to-maturity.

- ii. If the market value of securities held-to-maturity increased by \$1 during the reporting period, what journal entry would the company record?

The company does not recognize any changes in market rate of securities held-to-maturity. The market rate may fluctuate because interest rates may change. However, the changes are not recognized because held-to-maturity securities are not adjusted to fair market value.

Process

D. Consider the “Trading account assets” on State Street’s balance sheet.

- i. What is the balance in this account on December 31, 2012? What is the market value of these securities on that date?

The balance for the “Trading account assets” account is 637 million on December 31, 2012. The notes indicate this is the fair market value.

- ii. Assume that the 2012 unadjusted trial balance for trading account assets was \$552 million. What adjusting journal entry would State Street make to adjust this account to market value? Ignore any income tax effects for this part.

Trading Account Assets	85 million
Unrealized Holding Gain	85 million

This amount is found by subtracting the unadjusted trial balance amount for trading accounts assets of \$552 million from the market value found on the balance sheet at December 31, 2012 (\$637 million).

E. Consider the balance sheet account “Investment securities held to maturity” and the related disclosures in Note 4.

i. What is the 2012 year-end balance in this account?

The 2012 year-end balance of the “Investment securities held to maturity” is \$11,379 million.

ii. What is the market value of State Street’s investment securities held to maturity?

The market value of the investment securities held to maturity is \$11,661 million.

iii. What is the amortized cost of these securities? What does “amortized cost” represent? How does amortized cost compare to the original cost of the securities?

Amortized cost is the acquisition cost adjusted for the amortization. The amortized cost is \$11,379 million. This is lower than the original cost of the securities.

iv. What does the difference between the market value and the amortized cost represent? What does the difference suggest about how the average market rate of interest on held-to-maturity securities has changed since the purchase of the securities held by State Street?

This difference represents the amortization. The fair value increased because the interest rate has decreased compared to the market rate of the interest when purchased. It is now below the interest rate when purchased.

F. Consider the balance sheet account “Investment securities available for sale” and the related disclosures in Note 4.

i. What is the 2012 year-end balance in this account? What does this balance represent?

The 2012 year-end balance for available for sale securities is \$109,683 million. The notes indicate this is the fair market value.

ii. What is the amount of net unrealized gains or losses on the available-for-sale securities held by State Street at December 31, 2012? Be sure to note whether the amount is a net gain or loss.

The net unrealized gains or losses in 2012 for available-for-sale securities is a gain of \$1,119 million. The calculation for this unrealized holding gain is \$2001 million - \$882 million.

iii. What was the amount of net realized gains (losses) from sales of available-for-sale securities for 2012? How would this amount impact State Street’s statements of income and cash flows for 2012?

The net realized gains or losses in 2012 for available for sale securities is a gain of \$55 million. On the top of page 119, in note 4, there are two rows titled “gross realized gains from sales of available-for-sale securities” and “gross realized losses from sales of available-for-sale securities”. Therefore, the net amount is found by subtracting losses from gains (\$101 million - \$46 million = \$55 million). This would be on the income statement because it is realized. It also appears on the statement of cash flows for 2012 as a subtraction from net income as it is already included in proceeds.

G. State Street's statement of cash flow for 2012 (not included) shows the following line items in the "Investing Activities" section relating to available-for-sale securities (in millions): Proceeds from sales of available-for-sale securities \$5,399 Purchases of available-for-sale securities \$60,812

i. Show the journal entry State Street made to record the purchase of available-for-sale securities for 2012.

Equity Investments in AFS	60,812 million
Cash	60,812 million

ii. Show the journal entry State Street made to record the sale of available-for-sale securities for 2012. Note 13 (not included) reports that the available-for-sale securities sold during 2012 had "unrealized pre-tax gains of \$67 million as of December 31, 2011." Hint: be sure to remove the current book-value of these securities in your entry.

Cash	5,399 million
Unrealized Holding Gain	67 million
Investment in AFS	5,411 million
Realized Gain on AFS	55 million

iii. Use the information in part g. ii to determine the original cost of the available-for-sale securities sold during 2012.

The original cost of the available-for-sale securities sold during 2012 is \$5,344,000,000. Since proceeds minus book value equals the gain, the known information can be plugged

in to solve for the book value. The calculation looks like this $\$55 \text{ million} = \$5,399,000 -$
Book Value. Thus, the book value is $\$5,344,000$.

CASE 11: DEFERRED INCOME TAXES
ZAGG Inc.

Introduction

Case #11 zooms in on Deferred Income Taxes by analyzing the financial statements of ZAGG Inc. First, defining the various terminology forced me to strengthen my understanding of the journal entries and accounting for income taxes. In addition, providing examples for temporary vs. permanent differences and deferred tax assets vs. deferred tax liabilities helped make the concepts more concrete. Moreover, part C in the concepts section required research of the FASB Codification. It required diving into ASC 740 to discover the purpose of deferred income taxes. This was the hardest part of the case because it was asking the “why” question: *why* a company reports deferred income taxes as part of their total income tax expense and *why* don’t companies simply report their current tax bill as their income tax expense. I learned what causes the disparities between income tax expense and income taxes payable. Finally, part F brought the concepts section full circle with application of the terms.

Concepts

- A. Describe what is meant by the term book income? Which number in ZAGG's statement of operation captures this notion for fiscal 2012? Describe how a company's book income differs from its taxable income.

The term book income refers to the income measured in accordance with generally accepted accounting principles. It is measured for the use of present and future investors and creditors. ZAGG has a book income of \$23,898,000 for fiscal 2012. It is labeled as "income before provision for income taxes" on the consolidated statements of operations. A company's book income can differ in numerous ways from its taxable income. This gap is a result of inconsistent regulations required by GAAP and the tax code. As an example, a company may compute depreciation on a straight-line basis for financial reporting and on an accelerated basis for tax purposes.

- B. In your own words, define the following terms:

- i. Permanent tax differences (also provide an example)

A permanent tax difference is a difference between income tax expense and income taxes payable that will never reverse. Often, the two will eventually line up. However, with a permanent difference, the book income and taxable income will be different forever. An example of a permanent difference is interest received on state and municipal obligations which is tax exempt to provide incentive to investment in the government.

- ii. Temporary tax difference (also provide an example)

A temporary tax difference arises in one period and reverses in another subsequent period. Temporary tax differences mean the tax basis of an asset or liability and its reported amount differ. As the asset is recovered or the liability is satisfied, this

difference reverses to result in taxable or deductible amounts in years to come. To illustrate, assume a company uses the full accrual method to report revenues and a modified cash basis for tax purposes. This will result in a temporary difference between income tax expense and income taxes payable. It will either be in the form of a deferred tax asset or a deferred tax liability.

iii. Statutory tax rate

The statutory tax rate is the tax rate mandated by law. This is the rate where the company is headquartered.

iv. Effective tax rate

The effective tax rate is the calculated rate. It is the total income tax expense for the period divided by the pretax financial income. This rate rarely matches the statutory rate as it accounts for deduction, exemptions, and more. It is the percentage of income actually paid by a company.

C. Explain in general terms why a company reports deferred income taxes as part of their total income tax expense. Why don't companies simply report their current tax bill as their income tax expense?

The FASB Accounting Standards Codification #740 is known as Accounting for Income Taxes. It comprises the reporting standards for the effects of income taxes resulting from activities during the current and previous years. As defined in the ASC Master Glossary, taxable income is the "excess of taxable revenues over tax deductible expenses and exemptions for the year as defined by the governmental taxing authority." Thus, ASC 740 establishes standards for reporting of currently payable income taxes as well as deferred income taxes payable at some point in the future. Companies report deferred

income taxes as part of their total income tax expense. Measuring income tax expense this way allows the company to match the income tax expense with the amount of pre-tax book income. Inclusion of deferred income taxes clarifies the effects of income taxes that result from a company's activities during the current *and* preceding years. Therefore, the after-tax financial position on the balance sheet is reflected in the most fair and honest way. A deferred tax liability or asset represents the increase or decrease in taxes payable or refundable as a result of temporary differences at the end of the current year. Thus, this expense must be acknowledged *in* the current year. The main objective is matching. Overall, the goal is to acknowledge an asset or liability for the tax effects of the events that have occurred but have not yet appeared in the tax return (or the other way around). The temporary differences take into account the total tax that would be payable or receivable if all of the company's assets and liabilities were realized at their carrying value at a point in time. The tax provision includes the amount of expense or benefit stemming from the income, expense and events that are portrayed in the current periods financial statements. Moreover, the current tax bill only reflects the statutory rate. It does not account for the deferred income taxes applicable.

D. Explain what deferred income tax assets and deferred income tax liabilities represent. Give an example of a situation that would give rise to each of these items on the balance sheet.

Deferred tax assets and deferred tax liabilities are deferred tax consequences attributable to the temporary differences between pretax income from the income statement and the taxable income on the tax return. A deferred tax asset will never, under any circumstances, become a deferred tax liability. This applies vice versa. They will never

switch characteristics. A deferred income tax asset represents a future tax benefit. It is the deferred tax consequence due to deductible temporary differences existing at the end of the current year. As a result, there is an increase in taxes saved in future years. It has a normal debit balance. Warranty expenses will cause a deferred tax asset on the balance sheet. This is because warranty expenses are recognized in the period incurred for financial reporting purposes. However, for tax purposes those same warranty expenses are recognized when they are paid. This means the reporting company will have a future deductible amount. Contrary, a deferred income tax liability arises from future taxable amounts. Taxable amounts increase taxable income in future years whereas deductible amounts decrease taxable income in future years (in the case of a deferred tax asset). A deferred income tax liability is the deferred tax consequence caused by taxable temporary differences. It represents the increase in taxes payable in future years because of the current year taxable temporary difference. It has a normal credit balance. The most common example of a deferred tax liability is the difference in treatment of depreciation expense. To illustrate, assume a company depreciates an asset over 10 years. In the second year, it records \$1,000 straight-line depreciation for financial reporting and \$1,800 depreciation to the IRS. This \$800 difference between the two is a temporary difference that will reverse by the 10th year.

E. Explain what a deferred income tax valuation allowance is and when it should be recorded.

A deferred income tax valuation allowance is the portion of a deferred tax asset for which it is more likely than not that a tax benefit will not be realized. More likely than not means greater than 50 percent likelihood. It is a contra asset account. To record the

reduction in asset value, credit allowance to reduce deferred tax asset to expected realizable value and debit income tax expense.

Process

F. Consider the information disclosed in Note 8 – Income Taxes to answer the following questions:

i. Using information in the first table in Note 8, show the journal entry that ZAGG recorded for the income tax provision in fiscal 2012?

Note: entry is in thousands.

Income tax expense	9,393	
DTA, net of DTL	8,293	
		Income tax payable
		17,686

The notes indicate it is a net deferred tax asset instead of a reversal of a deferred tax liability.

ii. Using the information in the third table in Note 8, decompose the amount of “net deferred income taxes” recorded in income tax journal entry in part f. i. into its deferred income tax asset and deferred income tax liability components.

Note: entry is in thousands.

Income tax Expense	9,393	
DTA, net of VA	8,002	
DTL	291	
		Income Taxes Payable
		17,686

The net deferred income taxes recorded in income tax journal entry is split into two components: 8,002 in deferred tax assets and 291 in deferred tax liabilities.

iii. The second table in Note 8 provides a reconciliation of income taxes computed using the federal statutory rate (35 percent) to income taxes computed using ZAGG's effective tax rate. Calculate ZAGG's 2012 effective tax rate using the information provided in their income statement. What accounts for the difference between the statutory rate and ZAGG's effective tax rate?

Effective tax rate is computed by dividing the total income tax expense by the pretax financial income. The calculation as follows, $9,393/23,898$ yields an effective tax rate of 39.3 percent. The difference between the statutory rate and ZAGG's effective rate can be a result of many factors. The effective rate takes into consideration rates from other countries, deductions, and credits.

iv. According to the third table in Note 8 – Income Taxes, ZAGG had a net deferred income tax asset balance of \$13,508,000 at December 31, 2012. Explain where this amount appears on ZAGG's balance sheet.

On the balance sheet, this appears as two separate components: a current amount of 6,912 and a noncurrent balance of 6,596. Both amounts are listed as deferred income tax assets and together these amounts equal 13,508.

CASE 12: REVENUE RECOGNITION
Apple Inc.

Introduction

The final case looks at Apple Inc.'s treatment of revenue recognition. This case proved interesting as FASB's new standard, Revenue from Contracts with Customers (Topic 606), has recently come into effect. This standard analyzes revenue based on the asset or liability arising from contracts with customers. It is a result of unsatisfactory guidance from the FASB and the IASB in various areas of revenue recognition. The new standard aims to increase comparability, simplicity, and better understanding of the amount, timing and uncertainty of the revenue recognized. Comparing Apple's disclosure and requirements of revenue recognition to the required criteria in the ASC 606 helped solidify my understanding of the concepts.

I found it fascinating to see how changes in standards can greatly impact the ease (or burden) of reporting. Even more, the changes can impact the financial performance of a company. There are so many factors that fit into revenue recognition and this case helped to break those factors down to become more manageable. Revenue is relatively simple when selling one product. However, for example, revenue becomes more difficult when adding software updates at the discretion of the customer that improve the hardware. Situations like this make revenue recognition complex and interesting which is why I enjoyed this case. Overall, revenue is an extremely important component of a company's financials and thus demands careful recognition.

Concepts

A. In your own words, define “revenues.” Explain how revenues are different from “gains.”

Revenue is one of the leading measures of financial performance. It is the amount recognized to reflect the consideration received in exchange for the transfer of goods or services to customers. Revenues result from normal operations whereas gains are a result of peripheral transactions. Furthermore, revenue increases equity (through net income). Overall, the objective is to match revenues to the period when it is earned.

B. Describe what it means for a business to “recognize” revenues. What specific accounts and financial statements are affected by the process of revenue recognition? Describe the revenue recognition criteria outline in the FASB’s Statement of Concepts No. 5.

The asset-liability approach measures revenue based on changes in assets and liabilities. The new standard, Revenue from Contracts with Customers, outlines a five-step process for revenue recognition. The process begins with identifying the contract with customers. Next, the company must identify the separate performance obligations in the contract. The company determines the transaction price in the third step. Finally, the company should recognize revenue when each performance obligation is satisfied. A change in control decides if the performance obligation is truly satisfied. There are certain indications of control. These indications are as follows: 1. The company has a right to payment for the asset. 2. The company has transferred legal title to the asset. 3. The company has transferred physical possession of the asset. 4. The customer has significant risks and rewards of ownership. 5. The customer has accepted the asset.

C. Refer to the Revenue Recognition discussion in Note 1. In general, when does Apple recognize revenue? Explain Apple's four revenue recognition criteria. Do they appear to be aligned with the revenue recognition criteria you described in part b, above?

As specified in the case, Apple recognizes revenue when significant evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and collection is probable. "Delivery" in this context means it has been shipped and the risk of loss has been transferred. For online sales, Apple defers recognition of revenue until the customer receives the product. These criteria closely align to the revenue recognition criteria outlined above. Apple's most recent 10-K indicates the new revenue standards may be applied retrospectively to each prior period presented or as a cumulative effect. Apple will begin applying this standard in the first quarter of 2019. They do not expect the new revenue standard to have a material impact on the revenue recognized.

D. What are multiple-element contracts and why do they pose revenue recognition problems for companies?

Multiple-element contracts include more than just one product. For Apple, hardware products contain software and updates vital to the functionality. Thus, the company must allocate the revenue to all deliverables based on their relative selling prices. Two deliverables pose revenue recognition problems of when to defer and when to recognize the unspecified "when-and-if available" software upgrades and features.

E. In general, what incentives do managers have to make self-serving revenue recognition choices?

Recognizing revenues earlier than they actually occur is a simple way to boost earnings on the income statement. These fraudulent timing gaps are unethical and must be watched. Managers have incentives to boost revenue in order to receive bonuses.

Process

F. Refer to Apple's revenue recognition footnote. In particular, when does the company recognize revenue for the following types of sales?

i. iTunes songs sold online.

Apple recognizes revenue from iTunes songs sold online when the customer receives (aka downloads) the song. In this online sales case, the customer receives it almost immediately by download. Apple recognizes revenue on a net basis by recognizing only the commission it retains from each sale. This is because each song, movie or app in the iTunes store have been developed by another party. Apple includes this commission in the net sales in consolidated statements of operations.

ii. Mac-branded accessories such as headphones, power adaptors, and backpacks sold in the Apple stores. What if the accessories are sold online?

Apple recognizes revenue of Mac-branded accessories such as headphones, power adaptors, and backpacks sold in the Apple stores immediately. This is because passage of control and risk to the customer. If the accessories are sold online, Apple recognizes revenue once the customer receives the product.

iii. iPods sold to a third-party reseller in India.

Apple often sells products to third-party licensed resellers. However, Apple still establishes their own pricing and retains risk of credit and inventory. Therefore, the

corporation recognizes revenue for the sale of products obtained from other companies based on the gross amount billed.

iv. Revenue from gift cards

When Apple sells a gift card, they record deferred revenue upon the sale of the card. This is relieved upon redemption of the card by the customer. This is because the customer has not accepted the asset (they only have the gift card that entitles them to an asset).

Moreover, the customer does not have risks and rewards of ownership of the product they may use the gift card for.

On my honor, I pledge that I have neither given, received, nor witnessed any unauthorized help on this case. Signed: Sarah Caswell