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Navigating the Grey Areas Within Financial Reporting: A Composition of Case Studies

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NAVIGATING THE GREY AREAS WITHIN FINANCIAL REPORTING: A COMPOSITION OF 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
ANNABELLE FORTUNE: Navigating the Grey Areas Within Public Accounting: A Composition of Case Studies
(Under the Direction of Victoria Dickinson)

The following thesis consists of a composition of case studies that I wrote under the guidance of Dr. Victoria Dickinson. Over two semesters, Dr. Dickinson advised my peers and me to work through a dozen case studies covering a variety of financial accounting concepts. For most of the cases, we were presented with information and pertinent data about a company, then a series of questions for us to answer would follow. While many of the questions were objective in nature, some of the questions allowed us to be creative and provide our own recommendations to the problems presented. Aside from the structured case studies, we were also given the opportunity to research different data analytics software programs which we may encounter in public accounting. Throughout the year, I was able to apply the technical knowledge that I was learning in my accounting classes to the real-world problems that the cases presented which gave me an understanding of the concepts beyond the classroom.

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INTRODUCTION

Similarly to the way that intermediate accounting helps students build upon the concepts that they learned in their principles accounting courses, the case studies presented another facet of learning that put those concepts in a real-world perspective. An example of the topics that the cases addresses includes how using different accounting methods, such as FIFO versus LIFO inventory methods or straight-line versus double-declining balance depreciation methods, affect the financial statements of a company. I was also able to explore more in depth about revenue recognition, the valuation of accounts receivable, and some of the differences between GAAP and IFRS. As I move forward in my career, I plan to reference these cases because they cover such a wide variety of accounting concepts.

In addition to completing the case studies, I also participated in two accounting case competitions which served as my thesis defense. For these competitions, I was teamed with a random group of accounting students, most of whom I had never met. In the midst of interview and intermediate tests, these competitions were a challenge, but they taught me so many invaluable lessons. When I start working in public accounting, I will not have the chance to hand-select the teams that I will work with, so it was helpful to have the opportunity to work with a lot of people that have much different leadership styles than mine. The competitions also put the case studies in perspective for me. While the cases we were working on at the time were only hypothetical, in a couple of years, we will be hired to solve problems for real clients, so these cases are great practice for the near future. I am thankful that the case competitions gave me confidence as well as experience in using critical thinking to problem solve for realistic companies.

In addition to helping me to better understand fundamental accounting concepts, the case studies were also great practice for my internship in public accounting this past winter. Many of the cases required using Excel to enter and manipulate data. Because of all of the practice I had with the case studies, I was able to maneuver Excel quickly and easily to complete the tasks that I was assigned during my internship. When tackling an assignment, rather than just copying tickmarks from the prior year, I was able to look critically at the workpaper to determine which reconciliations still applied based on the current year's circumstances. On several occasions, a manager or senior manager would reach out to ask me to conduct research regarding an issue that one of their clients was having. I felt confident in providing them with information that I found because I was so comfortable with doing accounting research from taking the thesis course. The thesis experience provided me with many skills that I will be able to utilize in my future career in public accounting.

As a future certified public accountant, I am so glad that I had the opportunity to participate in the accounting thesis program. Although it is necessary to learn accounting concepts in a regular classroom manner, it is often difficult for me to fully grasp a concept unless I have a tangible experience with it, and the case studies and competitions gave me that experience. As I go on to earn my Master's in Taxation and Data Analytics then start my career as a professional accountant, I know that I will be able to use the skills and knowledge that I gained from this collection of case studies.

CASE STUDY 1: HOME HEATERS, INC.

September 6. 2017

Summary

In this case, two companies that sell home heaters were introduced. Glenwood Heating, Inc. was founded in Glenwood Springs, Colorado, and Eads Heaters, Inc. was founded in Eads, Colorado. Both companies sell the same product: one model of a home heating unit. Many of the companies' transactions were initially the same, including the purchase prices of their land and buildings, the number of home heaters sold, and the amount of dividends paid to their stockholders. However, Glenwood and Eads applied several differing generally accepted accounting principles (GAAP) at year-end that affected the outcome of the companies' financial statements. After journalizing and recording the transactions of the two companies, I was able to analyze the data to make a recommendation about which company would be a better investment.

Through the write-up of this case, I was able to use dozens of concepts that I learned in my accounting principles classes last year. At times, I would find that the totals of my debits and credits columns of a trial balance did not match or that they equaled the same incorrect number. While incidents such as those definitely caused frustration, they also provided a learning opportunity that I will be able to apply in my future career. In this case, I was given the chance to use problem solving skills because I had to scour my notes and work in order to discover the mistakes that I had made. When I accept a job offer and begin working for an accounting firm, the companies that I analyze will not be hypothetical like the companies in this case. Rather, they will be real, operating companies that will depend on accountants like me to do thorough and accurate work. Through the comparison of the two home heaters companies, I was able to see how using

different GAAP principles makes companies' financial statements unique no matter how similar it appears they will be.

Glenwood Heating, Inc. Financial Statements

Below are the financial statements for Glenwood Heating, Inc.

Glenwood Heating, Inc. Income Statement For Year Ended December 31, 20X1			
Sales		$398,500	
Cost of Goods Sold		177,000	
Gross Profit			$221,500
Expenses			
Operating Expenses			
Rent Expense	$16,000		
Other Operating Expenses	34,200		
Total Operating Expenses		50,200	
General and Administrative Expenses			
Bad Debt Expense	994		
Depreciation Expense	19,000		
Interest Expense	27,650		
Total General and Administrative Expenses		47,644	97,844
Income from Operations			123,656
Other Expenses and Losses			
Provision for Income Tax			30,914
Net Income			$92,742
Earnings per Common Share			$28.98

Glenwood Heating, Inc. Statement of Retained Earnings For Year Ended December 31, 20X1	
Retained Earnings, January 1, 20X1	$ -
Plus: Net Income	92,742
	92,742
Less: Dividends	23, 200
Retained Earnings, December 31, 20X1	$69,542

Glenwood Heating, Inc. Balance Sheet December 31, 20X1		
Assets		
Current Assets		
Cash	$426	
Accounts Receivable	99,400	
Less: Allowance for Bad Debts	(994)	
Inventory	62,800	$161,632
Total Current Assets		
Property, Plant, and Equipment		
Land	70,000	
Building	350,000	
Equipment	80,000	
Less: Accumulated Depreciation	(19,000)	481,000
Total Assets		$642,632

Glenwood Heating, Inc. Balance Sheet December 31, 20X1		
Liabilities		
Current Liabilities		
Accounts Payable	$26,440	
Interest Payable	6,650	
Note Payable	20,000	$53,090
Long-Term Liability		
Note Payable		360,000
Total Liabilities		413,090
Stockholder's Equity		
Common Stock	160,000	
Retained Earnings	69,542	
Total Equity		229,542
Total Liabilities and Stockholder's Equity		$642,632

Eads Heater, Inc. Financial Statements

The financial statements for Eads Heater, Inc. are included below.

Eads Heater, Inc. Income Statement For Year Ended December 31, 20X1			
Sales		$398,500	
Cost of Goods Sold		188,800	
Gross Profit			$209,700
Expenses			
Operating Expenses		34,200	
General and Administrative Expenses			
Bad Debt Expense	4,970		
Depreciation Expense	41,500		
Interest Expense	35,010		
Total General and Administrative Expenses		81,480	115,680
Income from Operations			94,020
Other Expenses and Losses			
Provision for Income Tax			23,505
Net Income			$70,515
Earnings per Common Share			$22.04

Eads Heater, Inc. Statement of Retained Earnings For Year Ended December 31, 20X1	
Retained Earnings, January 1, 20X1	$-
Plus: Net Income	70,515
	70,515
Less: Dividends	23, 200
Retained Earnings, December 31, 20X1	$47,315

Eads Heater, Inc. Balance Sheet December 31, 20X1		
Assets		
Current Assets		
Cash	$7,835	
Accounts Receivable	99,400	
Less: Allowance for Bad Debts	(4,970)	
Inventory	51,000	$153,265
Total Current Assets		
Property, Plant, and Equipment		
Land	70,000	
Building	350,000	
Equipment	80,000	
Leased Equipment	92,000	
Less: Accumulated Depreciation	(41,500)	550,500
Total Assets		$703,765

Eads Heater, Inc. Balance Sheet December 31, 20X1		
Liabilities		
Current Liabilities		
Accounts Payable	$26,440	
Interest Payable	6,650	
Note Payable	20,000	
Lease Payable	9,330	$62,420
Long-Term Liabilities		
Note Payable	360,000	
Lease Payable	74,030	434,030
Total Liabilities		496,450
Stockholder's Equity		
Common Stock	160,000	
Retained Earnings	47,315	
Total Equity		207,315
Total Liabilities and Stockholder's Equity		$703,765

Investment Recommendation

Although neither company seems to be struggling in any way according to the financial reports, I found that Glenwood Heating, Inc. is a better investment over Eads Heater, Inc. In addition to reading the financial statements, I pulled several key pieces of data from each company to further analyze the companies' successes.

Current Ratio	
Glenwood	3.04 to 1
Eads	2.46 to 1

To begin, I calculated the current ratio for each company and entered my findings in the table above. The current ratio is found by dividing a company's current assets by its current liabilities. This value gives analysts an idea of a company's liquidity position and its ability to meet current obligations. While both companies have strong liquidity positions, Glenwood has a higher current ratio, which means that this company can more readily meet its current obligations than Eads could.

Profit Margin	
Glenwood	23.27%
Eads	17.7

Next, in order to analyze the companies' profitability, I calculated profit margin of each company by dividing net income by net sales. I found that Glenwood earns 23.27 percent of its sales as income, while Eads only earns 17.70 percent of its sales as income. These profit margin values indicate that Glenwood has greater operating efficiency and profitability than Eads.

Debt-to-Equity Ratio	
Glenwood	1.8 to 1
Eads	2.39 to 1

Calculating the debt-to-equity ratio of both companies allowed me to analyze solvency. By dividing the total liabilities by total equity, I found that Glenwood has a lower debt-to-equity ratio than Eads. When a company has a lower ratio of liabilities to equity, it is less risky because equity does not have to be paid back with interest, while liabilities do. In the event of an economic downfall, Glenwood is more solvent and would probably have an easier time meeting its obligations than Eads would, so Glenwood is the safer investment.

Times Interest Earned	
Glenwood	5.47x
Eads	3.69x

Finally, I determined times interest earned for both home heater companies, which is found by dividing a company's income before interest and taxes by interest expense. This ratio demonstrates the number of times a company could pay its interest expense. A company with a higher times interest earned ratio is less risky to an investor because it is more likely to be able to pay back its loans. Glenwood has the higher ratio value of 5.47 times, while Eads has a value of 3.69 times.

An investor loans money to an individual, organization, or company with the hopes that they will be paid back and earn interest on their investment. Based on the above calculations, I would recommend that an investor loans money to the Glenwood

Heating, Inc. in order to minimize risk and give the investor the greatest opportunity to recover his or her investment.

Appendices: Part A (Glenwood and Eads)

General Journal				
Number	Date	Account Title	Debit	Credit
1	2-Jan-20X1	Cash	$160,000	
		Common Stock		$160,000
2	3-Jan	Cash	400,000	
		Note Payable		400,000
3	3-Jan	Land	70,000	
		Cash		70,000
		Building	350,000	
		Cash		350,000
4	5-Jan	Equipment	80,000	
		Cash		80,000
5	X-X	Inventory	239,800	
		Accounts Payable		239,800
6	X-X	Accounts Receivable	398,500	
		Sales		398,500
7	X-X	Cash	299,100	
		Accounts Receivable		299,100
8	X-X	Accounts Payable	213,360	
		Cash		213,360
9	9-Sep	Note Payable	20,000	
		Interest Expense	21,000	
		Cash		41,000
10	X-X	Other Operating Expenses	34,200	
		Cash		34,200

General Journal				
Number	Date	Account Title	Debit	Credit
11	1-Dec	Dividends	23,200	
		Cash		23,200
12	31-Dec	Interest Expense	6,650	
		Interest Payable		6,650

Recording Basic Transactions

Assets

	Cash	Accounts Receivable	Inventory	Land	Building	Equipment
No. 1	$160,000					
No. 2	400,000					
No. 3	(420,000)			$70,000	$350,000	
No. 4	(80,000)					$80,000
No. 5			$239,800			
No. 6		$398,500				
No. 7	299,100	(299,100)				
No. 8	(213,360)					
No. 9	(41,000)					
No. 10	(34,200)					
No. 11	(23,200)					
No. 12						
Balances	$47,340	$99,400	$239,800	$70,000	$350,000	$80,000

Recording Basic Transactions					
	Liabilities		+	Stockholder's Equity	
	Accounts Payable	Note Payable	Interest Payable	Common Stock	Retained Earnings
No. 1				$160,000	
No. 2		$400,000			
No. 3					
No. 4					
No. 5	$239,800				
No. 6					$398,500
No. 7					
No. 8	(213,360)				
No. 9		(20,000)			(21,000)
No. 10					(34,200)
No. 11					(23,200)
No. 12			$6,650		(6,650)
Balances	$26,440	$380,000	$6,650	$160,000	$313,450

Home Heaters Unadjusted Trial Balance: Part A		
	Debits	Credits
Cash	$ 47,340	
Accounts Receivable	99,400	
Inventory	239,800	
Land	70,000	
Building	350,000	
Equipment	80,000	

Home Heaters Unadjusted Trial Balance: Part A		
Accounts Payable		$ 26,440
Note Payable		380,000
Interest Payable		6,650
Common Stock		160,000
Dividends	$ 23,200	
Sales		398,500
Other Operating Expenses	34,200	
Interest Expense	27,650	
Total	$ 971,590	$ 971,590

Part B: Glenwood

General Journal			
Date	Account Title	Debit	Credit
31-Dec	Bad Debt Expense	$994	
	Allowance for Bad Debts		$994
	Cost of Goods Sold	177,000	
	Inventory		177,000
	Depreciation Expense	10,000	
	Accumulated Depreciation- Building		10,000
	Depreciation Expense	9,000	
	Accumulated Depreciation- Equipment		9,000
	Rent Expense	16,000	
	Cash		16,000
	Income Tax Expense	30,914	
	Cash		30,914

Recording Additional Transactions					
	Assets				
Transaction	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land
Balances: Part A	$47,340	$99,400		$239,800	$70,000
Part B (1) Bad Debts			$(994)		
Part B (2) COGS				(177,000)	
Part B (3) Depreciation					
Building					
Equipment					
Part B (4) Equipment Rental Payment	(16,000)				
Part B (5) Income Tax	(30,914)				
Balances	$426	$99,400	$(994)	$62,800	$70,000

Recording Additional Transactions				
	Assets			
Transaction	Building	Accumulated Depreciation Building	Equipment	Accumulated Depreciation Equipment
Balances: Part A	$350,000		$80,000	
Part B (1) Bad Debts				
Part B (2) COGS				
Part B (3) Depreciation				
Building		$(10,000)		
Equipment				$(9,000)
Part B (4) Equipment Rental Payment				
Part B (5) Income Tax				
Balances	$350,000	$(10,000)	$80,000	$(9,000)

Recording Additional Transactions					
	Liabilities			Stockholder's Equity	
Transaction	Accounts Payable	Interest Payable	Note Payable	Common Stock	Retained Earnings
Balances: Part A	$ 26,440	$ 6,650	$ 380,000	$ 160,000	$ 313,450
Part B (1) Bad Debts					(994)
Part B (2) COGS					(177,000)
Part B (3) Depreciation					
Building					(10,000)
Equipment					(9,000)
Part B (4) Equipment Rental Payment					(16,000)
Part B (5) Income Tax					(30,914)
Balances	$ 26,440	$ 6,650	$ 380,000	$ 160,000	$ 69,542

Glenwood Heating, Inc. Adjusted Trial Balance: Part B		
	Debits	**Credits**
Cash	$ 426	
Accounts Receivable	99,400	
Allowance for Bad Debts		$ 994
Inventory	62,800	
Land	70,000	
Building	350,000	
Accumulated Depreciation-Building		10,000
Equipment	80,000	
Accumulated Depreciation-Equipment		9,000
Accounts Payable		26,440
Interest Payable		6,650
Note Payable		380,000
Common Stock		160,000
Dividend	23,200	
Sales		398,500
Cost of Goods Sold	177,000	
Other Operating Expenses	34,200	
Bad Debt Expense	994	
Depreciation Expense- Building	10,000	
Depreciation Expense- Equipment	9,000	
Rent Expense	16,000	
Interest Expense	27,650	
Provision for Income Tax	30,914	
Totals	$ 991,584	$ 991,584

Glenwood Heating, Inc. Cost of Goods Sold (FIFO)			
Date	Activity	Units Acquired at Cost	Units Sold at Retail
10-Jan	Purchase	40 units @ $1,000 = $40,000	
	Sales		40 units @ $1,000
14-Mar	Purchase	60 units @ 1,1000 = 66,000	
	Sales		60 units @ 1,100
1-Jun	Purchase	20 units @ 1,150 = 23,000	
	Sales		20 units @ 1,150
15-Sep	Purchase	62 units @ 1,200 = 74,400	
	Sales		40 units @ 1,200
30-Oct	Purchase	28 units @ 1,300 = 36,400	
	Totals	210 units $239,800	160 units $177,000

Glenwood Heating, Inc. Calculation of Interest Expense on Note Payable	
Note Payable	$400,000
Interest	7%
	28,000
Months	12
Interest per Month	$2,333.33
Interest due 30-Sept	21,000
Interest Accrued 31-Dec	6,650
Interest Expense 20X1	$27,650

Glenwood Heating, Inc. Calculation of Depreciation	
Building	
Cost	$350,000
Less: Salvage Value	50,000
Depreciable Value	300,000
Expected Life (years)	30
Depreciation per year	$10,000
Equipment	
Cost	$80,000
Less: Salvage Value	8,000
Depreciable Value	72,000
Expected Life (years)	8
Depreciation per year	$9,000

Glenwood Heating, Inc. Calculation of Bad Debt Expense	
Ending Accounts Receivable	$99,400
Estimated Percent Uncollectable	1%
Bad Debt Expense	$994

Glenwood Heating, Inc. Calculation of Income Expense	
GAAP Income	$92,742
Income Tax Rate	25%
Income Tax	$30,914

Part B: Eads

General Journal			
Date	Account Title	Debit	Credit
31-Dec	Bad Debt Expense	$4,970	
	Allowance for Bad Debts		$4,970
	Cost of Goods Sold	188,800	
	Inventory		188,800
	Depreciation Expense	10,000	
	Accumulated Depreciation- Building		10,000
	Depreciation Expense	20,000	
	Accumulated Depreciation- Equipment		20,000
	Lease Equipment	92,000	
	Lease Payable		92,000
	Lease Payable	8,640	
	Interest Expense	7,360	
	Cash		16,000
	Depreciation Expense	11,500	
	Accumulated Depreciation- Leased Equip.		11,500
	Income Tax Expense	23,505	
	Cash		23,505

Recording Additional Transactions						
	Assets					
Transaction	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building
Balances: Part A	$47,340	$99,400		$239,800	$70,000	$350,000
Part B (1) Bad Debts			$(4,970)			
Part B (2) COGS				(188,800)		
Part B (3) Depreciation						
Building						
Equipment						
Part B (4) Equipment						
Lease						
Lease Payment	(16,000)					
Depreciation						
Part B (5) Income Tax	(23,505)					
Balances	$7,835	$99,400	$(4,970)	$51,000	$70,000	$350,000

Recording Additional Transactions					
	Assets				
Transaction	Accumulated Depreciation Building	Equipment	Accumulated Depreciation Equipment	Leased Equipment	Accumulated Depreciation Lease
Balances: Part A		$80,000			
Part B (1) Bad Debts					
Part B (2) COGS					
Part B (3) Depreciation					
Building	$(10,000)				
Equipment			$(20,000)		
Part B (4) Equipment					
Lease				$92,000	
Lease Payment					
Depreciation					$(11,500)
Part B (5) Income Tax					
Balances	$(10,000)	$80,000	$(20,000)	$92,000	$(11,500)

Recording Additional Transactions						
	Liabilities				Stockholder's Equity	
Transaction	Accounts Payable	Interest Payable	Note Payable	Lease Payable	Common Stock	Retained Earnings
Balances: Part A	$26,440	$6,650	$380,000		$160,000	$313,450
Part B (1) Bad Debts						(4,970)
Part B (2) COGS						(188,800)
Part B (3) Depreciation						
Building						(10,000)
Equipment						(20,000)
Part B (4) Equipment						
Lease				$92,000		
Lease Payment				(8,640)		(7,360)
Depreciation						(11,500)
Part B (5) Income Tax						(23,505)
Balances	$26,440	$6,650	$380,000	$83,360	$160,000	$47,315

Eads Heater, Inc. Adjusted Trial Balance: Part B		
	Debits	Credits
Cash	$ 7,835	
Accounts Receivable	99,400	
Allowance for Bad Debts		$ 4,970
Inventory	51,000	
Land	70,000	
Building	350,000	
Accumulated Depreciation- Building		10,000
Equipment	80,000	
Accumulated Depreciation- Equipment		20,000
Leased Equipment	92,000	
Accumulated Depreciation- Leased Equipment		11,500

Eads Heater, Inc. Adjusted Trial Balance: Part B		
	Debits	Credits
Accounts Payable		$ 26,440
Interest Payable		6,650
Note Payable		380,000
Lease Payable		83,360
Common Stock		160,000
Dividend	$ 23,200	
Sales		398,500
Cost of Goods Sold	188,800	
Other Operating Expenses	34,200	
Bad Debt Expense	4,970	
Depreciation Expense- Building	10,000	
Depreciation Expense- Equipment	20,000	
Depreciation Expense- Leased Equipment	11,500	
Interest Expense	35,010	
Provision for Income Tax	23,505	
Totals	$ 994,185	$ 1,101,420

Eads Heater, Inc. Cost of Goods Sold (LIFO)			
Date	Activity	Units Acquired at Cost	Units Sold at Retail
10-Jan	Purchase	40 units @ $1,000 = $40,000	
14-Mar	Purchase	60 units @ 1,100 = 66,000	
	Sales		50 units @ $1,100
1-Jun	Purchase	20 units @ 1,150 = 23,000	
	Sales		20 units @ 1,150
15-Sep	Purchase	62 units @ 1,200 = 74,400	
	Sales		62 units @ 1,200
30-Oct	Purchase	28 units @ 1,300 = 36,400	
	Sales		28 units @ 1,300
	Totals	210 units $239,800	160 units $188,800

Eads Heater, Inc. Calculation of Interest Expense	
Note Payable	$400,000
Interest	7%
	28,000
Months	12
Interest per Month	$2,333.33
Interest due 30-Sept	21,000
Interest Accrued 31-Dec	6,650
Interest Expense N/P	27,650
Add: Interest Expense Lease Payment	7,360
Interest Expense 20X1	$35,010

Eads Heater, Inc. Calculation of Depreciation Expense	
Building	
Book Value	$350,000
Less: Salvage Value	50,000
Depreciable Value	300,000
Expected Life (years)	30
Depreciation per year	$10,000
Equipment	
Book Value	80,000
Depreciation Rate	25%
Depreciation 20X1	$20,000

Eads Heater, Inc. Calculation of Bad Debt Expense	
Ending Accounts Receivable	$99,400
Estimated Percent Uncollectable	5%
Bad Debt Expense	$4,970

Eads Heater, Inc. Calculation of Income Expense	
GAAP Income	$70,515
Income Tax Rate	25%
Income Tax	$23,505

CASE STUDY 2: MOLSEN COORS BREWING COMPANY

September 20, 2017

Summary

In this case about the Molsen Brewing Company, our class took the perspective of accountants who were tasked with explaining concepts and why they are important to an investor with limited knowledge of accounting terms. For the case, we were given many different financial statements, including balance sheets and statements of comprehensive income, to use in our analyses. We were asked to describe the contents of a classified income statement, explain why GAAP requires a classified income statement, and define comprehensive income. While our explanations had to be simpler than if another accountant was to read the analysis, they were still required to align with the generally accepted accounting principles.

In my experience, explaining concepts can be much more difficult than calculating the numbers. I had a troublesome time answering a few of the questions because I could not figure out an eloquent way to define a term. However, this exercise was great practice for my future in accounting. While my colleagues will have an equal understanding of the accounting terms I will use, my clients, friends, and family may not be able to grasp what I am describing. By completing this case, I was given the opportunity to practice clarifying complicated accounting terms to someone who wants and needs to understand them. I did not have all of the knowledge to answer some of the questions myself, so I sought out additional help. By researching online and in my intermediate accounting textbook, I earned a greater understanding of some unfamiliar terms including non-controlling interest. Although this case was a different type of challenge than we have experienced so far, it gave us a deeper knowledge of our future professions.

a. What are the major classifications of an income statement?

- The income statement is divided into sections that include the operating section, non-operating section, income tax, discontinued operations, non-controlling interest, and earnings per share. The operating section contains the sales or revenue of the company minus its operating expenses, which may include cost of goods sold as well as other selling expenses. The non-operating section includes any revenues, gains, expenses, or losses that may result from non-operating activities such as investments and asset sales. Income before tax is stated, then income tax is subtracted in order to find the net income or net loss of the company's year. Earnings per share is included at the bottom of income statements and is calculated by dividing net income by the number of outstanding shares of stock.

b. Explain why, under US GAAP, companies are required to provide "classified" income statements.

- GAAP requires a classified income statement because its segments make it easier for investors to interpret. For example, analysts could compare and contrast the company's operating income from one year to another because the value can be easily located on classified income statements. The classified income statement provides greater understanding to viewers, and it allows investors to readily interpret revenues and expenses.

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

- A financial statement user, particularly investors and creditors, may be interested in seeing a measure of persistent income because it allows them to predict earnings in the company's future. It would give them the information that they need to know about the company's stock price and whether or not the company would make a good investment for the creditor.

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

- Comprehensive income includes the total change in equity of a company except for investments by owners or distributions to owners. It begins with net income and adds unrealized gains and subtracts unrealized losses. An unrealized gain or loss occurs when a stock either increases or decreases in value, but the stock has not yet been sold. While similar, net income does not include changes in equity. Net income describes the excess in revenues and gains over the expenses and losses of a company.

e. The income statement reports "sales" and "net sales." What is the difference? Why does Molson Coors report these two items separately?

- The difference between sales and net sales is that sales does not include the money that the company pays to the government in the form of excise taxes. Excise taxes are sometimes applied to items that are viewed as either unnecessary or extra, which in this case would be alcohol. The company reports these two items separately because sales is the total of all

sales transactions during the period, but net sales gives a more accurate picture of the amount of money the company expects to receive from its sales.

f. Consider the income statement item "special items, net" and information in Notes 1 and 8.

- In general, what types of items does Molson Coors include in this line item?
    - In general, Molson Coors includes special items such as impairments and abandonments of assets and unusual or infrequent items including flood losses and outsourcing costs.
- Explain why the company reports these on a separate 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.
    - These special items are unusual and infrequent in nature, so the company includes them in a separate line item rather than with another expense item. Although Molson Coors classifies these special items as operating expenses, they should be considered non-operating expenses. For example, one "special item" records the reimbursement of insurance due to losses caused by flooding in the Czech Republic. This expense does not directly coincide with the company's core operations, which is brewing beer.

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 a non-operating expense, and “Special items, net” which Molson Coors classifies as operating expenses?

- “Other income (expense), net” include expenses that are not related to Molson’s operations, so they are considered non-operating expenses, but they are more likely to reoccur in future periods. While “special items, net” are classified as operating expenses, they should be stated as non-operating expenses, too. These “special” non-operating expenses are just less likely to occur again compared with “other income expenses.”

h. Refer to the statement of comprehensive income.

- What is the amount of comprehensive income in 2013? How does this amount compare to net income in 2013?
    - Comprehensive income for the Molson Brewing Company in 2013 is $760.2 million, and net income for the Molson Brewing Company is $567.3 million.
- 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 comprehensive income incorporates items such as unrealized gains, foreign currency translation adjustments, and pension

adjustments that net income does not include. It also includes the comprehensive income loss attributable to non-controlling interests, which are minority ownership stakes in a company. The items included in Molson Coors' comprehensive income are related because they are all infrequent in nature.

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

- What is Molson Coors' effective tax rate in 2013?
    - Molson Coors' effective tax rate of 12.8 percent is found by dividing the pretax income of $654.5 million by the income tax expense of $84 million.

CASE STUDY 3: PEARSON

October 4, 2017

Summary

This week's case was based upon a company that is near to all of our wallets which is Pearson, a textbook provider. We were tasked with completing the case with terms that someone with an introductory level understanding of accounting would be able to comprehend. Like most companies, Pearson calculated an estimate for the value of the accounts that it did not expect to recover, which is the bad debt expense, and an estimate of the sales returns and allowances for the year. These numbers are calculated in order for the financial statements to provide figures that are as accurate as possible despite unknown future events. We defined many terms including account receivable, notes receivable, and contra accounts.

This case was a great review of accounts receivable terms. In my principles class, contra accounts went way beyond my level of understanding, and I had a difficult time grasping why they were important. Now that I have a stronger accounting background, their purpose is so much clearer. However, I am not a very good teacher, so I struggled to come up with good explanations for some of the prompts. Another aspect of the case that I had difficulty with this week was analyzing the notes. It took me quite a long time to figure out how the t-account for the allowance for doubtful accounts could balance, and the accounts receivable t-account caused me problems as well. Even so, I enjoyed working on this case because concepts make more sense when there are actual numbers to look at. Because Pearson is a real company, I felt as though I was working on a client for a firm, which was an exciting experience.

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

- An account receivable is a customer's oral promise to pay for the goods that he or she purchased or the services that were performed. Accounts receivable may also be called trade receivables.

b. How do accounts receivable differ from notes receivable?

- Accounts receivable are customer promises to pay a person or company back for goods purchased or services already rendered, and the payback period is typically short-term. However, a note receivable is a customer's promise to repay a loan or money borrowed, and the payback period can be either short or long-term.
- Notes receivable often bear interest while accounts receivable do not.

c. What is a contra account? What two contra accounts are associated with Pearson's trade receivables? 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 is an account that has the opposite normal balance of the regular account. For example, a contra asset account would have a normal credit balance because asset accounts have normal debit balances. The two contra accounts that are associated with Pearson's trade receivables are the Provision for Bad and Doubtful Debts and the Provision for Sales Returns. The United States equivalents for these accounts are the Allowance for Doubtful Accounts (ADA) and the Allowance for Sales Returns and Allowances. Both accounts have normal credit balances.

- In the Allowance for Doubtful Accounts account, Pearson will estimate and credit its estimate for bad debt expense, which is the dollar amount of customer charges that Pearson believes will not be repaid. When the company loses faith that a specific customer will not pay, they will debit the Allowance for Doubtful Accounts account for the amount of money that customer owes. If the unreliable customer happens to pay back some of his or her debt, Pearson would credit ADA for the amount that is paid.
- In the Allowance for Sales Returns and Allowances account, Pearson will estimate the amount of sales returns and allowances that it will have for the period and credit that amount. When the actual amount of sales returns and allowances are determined, Pearson will debit that amount in the account. This account allows Pearson to report net income as accurately as possible.
- In order to estimate the balance in these accounts, managers might consider the percentage of accounts receivables that were not recovered in years past and the percentage of total sales that were returned or given allowances.

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?

- Some companies may use a percentage-of-sales procedure to estimate the amount of uncollectible accounts receivable, which could be found by multiplying the amount of total sales of the company by the percentage of the total amount that the company does not expect to receive from its customers. The aging-of-accounts procedure is a method that breaks accounts into different time periods such as up to three months past due, three to six months past due, six to nine months past due, and so on. As more time passes, an account is less and less likely to be paid back. A company will estimate the percentage of the accounts that it expects to receive payment from for each time period based on past years' data and add up those amounts to determine the bad debt expense. Of the two approaches, the aging-of-accounts method is definitely more accurate. It is more time consuming and tedious to calculate, but this procedure will most likely result in an amount that is close to the actual amount of unrecoverable receivables because it is based on data that has been collected from accounts in those specific time periods from the past.

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

- The percentage of accounts that are uncollectable is likely to be small compared to total sales. The company may extend credit to those customers, even though they are unlikely to pay, because it is not worth gaining bad press in order to ensure that every single customer will pay. If people heard that Pearson was refusing customers, they may lose even more reliable customers by offending customers with potentially uncollectable accounts. Managers may decide to risk the ability to collect every account in order to maintain a good company name.

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).

- 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 Accounts	
Debits	Credits
	Beginning Balance 72
	Estimate 29
Write-offs 25	
	Ending Balance 76

- The beginning balance in the allowance for doubtful accounts account was a credit of £72 million at the beginning of 2009. In order to find the bad debt expense or "estimate," I added the income statement movements and acquisition through business combination, which is the amount of bad debt expense that was acquired when a business was absorbed during the year and credited them to the account at the amount of £29 million. To obtain the write-off amount, I combined the exchange differences and utilized amounts, which equaled £25 million. The net of the two numbers equals a credit of £4 million and when added to the initial credit of £72 million, the account has a credit balance of £76 million at the end of the year.

- Prepare the journal entries that Pearson recorded during 2009 to capture (1) bad and doubtful accounts expense for 2009 (that is, the "income statement movements") and (2) the write-off of accounts receivable (that is, the amount "utilized") during 2009. For each account in your journal entries, note whether the account is a balance sheet or income statement account.

General Journal			
Date	Account Title	Debit	Credit
31-Dec-08	Bad Debt Expense *(income statement)*	26	
	Allowance for Doubtful Accounts *(balance sheet)*		26
X-X-09	Allowance for Doubtful Accounts *(balance sheet)*	20	
	Accounts Receivable-Customer *(balance sheet)*		20

- Where in the income statement is the provision for bad and doubtful debts expense included?
    - The provision for bad and doubtful debts expense would be included in the administrative expenses section of the income statement.

g. Note 22 reports that the balance in Pearson's provision for sales returns was £372 million at December 31, 2008 and £354 million 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.

- 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			
Debits		Credits	
		Beginning Balance	372
		Estimated Sales Returns	425
Actual Sales Returns	443		
		Ending Balance	354

- The account started with a credit balance of £372 million, and Pearson estimated its sales returns and allowances for the year to be £425 million. Because the ending balance of the account is £354 million, the amount of actual sales returns and allowances for the year had to be £443 million, which was debited to the account.

- 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.

General Journal			
Date	Account Title	Debit	Credit
31-Dec-08	Sales Returns and Allowances *(income statement)*	425	
	Allowance for Sales Returns and Allowances *(balance sheet)*		425
X-X-09	Allowance for Sales Returns and Allowances *(income statement)*	443	
	Accounts Receivable *(balance sheet)*		443

- In which income statement line item does the amount of 2009 estimated sales returns appear?
    - Estimated sales returns would fall under the revenues/sales section of the income statement. Subtracting sales returns from total sales would provide the net sales figure.

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 solutions for parts f and g will be helpful here). Assume that all sales in 2009 were on account. That is, they were 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.

Accounts Receivable (gross)			
Debits		Credits	
Beginning Balance	1,342		
		Write-offs	20
Credit Sales	405		
		Actual Sales Returns	443
Ending Balance	1,284		

- Accounts receivable began with a balance of £1,342 million in the beginning of 2009. £20 million was credited to the account because accounts were determined to be unrecoverable and were written off. At the end of 2009, the amount of actual sales returns was determined to be £443 million, so that figure would also be credited to the accounts receivable account. Finally, to end with the balance of £1,284 million, we find that credit sales for the year were £405 million, which is net of the £425 million estimate of sales returns and allowances.

General Journal			
Date	Account Title	Debit	Credit
X-X-09	Accounts Receivable	830	
	Sales Revenue		830
	Sales Returns and Allowances	425	
	Allowance for Sales Returns and Allowances		425
	Sales Returns and Allowances	443	
	Accounts Receivable		443
	Allowance for Doubtful Accounts	20	
	Accounts Receivable-Customer		20

CASE STUDY 4: TIME VALUE OF MONEY

October 11, 2017

Summary

In lieu of a case, our class was tasked with picking a problem out of our intermediate accounting textbooks to solve. Once solved, we were to write a tutorial for an intermediate accounting student to understand. The catch was that the problem needed to be about a topic from the upcoming exam that we are personally struggling to comprehend. One of the chapters that will be on our exam is Chapter 6, Accounting and the Time Value of Money. On some days, the problems make total sense to me, but on other days, I cannot even figure out where to start. I think that part of the trouble that I am having is that I am also currently enrolled in a finance course where we have also been talking about the time value of money, but the two classes solve the word problems different ways. For my assignment, I chose Problem 6-5. This problem has multiple parts that require solving for different annuities, so I thought that it would be good practice to gain a better understanding of this chapter.

Problem 6-5

Julia Baker died, leaving to her husband Brent an insurance policy contract that provides that the beneficiary (Brent) can choose any one of the following four options.

(a) $55,000 immediate cash.

(b) $4,000 every three months payable at the end of each quarter for five years.

(c) $18,000 immediate cash and $1,800 every three months for ten years, payable at the beginning of each three-month period.

(d) $4,000 every three months for three years and $1,500 each quarter for the following twenty-five quarters, all payments payable at the end of each quarter.

If money is worth two-and-a-half percent per quarter, compounded quarterly, which options would you recommend Brent exercise?

Tutorial

(a) In this scenario, Brent would just receive $55,000 even. This cash flow would not be discounted because he would be written a check or handed cash on the spot.

(b) Under this assumption, the present value of the annuities Brent would earn is $62,357.

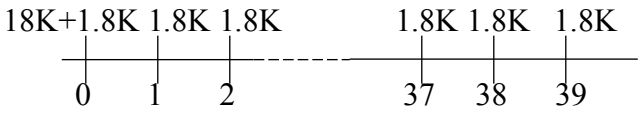
*4K stands for each $4,000 payment. Each number represents 3 months or one quarter up to 20 quarters.

The present value of the annuity equals the payment, $4,000, times the present value of an ordinary annuity factor for twenty periods at 2.5% interest. We will use present value of an ordinary annuity because the installments are due at the end of the quarter, and we want to know how much the annuity is worth at time zero, which is the present.

$4,000 x PVOA (20, 2.5%) = ?

$4,000 x 15.58916 = $62,357

(c) Under this assumption, the present value of annuities Brent would earn is $63,185.



In the present, Brent would receive an $18,000 payment. The present value of the annuity equals the payment, $1,800, times the present value of an annuity due factor for 40 periods at 2.5% interest. We will use the present value of an annuity due because the installments are due at the beginning of the quarter.

$1,800 x PVAD (40, 2.5%) = ?

$1,800 x (25.10578) + $18,000 = $63,185

Brent should choose option c, $18,000 immediate cash and $1,800 every quarter, because the present value is $63,185 which is the highest value.

CASE STUDY 5: PALFINGER AG

November 8, 2017

Summary

For this case, we looked into a company called Palfinger AG which is a manufacturing company located in Austria. This company serves many industries including construction, transport, agriculture and forestry, recycling, and haulage. Palfinger manufactures equipment including several types of cranes, platforms, and forklifts as well as different kinds of handling solutions. Because this company is located in Austria, it does not adhere to GAAP, but instead it abides by the International Financial Reporting Standards, so some of the methods and terminology are slightly different from what we are accustomed to seeing.

Because my intermediate accounting class has not reached the property, plant, and equipment chapter yet, it has been almost a year since the last time I created a depreciation schedule. This case was a great reminder of the difference between straight-line and double-declining-balance depreciation methods. It is interesting to come back to these concepts after an entire year because I remember thinking it was incredibly challenging as I was learning it in my principles course. However, after a quick review of the steps, I was able to calculate depreciation under both methods with ease. Another aspect that I found interesting about this case was getting the opportunity to research about government grants. Although I definitely still have a very basic understanding of them, I never would have known that a company would be required to deduct the amount of the grant from the carrying amount of that asset.

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

- Based on the description of Palfinger, the company likely owns warehouses and manufacturing plants where it produces machinery that it sells to construction, agriculture, recycling, and other industries of the like. Because construction equipment is so large, Palfinger probably owns a lot of land where the production plants are located. Any corporate office buildings that the company has would also be classified under this category.

b. The 2007 balance sheet shows property, plant, and equipment of €149,990[1]. What does this number represent?

- This amount represents the carrying amounts of the categories of land and buildings; undeveloped land; plant and machinery; other plant, fixtures, fittings, and equipment; and prepayments and assets under construction at December 31, 2007. This number takes into account all additions, disposals, impairments, depreciation, and reclassifications of these assets.

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

- In its financial statements, Palfinger reports machinery and other plant, fixtures, fittings, and equipment which may include smaller, more mobile pieces of 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 €14,958 in this account during 2007.

[1] All numbers are in thousands of Euros.

- Palfinger's "prepayments and assets under construction" account corresponds with GAAP's "self-constructed assets" account. As the company works on constructing a building, it is not able to debit "Buildings" because the building is not yet available for use and therefore cannot be depreciated. The company debits a Construction and Progress account until the building is complete and available for use. Once Palfinger completed construction of the asset that was under construction, it reclassified it under another asset account, and it would be able to begin depreciating the asset at that time.

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 under the straight-line depreciation method. For each piece of equipment or land, Palfinger depreciates the same amount each year. For fixtures, fittings, and equipment, the company depreciates each asset anywhere from three to ten years based on its estimated useful life. For plant and machinery, the company depreciates them over three to fifteen years, and for buildings and investments in third party buildings, it depreciates them over eight to fifty years. This policy seems unreasonable for the buildings category especially. The company is likely paying too much in taxes if it is depreciating an asset over upwards of fifty years. If it depreciated the assets under the double-declining balance method, net income would be lower, so taxes would be lower. While straight-line depreciation is much simpler and easier because it involves the same amount every single year, the double-declining method allows a company to depreciate its property and equipment much faster,

while it is more complicated than straight-line depreciation because it does have to be recalculated each year.

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?

- As Palfinger adds modifications to its equipment and buildings, it capitalizes them and depreciates them over their original or new useful life. The alternative accounting treatment of these modifications would be to treat these modifications as expenses. However, Palfinger chooses to classify them as part of its assets.

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.
    - The company purchased €61,444 of property, plant, and equipment in 2007.

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 provided Palfinger with €733 of government grants. These government grants are assistance from the government intended to compensate for costs that may have conditions attached to them regarding their use. The grants are deducted from the property, plant, and equipment account

because a grant relating to assets must either be presented "as deferred income [or] by deducting the grant from the asset's carrying amount," so Palfinger is using an allowable method (IAS Plus).

iii. Depreciation expense for fiscal 2007.

- Palfinger records its depreciation expense as €12,557 for fiscal 2007.

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

- The net book value of the property, plant, and equipment that Palfinger disposed of in fiscal 2007 is €1,501. The original cost was €13,799 less the accumulated depreciation of €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.

Cash	1,655	
Accumulated Depreciation	12,298	
Gain		154
Property, Plant, and Equipment		13,799

- If Palfinger received proceeds of €1,655 from the disposal of property, plant, and equipment, the company would receive a gain of €154. This gain means that the property, plant, and equipment sold was on the books

for a lower value than the sale price. Therefore, the company must recognize a gain of €154 for the sale.

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:

- Straight-line depreciation.
    - Depreciation Expense= (€10,673-1,273)/5 = €1,880 per year

Year	Depreciation Expense	Book Value
0		€10,673
1	€1,880	8,793
2	1,880	6,913
3	1,880	5,033
4	1,880	3,153
5	1,880	1,273

- Double-declining-balance depreciation.

Year	Book Value (beg of year)	Rate on declining balance	Depreciation expense	Balance accumulated depreciation	Book Value (end of year)
1	€10,673	40%	€4,269	€4,269	€6,404
2	6,404	40	2,562	6,831	3,842
3	3,842	40	1,537	8,368	2,305
4	2,305	40	922	9,290	1,383
5	1,383	40	553	9,843	1,273

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 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).

Cash	7,500	
Accumulated Depreciation	1,880	
Loss	1,293	
Equipment		10,673

- If the company chooses to use straight-line depreciation, it would suffer a loss of €1,293 upon the sale of the equipment. The company would record depreciation expense of €1,880 and a loss on sale of equipment of €1,293 on its income statement for that year, which would lower the profit before tax by a total of €3,173.

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 that 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).

Cash	7,500	
Accumulated Depreciation	4,269	
Gain		1,096
Equipment		10,673

- If the company chooses to use double-declining-balance as its depreciation method, it would receive a gain of €1,096 upon the sale of the equipment. The company would record a depreciation expense of €4,269 and a gain of €1,096 on the income statement for the year, which would lower the profit before tax by a total of €3,173.

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

- While the company experiences a gain under the double-declining balance method and a loss under the straight-line depreciation method, the income statement impact is exactly the same under both methods. The greater amount of depreciation taken on the equipment under the double-declining-balance method is offset by the gain while the lesser amount of depreciation under the straight-line method is offset by the loss to net the same amount under either depreciation method.

CASE STUDY 6: VOLVO GROUP

November 22, 2017

Summary

In this case, we were presented with a Swedish company, Volvo Group, that invests heavily in research and development annually in order to attempt to achieve breakthroughs in reducing the environmental impact of its vehicles and continue to meet emissions and other global regulations. Unlike American companies which adhere to GAAP, Volvo is a company that follows the International Financial Reporting Standards (IFRS). Under the IFRS, companies are able to capitalize expenditures made for research and development as long as they have a high degree of certainty that they will provide future financial benefits to the company. This is appealing to companies because money spent towards research and development is often fruitless, but the small proportion that is successful is able to be capitalized for companies that follow the IFRS. For example, billions of dollars are invested in the pharmaceutical industry, and in the United States, every single dollar must be expensed under GAAP.

In this case, our class was again given the opportunity to analyze an international company that operates under IFRS. In my future career, it is more than likely that I will have an international client. While it is imperative to be extremely knowledgeable of GAAP, it is also important for us to be familiar with the IFRS. With each case such as this one, we are gaining more exposure to the differences between the two sets of principles/standards. Although I cannot yet consider myself an expert, I feel as though I am gaining experience and a greater understanding of the differences between GAAP and IFRS by completing these cases.

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 include costs associated with investigating new technologies to or improving upon existing ones. For example, a car company such as Volvo could be spending money on developing a more fuel-efficient vehicle or one that runs without gasoline. It could be researching new safety features such as how to minimize blind spots or how to make more effective air bags. There is an infinite number of possibilities that this company could be investing in, but in order to continue to grow, car companies will always be investing in R&D to stay competitive and keep improving.

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?

    - Volvo applies IAS 38, which allows the company to capitalize expenditures for the development of new products, production systems, and software as long as there is a high degree of certainty that the company will benefit from them financially in the future. The company must also be able to prove the technical functionality of the new product

or software before it can be recorded as an asset. Development that does not meet these qualifications and research will be expensed as normal.

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?

    - In order to determine the amortization period for particular costs, the company needs to estimate the useful life of the asset. If the asset is not expected to be beneficial for very long, the company would choose an amortization period on the shorter end of the spectrum. However, if the company estimates that the asset will have a longer useful life, it will choose an amortization period on the longer end of the spectrum. Volvo would have to consider how much time the software will be relevant in order to determine the amortization period it will use.

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?

    - Because IFRS allows a company to capitalize development costs that have foreseeable benefits, I think that IFRS provides financial statements that better reflects costs and benefits of R&D spending than GAAP. Under GAAP, companies are seemingly punished for conducting research and

development because every dollar is expensed to income. Under IFRS, companies are able to report beneficial development expenditures as assets which encourages them even further to conduct successful research and development that could qualify to be capitalized.

e. Refer to note 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 depreciation at the end of fiscal 2009? Which line item on Volvo Group's balance sheet represents this intangible asset?

      - The amount of capitalized product and software development costs at the end of fiscal 2009 is 25,148 million SEK, and the accumulated depreciation is 13,739 million SEK, so the net amount would be 11,409 million SEK. This number is factored into the "Intangible assets" line item on the balance sheet which totals 41,628 million SEK for year-end 2009.

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.

Capital Product and Software Development, net (SEK M)			
Beginning Balance	12,381	Amortization	3,126
Amounts Capitalized	2,602		448
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 SEK millions)	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 (including R&D expense)	2,357	2,864	3,126
(4) Total R&D costs incurred during the year = 1 + 2 - 3	10,741	13,634	12,669

ii. 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 capitalized 19.15 percent of its total R&D costs. In 2008, Volvo capitalized 15.77 percent, then it capitalized 20.54 percent in 2009. These numbers were calculated by dividing the product and software development costs capitalized during the year by the total R&D costs incurred during the year.

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

(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	14,399	11,300
Total assets	11,448	10,390	10,028
Operating income before tax	(73)	191	359

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?

- For Navistar, the proportion of total research and development costs incurred to net sales from manufactured products was 3.15 percent for 2007, 2.67 percent for 2008, and 3.83 percent for 2009. For Volvo, the proportion of total research and development costs incurred to net sales from operations was 4.00 percent for 2007, 4.86 percent in 2008, and 6.33 percent in 2009. The proportion of research and development to net sales from manufactured products for Navistar is increasing slowly, and it even decreased in 2008. However, the proportion of research and development incurred to net sales from operations for Volvo is higher each year than Navistar's, and it is increasing at a faster pace. This could be the case because Volvo Group is able to capitalize product and software development costs that have a high degree of certainty that they will benefit the company while American companies such as Navistar have to expense all research and development costs, so American companies may not be willing to spend as high of a proportion of their net sales as some international companies.

CASE STUDY 7: ALTERYX

January 31, 2018

Summary

For this case, each group was given a data an analytics tool to research and learn more about. My group was assigned a tool called Alteryx. While some groups were assigned tools that are widely known such as IBM Watson, many of the groups were given tools that were unfamiliar to us. It was difficult to know where to begin our research, but after thoroughly examining several websites for information, our group was able to find a couple of reliable sources of information to learn more about Alteryx.

From participating in the case competitions in the fall and listening to all of the firms' presentations last semester, it is clear that data and analytics are buzzwords in the accounting field. Firms are relying on their employees to be able to analyze data efficiently for their clients, but without the right tools and training, this can be difficult for accountants to achieve. If my peers and I become familiar with these tools and learn how to use even a few of them, firms will not only be more inclined to offer us jobs, but we will also be much better employees. Learning how to utilize these programs seems daunting, but it is essential in order to stay relevant in the accounting field and reduce the likelihood of being replaced by new hires who *can* use these programs.

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.
    a. The company was founded in 2010 by Dean Stoecker, Kevin Rubin, and Ned Harding. Located in Irvine, California, Alteryx serves thousands of customers including Experian, Ford, and McDonald's.
    b. Alteryx is a tool that allows data stored on multiple servers, which may include Microsoft Excel, SAS, Twitter feeds, Facebook posts, and Google Analytics, to be brought together so that a company's data analyst has access to it no matter the type or source. This tool is fast with processing data, so it saves companies a lot of time. It offers "deeper insights in hours, rather than the traditional week-approach, allowing you to spend less time preparing your data and more time getting insight from it" ("Alteryx"). The program provides tools that allows users to utilize statistical techniques without writing code. The program is integrated with Tableau, so in order to visualize the data in Alteryx, the workflow can simply be saved in the Tableau format and opened in the Tableau program.
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?
    a. One of the advantages of the program is that "Alteryx makes predictive analytics accessible to every analyst" by delivering "self-service data

analytics capabilities required for predictive analytics" without requiring any programming ("Repeatable Workflow"). Customers that are not familiar with coding are able to use the predictive tools that Alteryx provides rather than requiring coding experience.

b. There are no specific tools that a user necessarily needs to utilize the program. However, the program draws data from many different formats including, but not limited to, Excel, XML, SAS, SAP, and SQL, so the better a user knows these formats, the more benefits that he or she will be able to draw from using Alteryx. If a user is having trouble, there are tutorial videos on the company's website that can help the user to understand how to use the program.

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

        i. One auditing scenario in which Alteryx would prove beneficial to a company is during an inventory count. Auditors conduct inventory counts to ensure that the assets the company claims to have are in existence. For large companies such as Amazon with countless warehouses packed with inventory, Alteryx would be a great tool to use to compile the collected data. With warehouses located all over the world, one team could obviously not conduct the entire

inventory count. The data from each count may be entered into a variety of different programs considering the scope of a large company like Amazon, so Alteryx would make allow for the auditors to consolidate the data into one program in order to analyze it for the audit.

ii. For businesses like Walmart that serve millions of customers per week, many of whom make purchases with credit, having a good-faith estimate for the amount of uncollectible accounts is essential. Walmart has decades' worth of data that auditors could analyze to make sure that the bad debt expense is valued correctly. Auditors may want to analyze trends such as the amount of uncollectible accounts that Walmart has dealt with in the past and how accurate those predictions were. Compiling this data into a system such as Alteryx would help auditors make sure that companies are accurately valuing their bad debt expense for the year.

iii. In small, family-owned businesses, it is not uncommon for fraud to occur because business owners sometimes hire employees that take advantage of them or customers without the owners realizing it. For example, in a local dentist's office, if only one employee is in charge of all of the finances, the individual may be overcharging for procedures or waiving fees that are not supposed to be waived. In a situation such as this, an auditor could use Alteryx to compile records from the dentist's perspective and the transactions that

occurred. If the numbers are materially different, fraud may be occurring, and further investigations would have to be conducted.

b. Tax Planning

    i. Accountants who work in tax help companies minimize their legal tax payment. Different states and countries have widely different tax rates, so it may be more profitable for a company to manufacture in one place than another. If a company like Nike is looking for a new tennis shoe manufacturing site, it can use Alteryx to pull together data to compare different site options. There could be hundreds of options, domestic and international, so Alteryx would be helpful for Nike to use to be able to view all of the information in one place. Not only would there be data about the tax rates themselves, but also the regulations in place where each site is located that may affect their decision, so Alteryx would be a great program to consolidate all of the data into one easy-to-use program.

    ii. With high taxes and living expenses higher than ever, many entertainment companies are looking to produce movies in places other than Los Angeles. A lot of factors are involved in deciding where to build a new studio lot. Once a company finds locations that would be large enough to build the studios, it would have to look into the tax rates for each location. Some data that could impact the decision may include what incentives that the state of

interest offers such as tax breaks. Proximity to a large airport could also be a factor. Alteryx would allow the company to analyze all of the data and determine the positives and negatives of each option and allow it to easily determine which location makes the most financial sense.

iii. A company with a lot of industrial machinery can use tax planning to minimize the amount of taxes that it has to pay the government. Machines have limited lives, so their value is depreciated over time. If the company depreciates it at a faster rate, taxable income will be lower. The company could utilize Alteryx to keep track of each machine's expected life and how much has already been depreciated. If the company recalculates the machine's salvage value and expected life, it can update the program to ensure that each machine's information is up-to-date and that the depreciation expenses are keeping the taxable income as low as possible.

c. Financial Statement Analysis / Valuation / Advisory

i. Data and analytics are often used to advise a company on how it can expand into new markets, increase profits, and/or lower expenses. The following scenario is based upon one of Alteryx's current customers, Southwest Airlines. The company is one of the company's largest carriers, and it is constantly adding new cities to its list of destinations. Southwest may hire an advisory company to help them determine which city would be most profitable for their

newest destination offering. The advisory team could utilize Alteryx to draw data from different airports to determine which city could benefit from additional flights, which could be a small airport with little competition or a large airport with consumers struggling to find seats. Rather than looking at data from all different sources, the sources can be consolidated and analyzed using Alteryx.

ii. For companies with large IT departments, having a program that each employee has the ability to use to analyze data would greatly benefit the company. The Chick-fil-A Home Office has an IT department that is responsible for supporting all of the restaurants as well as all of the staff on site. Chick-fil-A restaurants can be found all over the country, and each one has individual needs. The IT department could utilize Alteryx to draw data from each register and analyze which products are the most popular in individual restaurants or specific regions. For example, coffee does not sell well in the Utah locations because Mormons are not permitted to drink caffeine, so it may not be worth it for the Chick-fil-A restaurants in Utah to offer coffee products. Using Alteryx to analyze register data efficiently could help a company save a lot of money.

iii. There are certain franchise restaurants that seem to have locations on every single interstate exit. Before opening a new storefront,

companies likely analyze data to ensure that the location will be profitable. For example, suppose that Starbucks hired an advisory firm because it is hoping to open a new Atlanta location. Some information that would be helpful prior to choosing a site would be how close the shop would be in proximity to other Starbucks locations and how close it would be to other coffee chains and restaurants that also sell coffee. The firm could use Alteryx to input this data to determine whether or not it would be in their best interests to open a new location in the area. They would be able to tell if there was enough demand to support another coffee shop or if it would struggle to keep its doors open. Advisory firms could definitely use Alteryx to help franchise firms pick their newest locations.

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.

    Finding a program that can be used to analyze data by everyone in an organization is almost impossible. However, with a program as easy to use as Alteryx, employees of all experiences will be able to utilize it. Experienced employees who have been working for the company for a long time may be resistant to learning a new program so late in their careers. Young, inexperienced employees may be nervous to try it as well.

However, Alteryx makes data analyzing easy for users of all ages and experiences.

Because the program is programmed with predictive technologies, users are not required to learn how to code to take advantage of it. The program requires little to no training for the average employee to use. However, the company could potentially invest in additional training for younger employees so that with experience and practice, they could provide even more benefit to the company.

Another benefit of Alteryx is its speed. Rather than waiting weeks for a program to process data, Alteryx promises that the data will be ready to analyze in hours. This massive time savings would provide for decisions to be made faster and more efficiently, and the time that would have been wasted waiting for the data to process could instead be used for more productive and profitable tasks. Alteryx would save the company time and money, and its ease of use would be appreciated by employees of all types. The company should definitely invest in this tool.

Works Cited

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CASE STUDY 8: RITE AID

February 14, 2018

Summary

This week, we were given a case on the Rite Aid Corporation. This case focused on long-term debt, namely notes. The company has issued several notes with various terms, interest rates, and due dates. The timing of the case worked well with our Intermediate Accounting schedule as we just finished the chapter that discusses long-term debt. While we are familiar and accustomed with writing entries to issue notes and calculating discounts and premiums, it is rare for us to work backwards like we were given the chance to in this case. It was interesting to comb through the balance sheets to look for the information that was needed to solve the question and use critical thinking skills to find the pieces that were not explicitly given.

This case gave us the chance to apply the accounting knowledge that we have in new ways. When we do our internships or begin our careers, we will not be handed every single piece of information that we need. Instead, we will have to use our critical thinking skills to figure out the most efficient way to find out what we need. This case helped me to better understand the material that we are learning. It is easy to get caught up in the mechanics of the problems and memorize how the type of problem is supposed to be solved without truly understanding the task. I feel as though I have a much better understanding of notes, interest payments, and discounts/premiums after completing this case.

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

- Explain the difference between Rite Aid's secured and unsecured debt. Why does Rite Aid distinguish between these two types of debt?
    - Rite Aid's secured debt uses accounts receivable, inventory, and prescription files as collateral while the unsecured debt does not have collateral. At some point, Rite Aid could not incur any more secured debt, so it issued unsecured debt (86).
- 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?
    - A debt that is guaranteed has another party that will take on the debt if the borrower defaults and is unable to repay it. The guarantors for some of Rite Aid's unsecured debt are the company's subsidiaries, which are companies that Rite Aid controls.
- What is meant by the terms "senior," "fixed-rate," and "convertible"?
    - A senior debt is one that takes priority over all of a company's other debt obligations. The loaner has legal claim to the borrower's assets over other unsecured or junior debts.
    - A fixed-rate loan is a loan that's interest rate will not fluctuate during the fixed rate loan period. Fixed rate loans allow a borrower to be able to predict exactly how much their future payments will

be. The fixed rate may be for the entire period of the loan or a portion of it.

    - A convertible bond or note is one that allows the holder to convert the debt into common stock shares of the issuing company or the cash value of the shares.

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

    - Rite Aid likely issued different types of debt as needs arose. The debts have different interest rates because market rates may have fluctuated over the years, which probably affected the face rates of the debt. The notes were all issued at different times under different circumstances, so no two are exactly alike.

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.

    - According to note 11, Rite Aid has $6,370,899 worth of total debt. The amount of debt that is due in the coming fiscal year is $51,502. In order to reconcile the amount of total debt outlined in the note, one can look to the liabilities section of the balance sheet. The amount of debt that is due in a year is $51,502. The full amount of long-term debt, less the amount of current maturities, is

$6,185,633. The last component of the debt amount comes from Rite Aid's lease financing obligations which totals $133,764 without the amount due within the year.

c. Consider the 7.5% senior secured notes due March 2017.

- What is the face value (i.e. the principle) of these notes? How do you know?
    - The principle value of the 7.5% secured notes is $500,000. The balance sheet shows that the notes were issued at the par value of $500,000 because there is no unamortized discount or premium listed, which means that the market rate was also 7.5% at the time the notes were issued.
    - Prepare the journal entry that Rite Aid must have made when these notes were issued.
        1. The following is the journal entry to record the issuance of the 7.5% secured notes. This entry increases assets and increases liabilities. Income is unaffected.

Cash	500,000	
Notes Payable		500,000

- 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.
    1. The following is the journal entry to record the annual interest paid on the notes. This entry decreases income and decreases assets. Liabilities are unaffected.

Interest Expense	37,500	
Cash		37,500

- Prepare the journal entry that Rite Aid will make when these notes mature in 2017.
    1. The following is the journal entry to record the retirement of the notes. This entry decreases liabilities and decreases assets. Income is unaffected.

Notes Payable	500,000	
Cash		500,000

d. Consider the 9.375% senior notes due December 2015. Assume that interest is paid annually.

- What is the face value (or principle) of these notes? What is the carrying value (net book value) of these notes at February 27, 2010? Why do these two values differ?
    - The face value of the 9.375% notes is $410,000, and the carrying value is $405,951 as of February 27, 2010. The face value is the par value or the amount that will be due to the note holder at the

time of maturity. The carrying value is the book value of the notes. This amount is the carrying value less the unamortized discount or plus the unamortized premium. $405,951 is the notes' carrying value minus the unamortized discount of $4,049.

- How much interest did Rite Aid pay on these notes during the fiscal 2009?
    - During fiscal 2009, Rite Aid paid $38,438 in interest. The cash interest payment is calculated by multiplying the principle, which is $410,000, by the interest rate of 9.375%. Since interest for these notes is paid annually, the full amount of $38,438 will be paid at one time.
- 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 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).
    - The entry for interest expense is as follows:

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

The cash payment is calculated by multiplying the principle of $410,000 by the interest rate of 9.375%. The balance sheet displays the amount of unamortized discount in both 2009 and 2010. In order to determine the amount amortized specifically in

2010, the unamortized discount from 2010 is subtracted from the amount from 2009. The difference between $4,754 and $4,049 is $705, so $705 is the amount of the discount that was amortized for the year ended February 27, 2010. This entry decreases income and decreases assets. Liabilities are unaffected.

- Prepare the journal entry to record interest expense on these notes for fiscal 2009. Consider both the cash and discount (noncash) portions of interest expense from part c above.
    - Because the balance sheet does not disclose how long the notes have been outstanding, we must assume that the notes are amortized on a straight-line basis. In this case, the entry would be the same as the entry made in 2010. This entry decreases income and decreases assets. Liabilities are unaffected.

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

- Compute the total rate of interest recorded for fiscal 2009 on these notes.
    - To find the interest expense, one would multiply the carrying value of the note by the effective interest rate. Since the carrying value and interest expense are known, the effective interest rate can be found by dividing the interest expense by the carrying value from the beginning of the period. The interest expense of $39,143 divided by the carrying value from the beginning of the period, $405,256, gives an effective interest rate of 9.659%.

e. Consider the 9.75% 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.

- According to note 11, the proceeds of the notes at the time of issue were 98.2% of the face value of the notes. Prepare the journal entry that Rite Aid must have made when these notes were issued.
    - The journal entry that was made when the notes were issued is as follows:

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

The notes' face value of $410,000 is credited as notes payable. 1.8% of the face value, $7,380, is debited as the discount on notes payable, and the rest of the face value is debited as cash. This entry increases the company's assets and increases liabilities. There is no effect on income.

- At what effective annual rate of interest were these notes issued?
    - The notes were issued at an effective interest rate of 10.1212%. While there is an algebraic method, an Excel formula can also solve this problem. By entering the number of periods, the cash interest payment, cash proceeds, and face value of the note into the RATE function, the effective interest rate of 10.1212% is calculated.

- 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	Bond Discount Amortization	Net Book Value of Debt	Effective Interest Rate
June 30, 2009	--	--	--	$402,620	10.1212%
June 30, 2010	$39,975	$40,750	$775	403,395	10.1212
June 30, 2011	39,975	40,828	853	404,248	10.1212
June 30, 2012	39,975	40,914	939	405,187	10.1212
June 30, 2013	39,975	41,001	1,034	406,221	10.1212
June 30, 2014	39,975	41,115	1,139	407,360	10.1212
June 30, 2015	39,975	41,230	1,255	408,615	10.1212
June 30, 2016	39,975	41,357	1,382	409,998	10.1212

  - 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% and the effective rate (including fees) is 10.1212%.
  - 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.

1. 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.
2. Amortizing the discount increases the net book value of the bond each year.

- 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.

    1. Rite Aid would have recorded the following entry on February 27, 2010 for these notes:

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

    The entry above represents the interest accrued from June 30, 2009 to February 27, 2010, which is eight months of interest. The amounts can be found by multiplying the values for the full year of interest by the fraction 8/12, which represents the eight months of accrued interest. This entry decreases income and increases liabilities.

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

    1. The net book value of the notes would be $403,137. The prior period's carrying value was $402,620, and the amount

of the discount that was amortized during the eight-month period was $517, so the carrying value increases to $403,137.

CASE STUDY 9: MERCK & CO., INC.

February 23, 2018

Summary

For this case, we analyzed the financial statements of Merck & Co., a pharmaceutical company, particularly the sections pertaining to stockholders' equity. The timing of this case aligns well with our Intermediate schedule because we are currently learning and having discussions about calculating earnings per share and dividends. In the case, we are asked to distinguish the difference between authorized, issued, and outstanding shares of stock. We were also asked to discuss the concept of treasury stock and giving an explanation for why a company would want to buy back its own stock.

This case will not only help me to be a better employee, but also a better investor. As a future investor, I will be better able to calculate and interpret different ratios and learn more about the financial state of the company. After doing research about treasury stock, I have a better understanding of why companies want to buy back their stock. If a company I was interested in investing in were to schedule a buyback, I would be able to do research to try to determine if it was trying to artificially inflate the stock's valuation to make the stocks look more desirable or possibly just quickly increase earnings per share. The case also has given me a greater understanding of dividends and the reasons why companies choose to declare and pay them. This case gave me an interesting look into a company's equity accounts, and I will be able to apply the knowledge that I gained to both my future career and my future investments.

a. Consider Merck's common shares.
    a. How many common shares is Merck authorized to issue?
        - As stated on the balance sheet, Merck is authorized to issue up to 5.4 billion shares of common stock.
    b. How many common shares has Merck actually issued at December 31, 2007?
        - At the end of 2007, Merck has issued 2,983,508,675 shares.
    c. Reconcile the number of shares issued at December 31, 2007, to the dollar value of common stock reported on the balance sheet.
        - To reconcile the number of shares issued to the dollar value of common stock listed, the par value of the stock is multiplied by the number of shares issued. The number of shares issued is 2,983,508,675, or approximately 2.98 billion, and the par value is $0.01. Those values multiplied together reconciles to the value of $29.8 million of common stock on the balance sheet.
    d. How many common shares are held in treasury at December 31, 2007?
        - The company holds 811,005,791 shares of treasury stock at the end of 2007.
    e. How many common shares are outstanding at December 31, 2007?
        - The number of shares outstanding can be found by subtracting the number of shares in treasury by the number of shares issued. 2,983,508,675 shares of common stock less

811,005,791 shares of treasury stock equals 2,172,502,884 shares of common stock outstanding.

f. 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 of Merck on December 31, 2007 would have been $125,157,981,147. This number is found by multiplying the number of common stock shares outstanding by the market price per share.

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

a. A company may pay dividends because can be a sign that the company is in a good financial state and expects that future earnings are on an upward trend. Because dividends are attractive to investors, a company's share price will probably increase when dividends are paid because demand goes up.

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

a. When a company buys back its own shares from common stockholders, it is investing in itself. A stock buyback reduces the total number of shares outstanding, so the company's earnings per share is automatically increased. Investors will also sometimes purchase stock right before a company has scheduled to buy back shares, so the stock's valuation may go up.

d. 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	3,310.70	
Cash		3,307.30
Dividends Payable		3.4

The cash payment of $3,301.3 can be found on the statement of cash flow under "dividends paid to stockholders." The dividends payable amount can be found on the balance sheet, although the amount is slightly off due to rounding. The debit to retained earnings of $3,310.7 can be found on Merck's statement of retained earnings under "dividends declared on common stock."

*all numbers are in millions of dollars

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

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

        - Merck uses the cost method to account for its treasury stock transactions. The entire purchase of treasury stock is debited to treasury stock and credited to cash.

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

        - According to note 11, Merck repurchased about 26.5 million shares of stock on the open market in 2007.

c. 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?
    - Merck paid about $1,429.7 million to buy back stock in 2007. Because the company purchased 26.5 million shares, Merck paid about $53.95 per share of common stock. The purchase of treasury stock would be a negative cash flow, and it would be included in the financing section of the statement of cash flow.

d. Why doesn't Merck disclose its treasury stock as an asset?
    - Treasury stock is not considered an asset. A company cannot own shares of its own stock. Treasury stock shares do not pay dividends, and they do not have any voting rights. Rather than an asset, treasury stock is treated as a contra equity because the amount in treasury stock is subtracted from the total amount in the equity section.

f. Determine the missing amounts and calculate the ratios in the tables below. 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?

(dollar amounts in millions)	2007	2006
Dividends paid	$3,307.3	$3,322.6
Shares outstanding	2,172,502,884	2,167,785,445
Net Income	$3,275.4	$4,433.8
Total assets	$48,350.7	$44,569.8
Operating cash flows	$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)	100.97%	74.94%
Dividends to total assets	6.84%	7.45%
Dividends to operating cash flows	47.25%	49.11%

- In 2007, Merck's dividend yield, which is calculated by dividing dividends per share by stock price, decreased about 1% from 2006. While

dividends per share was about the same for both years, the stock price increased by a large amount in 2007 which accounts for the difference between the two years. From 2006 to 2007, the dividend payout increased about 25%. Both the amount of dividends paid and the amount of net income decreased in 2007, so that is why the dividend payout is so much higher in 2007. The ratio of dividends to total assets decreases by about half a percent from 2006 because the total assets increases in 2007. Because the operating cash flows increases in 2007, the ratio of dividends to operating cash flows decreases by about 2% from 2006.

CASE STUDY 10: STATE STREET CORPORATION

March 28, 2018

Summary

In this case, we analyzed the financial statements of the State Street Corporation, an investment company. The company has securities classified as trading, held-to-maturity, and available-for-sale. As we have learned in our intermediate accounting course over the last month, each different classification of security is treated in a different way. Held-to-maturity securities are amortized over time until their maturity date, and unrealized holding gains and losses are not recognized. Trading securities are adjusted to fair value through the fair value adjustment account, and unrealized holding gains and losses are recognized in the company's net income. Available-for-sale securities are also adjusted to fair value with the fair value adjustment account, and unrealized holding gains and losses are recognized in the company's other comprehensive income statement and as a separate component of stockholder's equity.

This company is an investment company, so it was different and interesting to analyze than the others that we have had. Unlike a merchandising company that has inventory and records cost of goods sold, this company makes profits by investing in companies and holding them to their maturity dates or selling them when their values increase. Several people that I have talked to from the accounting firms have had clients that are in banking or investing, so it is a possibility that I will have clients who conduct this type of business one day as well. If or when that day comes, it will be important to understand the type of business that they do so that I can give them the best advice possible. This case allowed me the opportunity to analyze an investment company's financial statements and gain a better understanding of the business activities of a company like State Street.

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?

      - In general, trading securities are debt or equity that a company owns in another company and plans to sell in the short term. These include shares of stock and bonds. Trading securities are adjusted to fair value using the fair value adjustment account.

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

      - The entry made to record dividends depends on whether or not the company has significant influence. If State Street has between 20 and 50 percent ownership of the company and can exercise influence, State Street would debit cash and credit equity or debt investments using the equity method.

Cash	1	
Equity or Debt Investments		1

      - If State Street owns between zero and 20 percent of the company and cannot exercise influence, State Street would debit cash and credit dividend revenue using the fair value method.

Cash	1	
Dividend 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/Loss- Income 1

- If the market value of a trading security increased by $1 during the reporting period, the company would debit the fair value adjustment- trading account for $1 and credit the unrealized holding gain/loss- income account for $1. Unrealized holding gains and losses on trading securities flow through income.

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?

- Securities that are classified as available-for-sale can either be debt or equity that a company has in another company. A company classifies securities as available-for-sale that it may or may not desire to sell in the future. Available-for-sale securities are adjusted to fair value through the fair value adjustment account.

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

- Similarly to trading securities, the entry made to record dividends depends on whether or not the company has significant influence. If State Street has between 20 and 50 percent ownership of the company and can exercise influence,

State Street would debit cash and credit equity or debt investments using the equity method.

Cash 1
Equity or Debt Investments 1

- If State Street owns between zero and 20 percent of the company and cannot exercise influence, State Street would debit cash and credit dividend revenue using the fair value method.

Cash 1
Dividend 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- Available-for-Sale 1
Unrealized Holding Gain/Loss- Equity 1

- If the market value of an available-for-sale security increases by $1, the company's ledger would reflect a journal entry with a debit to the fair value adjustment- AFS account for $1 and a credit to the unrealized holding gain/loss- equity account for $1. Unrealized holding gains and losses on available-for-sale securities bypass the income statement and go straight to other comprehensive income.

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

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

        - In general, held-to-maturity securities are debt that a company holds of another company. They are typically bonds. Equity securities are never classified as held-to maturity because they do not have a definite maturity date like debt securities do.

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

        - No journal entry would be made. Held-to-maturity securities are not adjusted to fair value because gains and losses are not recognized until the securities are sold.

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 in the trading account assets account on December 31, 2012 is $627 million. This value is also the market value of the securities on that date.

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. (Journal entry numbers are in millions of dollars)

Fair Value Adjustment- Trading	75	
Unrealized Holding Gain/Loss- Income		75

- State Street would debit the fair value adjustment- trading account and credit the unrealized holding gain/loss- income account to adjust the trading account to market value. A credit to the unrealized holding gain/loss account indicates an unrealized gain on the securities.

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 in the investment securities held to maturity account is $11,379 million.

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

- The consolidated statement of condition discloses that the market value or fair 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?

- The amortized cost of the held to maturity securities is $11,379 million. Although held to maturity securities are not adjusted to fair value, they are amortized over time until they reach their maturity dates. When a security is purchased, the purchaser may pay more or less than the par value of the security. The amortized cost represents the par value plus or minus the discount or premium that has yet to be amortized. If the securities were purchased at a discount, the original cost would be less than the amortized cost. If the securities were purchased at a premium, the original cost would be greater than the amortized 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?

- The difference between the market value and the amortized cost represents the difference between how much the security is worth on the market and the value that the owner of the security has recorded in its books. In this case, the fair value is $282 million greater than the amortized cost of the securities.

This difference suggests that the interest rates must have gone down since the fair value of the held to maturity securities have increased.

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 balance in the investment securities available for sale account is $109,882 million which represents the fair value of the securities classified as available for sale.

   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 amount of net unrealized gains or losses on available-for-sale securities on December 31, 2012 is $1,119 million. On page 115 in the available-for-sale section, the gross unrealized gains are $2,001 million and the gross unrealized losses are $882 million. The net of these two values results in a $1,119 million net unrealized gain on these securities.

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 amount of net realized gains or losses on available-for-sale securities on December 31, 2012 is $55 million. Page 119 states that the gross realized gains from sales of available-for-sale securities is $101 million, and the gross realized losses from sales of available-for-sale securities is $46 million. These two values net to a $55 million realized gain on the sale of securities classified as available-for-sale. This value would increase net income for the year, but it would be subtracted from the statement of cash flows because it is not a reflection of the actual amount of cash that State Street received from the sale.

g. State Street's statement of cash flow for 2012 shows the following line items in the "Investing Activities" section relating to available-for-sale securities (in millions):

i. Show the journal entry State Street made to record the purchase of available-for-sale securities for 2012. (Journal entry numbers are in millions of dollars)

Investment in Available for Sale securities	60,812	
Cash		60,812

- In 2012, State Street debited the investment in AFS securities account and credited cash for the purchase of the securities. Discount and amortization accounts are not used in debt or equity security transactions on the buyer side.

ii. Show the journal entry State Street made to record the sale of available-for-sale securities for 2012. Note 13 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. (Journal entry numbers are in millions of dollars)

Cash	5,399	
Unrealized Holding Gain	67	
Investment in Available for Sale securities		5,411
Realized Gain on Available for Sale securities		55

- According to Note 4, the cash proceeds for the sale of the available-for-sale securities were $5,399 million and the realized gain was $55 million. The unrealized holding gain of $67 million is debited, so the plug in this entry is the investment in available for sale securities which is credited for $5,411 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 can be found by subtracting the gain from the cash proceeds of the sale. The cash proceeds were $5,399

million and the realized gain from the sale is $55 million, so the original cost of the securities was $5,344 million.

CASE STUDY 11: ZAGG INC.

April 11, 2018

Summary

This case was based on the company Zagg Inc. and dealt with analyzing the differences between the pretax income from the income statement and taxable income of a company. While it seems that these numbers would be the same, there are actually several ways in which these numbers can and will differ for companies. This topic is relevant because we are currently learning about how to account for income taxes in our intermediate course. In order to fully understand this topic, it is important to be able to distinguish whether or not an item is a deferred tax asset or deferred tax liability.

Even though this topic was relevant to what we are currently learning in intermediate, I had more difficulty with this case than usual. A large part of the case required combing through the Accounting Standards Codification to see how FASB defines the terms discussed in the case. Some of the language was different from what I am accustomed to, which I believe is what made it the most difficult for me. However, it was interesting to gain experience researching topics in the Codification. As I prepare for a future career in tax accounting, I know that research will be an important aspect of my job. Almost every professional that I have spoken with has discussed how exciting the new tax code has been for their careers, but also that it has required a lot of research in order to understand and advise their clients. This case gave us great practice in learning how to search the Codification for relevant topics and how to utilize it to understand challenging 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 is the same as the pretax income that is listed on the income statement. This amount is found by subtracting cost of goods sold or cost of sales and other expenses from the company's revenues. Income before provision for income taxes is the line item on the Consolidated Statement of Operation for ZAGG that is also the company's book income for 2012. While a company's book income is found on the income statement, a company's taxable income comes from the tax return and is used to find the amount of taxes that a company is required to pay.

b. In your own words, define the following terms:

i. Permanent tax differences (also provide an example)

- A permanent tax difference is an item that causes a difference between the income reported on the financial statement and taxable income that will never be reconciled. An example of a permanent difference would be a fine that resulted from a violation of a law. For instance, if a company is fined for polluting, the expense would be recorded on the financial statements, but it will never be a deduction on the tax return.

ii. Temporary tax difference (also provide an example)

- A temporary tax differences is an item that causes a difference between the income reported on the financial statement and

taxable income that will eventually be reconciled. The difference in recognition of the revenue or expense item is just due to timing. An example of a temporary difference would be the recognition of revenue received in advance for a magazine subscription. This amount would be considered a deferred tax asset. The subscription revenue would be included in the company's taxable income, but it would not be recognized as revenue on the income statement until the company fulfills the obligation to the customer and sends magazines.

iii. Statutory tax rate

- The statutory tax rate is the rate that is mandated by the law of the place where the company is headquartered. Some statutory rates are constant, such as sales tax. Other statutory rates are variable and dependent on other factors, such as income tax which depends upon an individual's income.

iv. Effective tax rate

- The effective rate can be found by dividing the tax expense by the pretax income. This rate is the average rate at which a company is taxed on its pretax income.

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?

- Deferred income taxes are considered a liability. A company will be required to pay the sum in the future, but even though they are not charged on the current tax bill, deferred income taxes are included in total income tax expense. The Accounting Standards Codification's section about income taxes states that the "deferred tax expense (or benefit) is the change during the year in an entity's deferred tax liabilities and assets." Similarly to the way pretax income does not equal taxable income, income tax expense does not equal income taxes payable. One of the concepts that we have discussed in intermediate accounting is the revenue and expense matching principle. A company reports revenue in the period in which it was earned and expenses in the period in which they were incurred. For example, a company reports warranty expense and subtracts it from revenues in the year that the inventory was sold to consumers even if the consumers have not requested warranty repairs yet. In a similar way, deferred income taxes are reported as a part of a company's income tax expense in the period in which the events occurred even though they may not be due yet.
- In the case that a company experiences an event that causes a temporary difference that results in a deferred tax asset, there will be a future tax

deduction. Below is a pro forma example of what an entry would look like in this particular case:

Income tax expense	xx	
Deferred tax asset	xx	
Income tax payable		xx

Because the deferred tax asset is a future deductible amount, it is taxed in the present. Income tax payable is greater than the income tax expense because the company owes more in taxes than it has recorded for income tax expense on the income statement. When the deferred tax asset becomes a deductible expense in the future, the entry would look like the one that follows:

Income tax expense	xx	
Deferred tax asset		xx
Income tax payable		xx

When the amount becomes deductible, the deferred tax asset does *not* become a deferred tax liability. Instead, the company would debit the deferred tax asset in the period in which the expense is deducted. In this case, the income tax expense is greater than the income taxes payable. The company deducts a greater amount of expense from revenues than it owes in taxes.

- Conversely, when a company experiences an event with a temporary difference that is a future taxable amount, the company records a deferred tax liability. A pro forma entry of this situation is below:

Income tax expense	xx	
Deferred tax liability		xx
Income tax payable		xx

Deferred tax liabilities have a normal credit balance. This type of temporary difference results in higher expenses and lower taxable income in the present. The income tax expense is higher than the income tax payable in this case because taxable income is lower than financial income. In the year that the expense becomes taxable, the income taxes payable will be higher than the income tax expense and the deferred tax liability will be debited.

- In summary, companies do not report their tax bill as their income tax expense because those two amounts are likely not equal. The amount that a company owes in taxes could be more or less than the amount that the company records for income tax expense depending upon the temporary differences that occurred during the year.

d. Explain what deferred 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.

- According to the codification, a deferred tax asset is a deferred tax consequence that comes from temporary differences and carryforwards, which are utilized by companies to use realized losses to lessen the taxation of future capital gains. In other words, deferred tax assets are temporary

differences that will result in a future deductible amount. The increase in taxes in the present will result in refundable amounts in future years. The taxable income is higher than the financial income from the income statement in the current year. An example of a deferred tax asset would be warranty expense. If Apple has revenues of $1 million and anticipates that it will incur $100,000 in warranty expense next year, the company will not be able to deduct the expenses for tax purposes like it would on the income statement. Apple will have to pay taxes on the $1 million in revenue and deduct the warranty expenses in the future when customers cash in their warranties.

- According to the codification, a deferred tax liability is a deferred tax consequence that is attributable to taxable temporary differences. These amounts are deducted in the present, but they will be taxable in future years. In this case, the taxable income is greater than the financial income listed on the income statement in the year of origination. An example of a deferred tax liability would be depreciation expense. A company can use the double-declining balance method of depreciation in order to reduce taxable income in the present. A company that chooses to depreciate a piece of equipment using the double-declining balance method will report the highest depreciation expense in the first year. Each year, the amount of depreciation expense lessens and the amount of revenue subject to income taxes increases. This is an example of a deferred tax liability because the company is liable to pay the taxes in the future.

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

- A deferred income tax valuation allowance is a contra-asset account that is listed on the balance sheet with the purpose of offsetting all or a part of a company's deferred tax assets. If it is more likely than not that a company will not be able to realize all or some of its deferred tax assets, the company will use a deferred income tax valuation allowance account to offset that amount.

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. (Journal entry numbers are in thousands of dollars)

Income tax expense	9,393	
Deferred tax asset, net	8,293	
Income tax payable		17,686

- Zagg's total income taxes payable amount is listed in Note 8 to be $17,686 thousand. The amount of the income tax provision that is deferred in 2012 is $8,292 thousand. The income tax provision, which is the amount that Zagg currently owes, is $9,393 thousand.

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. (Journal entry numbers are in thousands of dollars)

Income tax expense	9,393	
Deferred tax asset	8,002	
Deferred tax liability	291	
Income tax payable		17,686

- The amount listed in part *f. i.* above is a net amount of the company's deferred tax asset and deferred tax liability. The amount of the company's deferred tax asset can be found by subtracting the total deferred tax assets in 2011 from the total deferred tax assets from 2012. $14,302 thousand less $6,300 thousand equals $8,002 thousand for the net deferred tax asset amount. The deferred tax liability amount is found in a similar way. The total gross deferred tax liabilities from 2011, which are $1,086 thousand, from the 2012 amount of $794 thousand equals a debit amount of $291 thousand. The net amount of deferred tax assets and deferred tax liabilities equals net deferred income taxes of $8,293 thousand.

iii. The second table in Note 8 provides a reconciliation of income taxes computed using the federal statutory rate (35%) 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?

- The effective tax rate is calculated by dividing the income tax expense by the pretax income. The income tax expense of $9,393 thousand divided by the pretax income of $13,898 calculates an effective tax rate of 39.30 percent. The effective tax rate is higher than the federal statutory rate because the effective rate also includes items such as state taxes and non-deductible expenses.

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.

- The third table of Note 8 states that there is a net deferred income tax asset balance of $13,508,000. This number can be reconciled from the balance sheet by adding the deferred income tax assets of $6,912 thousand from the current asset section and the noncurrent deferred income tax assets of $6,596 thousand. These two amounts total $13,508,000.

CASE STUDY 12: APPLE INC.

April 25, 2018

Summary

In this case, our class looked into how Apple Inc. recognizes revenue. This was an exciting opportunity because Apple is a familiar company, but I never thought about how complicated that revenue recognition could get. One item that we analyzed in this case was how to recognize revenues earned from contracts that have multiple elements. One of these cases in particular was recognizing revenues from the free software upgrades that are included with Apple products. These updates are not guaranteed, but they inevitably appear every few months as the company fixes bugs and improves user friendliness. I would have never assumed that revenue would be assigned to these updates because they are "free" to the customer, but it was a good reminder that nothing is truly free. The cost that is incurred to create those updates is built into the price of the devices, so revenue must be recognized accordingly.

One aspect about this case that I particularly enjoyed was becoming more familiar with the new revenue recognition standard. Every professional that I have spoken with over the last year has talked about how the changes in standards and the new tax code have affected their work. For the most part, they are excited to research and become experts on the new rules. We will be starting our careers at a very dynamic time, so it was interesting to see how changes affect a company's financial statements. For a company such as Apple, changing the financial statements to reflect the changes can take quite a while and often requires a lot of work. However, changes such as the one to the revenue recognition standard are made in good faith to better portray the financial status of companies to stakeholders.

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

    - Revenues are income that a company earns from its normal, day-to-day operations. Gains are also a positive increase in equity, but they result from operations that are not consistent with a company’s day-to-day operations. For example, Staples would report sales of pens and pencils as revenue because those sales are consistent with the company’s main product offerings. However, if Staples decides to sell a cherry picker from its back storeroom and sells for more than its book value, the increase in value would be reported as a gain because Staples is not in business to sell large equipment.

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 outlined in the FASB’s Statement of Concepts No. 5.

    - Rather than accounting for revenues when cash is received, a company recognizes its revenues in the period that they are earned. For example, People magazine may offer subscriptions that are paid in advance for a year’s worth of magazines. However, People only recognizes revenues that correspond with magazines that have already been delivered to customers, even though they have received payment for all of them. A common entry for revenue recognition would be to debit the cash and cost of goods sold accounts and credit inventory and sales revenue. Cash and

inventory are balance sheet accounts, and cost of goods sold and sales revenue are income statement accounts. According to the new revenue recognition standard, there are several criteria that must be met before an entity can account for a contract with a customer. All parties must approve the contract and be committed to follow through with their obligations. The payment terms can be identified as well as the rights to the goods or services that will be transferred. The contract must have commercial substance, which means that the risk, timing, or amount of the entity's future cash flows are expected to change. The entity must also be able to reasonably expect to collect the consideration that it is promised by the contract. Once the contract is established, the entity should identify the performance obligations that should be satisfied in order to complete the contract. When a performance obligation is complete, the entity can recognize revenue earned from that performance obligation in the same period that the obligation was met.

- FASB Statement of Concepts Number 5 states that if and when certain criteria are met, revenue should be recognized. The first criteria, definitions, is that the item must meet the definition of an element of financial statements. The item must have measurability or can be measured with sufficient reliability. The item must be relevant, which means it must be capable of making a difference in a user's decisions. Finally, the item must be reliable and be neutral, representational faithful, and verifiable.

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?

- According to Note 1, Apple recognizes revenue "when persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable, and collection is probable." In detail, Apple claims to recognize revenue when there is evidence that there is an arrangement between Apple and the customer, the customer is in possession of the good(s), the price is fixed or can be determined, and it is probable that the customer will pay for the good(s). These elements do not seem to be completely aligned with the criteria described above of relevance, reliability, measurability, and meets the standard to be considered a financial statement element. Even though the criteria do not currently align, Apple states in its most recent 10-K that it plans to "adopt the new revenue standards in the first quarter of 2019" at which point the company will utilize the full retrospective transition method. The company does not expect there to be a material difference in the amount and timing of revenue recognized in the financial statements.

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

- Multiple-element contracts include contracts that involve more than one deliverable product or service to a customer. In order for the delivered

items to be separated, they must have stand-alone value. This means that even though they are bundled in the contract, they could be sold separately and still have value. One issue with multiple-element contracts is that it may be difficult to separate elements from one another to successfully recognize the correct revenue because it is unlikely that revenue will be recognized in exactly the same amount every period. Apple describes the way that it handles "arrangements with multiple deliverables" in Note 1 of the case document. The company uses a hierarchy to determine how to allocate revenue to the different elements. The first level is vendor-specific objective evidence of fair value, which is only known if the company sells that particular item and the revenue equals the actual price that Apple would charge for that item. The second level is third-party evidence of selling price, which would be the price that other vendors charge for Apple's products, which could include stores like Verizon, AT&T, and Target. The last level is best estimate of the selling price, which would be the company's best estimate of what the selling price of an element would be if it was sold separately. One example that Apple gives of a multiple-element contract is free software updates that are provided along with the software that is provided at the time of the sale of an iPhone, iPad, iPod Touch, and Apple TV. Apple uses the best estimate of selling price to allocate revenue. The revenue from the hardware, which is the device, and the essential software is recognized when the device is

sold. The amounts that are allocated to the software updates are recognized on a straight-line basis over 24 months.

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

- Managers are under pressure to meet expectations and deadlines, and they may make self-serving choices in order to give the illusion that these expectations were met. The manager may desire to recognize more revenue than warranted if an increase in revenues were expected of the store. A manager may also have the incentive to recognize less revenue than earned in order to reduce the company's tax liability. Managers could be hoping for raises or promotions if they perform well, so they could make dishonest decisions in order to receive benefits.

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 is not the "primary obligor," or entity required to provide a payment or service to another, to users of iTunes. When a song is purchased, Apple recognizes revenue from the commission it retains from the purchase. The remainder of the sales price is remitted to the software developer who accounts for revenue on its own.

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

    - In order to satisfy the "delivery has occurred" criteria for revenue recognition, the title and risk of loss must be transferred. If an accessory is purchased in an Apple store, this happens as soon as the purchase is complete and the customer takes possession of the item. If the accessory is purchased online, Apple defers revenue until the product reaches the customer because Apple still bears some of the risk of loss or damage while the item is in transit. As long of the other criteria have been met, Apple will recognize revenue at the time of purchase if the purchase is made in-store or when the product is delivered to the customer if the purchase is made online.

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

    - When looking at Apple's most recent 10-K, it appears that the company breaks up net sales and operating income by region. The operating income includes net sales to third party resellers as well as the related costs of those sales. Revenue from iPods sold to a third-party reseller in India would be included in the section "Rest of Asia Pacific." The revenues would be recorded similarly to products sold online. Apple would defer revenues from the sale of the iPods until the reseller received the shipment.

iv. Revenue from gift cards.

- When a customer purchases a gift card, Apple records the proceeds as unearned revenues. Gift card purchases are liabilities to a company because Apple has not yet fulfilled its obligation to the customer. The company will record revenues from gift card purchases when funds from the gift card are redeemed.

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

Signed,