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# A Compilation of Accounting Case Studies

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#### A COMPILATION OF ACCOUNTING CASE STUDIES

by Madelyn Irene Smith

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

Oxford May 2019

Approved by

Advisor: Dr. Victoria Dickinson

Reader: Dean Mark Wilder

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#### ABSTRACT MADELYN IRENE SMITH: A Compilation of Accounting Case Studies (Under the direction of Victoria Dickinson)

The following thesis is a compilation of case studies in various areas of financial accounting that I completed over the course of two semesters under the advisory of Dr. Victoria Dickinson. During the class we reviewed different case studies that focused on various accounting concepts and principles that we were learning about in Intermediate Accounting. After analyzing each case and having discussions about the material in class, we would complete questions that required us to understand conceptually and practically how the information provided to us would affect the company. We dealt with companies that followed U.S. Generally Accepted Accounting Principles, as well as companies that used the International Financial Reporting Standards. We were required to analyze the information that we were provided to answer the questions and then write summaries describing the concepts and ideas that we learned about.

Throughout the course of the year that I completed these case studies, I learned a lot about how to apply concepts learned in class to real-world accounting practices. We covered topics such as accounts receivable, long-term debts, deferred income taxes, and a few others. We also completed a case that involved researching a specific data analytics tool to understand the purpose of the tool and all of its capabilities. This project helped expose us to data analytics, which is likely to be a very prominent component of our future careers.

Working through these cases helped me to learn where to find information in a set of financial statements. Although we did receive some guidance for Dr. Dickinson, we had to do most of the work on our own or in small groups; this required us to be able to

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locate the relevant information that was necessary to complete each of the twelve case studies. I also learned how beneficial reading through the notes to the financial statements can be because a lot of times there was crucial information in there that was required to answer certain questions. These cases improved my overall comprehension of financial statements and why the information in them is so important for the users. My understanding of IFRS was also increased because we did not discuss this topic very much in other classes and these cases were the only time I had ever worked with financial statements that were prepared under this method. The cases often required us to define terms that were different under IFRS than GAAP so that we could gain a better understanding of what we were analyzing. I now have a better understanding of the similarities and differences between these two different methods of reporting financial statements.

In addition to completing these case studies, we were also required to compete in two case competitions. These case competitions were a great learning experience for me because I was able to work with other accounting students on a large case and come up with a presentation for a solution to an accounting problem that was given to us. For one case competition we were given the problem with little time to prepare which allowed us to practice as if in a high-pressure time sensitive situation. We had to utilize time management skills to make sure that we completed the project in time for the presentation. For the other case competition we had more time to prepare and we were allowed to perform research, which taught us how to find relevant information pertaining to different accounting topics. We also were able to enhance our teamwork, presentation, and critical thinking skills for these competitions.

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The knowledge and skills that I acquired during this course will carry through to my professional career in one short year. I have already had experience in analyzing a multitude of different cases, as well as creating solutions and presenting them to my superiors. I also feel that I have a better grasp and understanding of the concepts that I learned in intermediate accounting because while I was learning about it in class, I was also able to see how these concepts would apply in real circumstances.

I also believe that having been exposed to data analytics early on will be beneficial in my career. I was able to learn about a specific data analytics tool in one of my case studies and we also had to include a component of data analytics in one of our case competitions. This exposure to data analytics and hearing from firms about the emphasis that they are placing on it sparked an interest in me that pushed me towards the master's program that includes data analytics. I believe that this knowledge and experience will give me an advantage over some of my peers who will not have this background in such a big part of the future of accounting.

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Glenwood Heating, Inc. and Eads, Inc.

# Home Heaters

Case Problem 1

**Madelyn Smith** 9-6-2017

#### **Introduction**

The Home Heaters case compares two companies who have identical transactions throughout the year, but whose financial statements are not the same. This is because the managers of the two companies used different accounting methods when recording the data. This case is a good example of how small choices, such as which depreciation method to use, can affect a company's financial statements. This in turn can have influence on whether or not an investor will be interested in the company. A company needs to find a good balance between making their company appear profitable to the public and also being cautious about using accounting methods which might increase their income on paper, but be risky or irresponsible.

#### **Analysis**

Glenwood Heating, Inc. and Eads Heaters, Inc. both began operations to sell home heaters at the beginning of the year. The two companies' operations were exactly the same throughout the year, but the managers of each company chose different accounting approaches. They differed in their treatments of uncollectible accounts receivable, recording methods of cost of goods sold, depreciation method of delivery equipment, and terms for leased equipment. Eads typically chose methods that were more conservative and geared at long-term goals, while Glenwood focused on the short-term profits. Based on net income and retained earnings, Glenwood appears to be the better investment. Although Glenwood has a higher income, Eads has more assets and has used less risky accounting methods. Eads has secured leased equipment for eight years and allowed for more bad debts than Glenwood. Glenwood's small allowance for bad debts could have a negative impact on their financial statements in the coming year. Glenwood also used a cost of goods sold method that made their costs lower than the method that Eads chose. All of these small differences lead me to believe that Eads would be a better long-term investment because they are not as focused on short-term profitability.

Glenwood Heating, Inc.	
Statement of Retained Earnings	
For Year Ended December 31, 20X1	
Retained Earnings, January 1	\$0
Add: Net Income	92,742
	92,742
Less: Dividends	23,200
Retained Earnings, December 31	69,542

Eads Heaters, Inc.								
Statement of Retained Earnings								
For the Year Ended December 31, 20X1	For the Year Ended December 31, 20X1							
Retained Earnings, January 1								
Add: Net Income	70,515							
	\$70,515							
Less: Dividends	23,200							
Retained Earnings, January 31	<u>\$47,315</u>							

Glenwood Heating, Inc.										
Income Statement										
For the Year Ended December 3:	1, 2017	¢ 200 500								
Sales Cost of Coods Sold		\$ 398,500 177,000								
Gross Profit		221,500								
Selling and Administrative Services	004									
Bau Debt Expense	994 10.000									
Other Operating Expense	Other Operating Expanses 16,000									
Dent Expense	24,200									
	54,200	70.404								
Iotal Selling and Administrative Expenses		/0,194								
Income from Operations		151,306								
Other Expenses										
Interest Expense		27,650								
Income before Taxes		123,656								
Provision for Income Taxes		30,914								
Net Income		\$ 92,742								
Eads Heaters, Inc.										
Eads Heaters, Inc. Income Statement										
<b>Eads Heaters, Inc</b> Income Statement For the Year Ended December	31, 20X1									
Eads Heaters, Inc. Income Statement For the Year Ended December Sales	31, 20X1	\$ 398,500								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold	31, 20X1	\$ 398,500 <u>188,800</u>								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit	31, 20X1	\$ 398,500 <u>188,800</u> 209,700								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses	31, 20X1	\$ 398,500 <u>188,800</u> 209,700								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense	31, 20X1 4,970	\$ 398,500 <u>188,800</u> 209,700								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense	31, 20X1 4,970 41,500	\$ 398,500 <u>188,800</u> 209,700								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense Other Operating Expenses	31, 20X1 4,970 41,500 34,200	\$ 398,500 <u>188,800</u> 209,700								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense Other Operating Expenses Total Selling and Administrative	31, 20X1 4,970 41,500 34,200 Expenses	\$ 398,500 <u>188,800</u> 209,700 <u>80,670</u>								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense Other Operating Expenses Total Selling and Administrative Income from Operations	31, 20X1 4,970 41,500 34,200 Expenses	\$ 398,500 <u>188,800</u> 209,700 <u>80,670</u> 129,030								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense Other Operating Expenses Total Selling and Administrative Income from Operations Other Expenses	31, 20X1 4,970 41,500 34,200 Expenses	\$ 398,500 <u>188,800</u> 209,700 <u>80,670</u> 129,030								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense Other Operating Expenses Total Selling and Administrative Income from Operations Other Expenses Interest Expense	31, 20X1 4,970 41,500 34,200 Expenses	\$ 398,500 188,800 209,700 80,670 129,030 35,010								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense Other Operating Expenses Total Selling and Administrative Income from Operations Other Expenses Interest Expense Income before Taxes	31, 20X1 4,970 41,500 34,200 Expenses	\$ 398,500 <u>188,800</u> 209,700 <u>80,670</u> 129,030 <u>35,010</u> 94,020								
Eads Heaters, Inc. Income Statement For the Year Ended December Sales Cost of Goods Sold Gross Profit Selling and Administrative Expenses Bad Debt Expense Depreciation Expense Other Operating Expenses Total Selling and Administrative Income from Operations Other Expenses Interest Expense Income before Taxes Provision for Income Taxes	31, 20X1 4,970 41,500 34,200 Expenses	\$ 398,500 188,800 209,700 80,670 129,030 35,010 94,020 23,505								

Glenwood Heating, Inc.										
Balance Sneet										
December 31, 20X1										
Assets	Assets									
Cash		\$ 426								
Accounts Receivable	\$ 99,400	÷								
Less: Allowance for Bad Debts	994	98,406								
Inventory		62,800								
Total Current Assets			\$161,632							
Property, Plant, and Equipment										
Land		70,000								
Building	350,000									
Less: Accumulated Depreciation- Building	10,000	340,000								
Equipment	80,000									
Less: Accumulated Depreciation- Equipment	9,000	71,000								
Total Property, Plant, and Equipment			481,000							
Total Assets			<u>\$642,632</u>							
Liabilities and Stockholders' Equ	<u>ity</u>									
Current Liabilities										
Accounts Payable		\$ 26,440								
Interest Payable		6,650								
Total Current Liabilities			\$ 33,090							
Long Term Debt										
Note Payable			380,000							
Total Liabilities			413,090							
Stockholders' Equity										
Common Stock		160,000								
Retained Earnings	92,742									
Less: Dividends	23,200	69,542								
Total Stockholders' Equity			229,542							
Total Liabilities and Stockholders' Equity			\$642,632							

Eads Heaters, Inc. Classified Balance Sheet										
December 31, 20X1										
Assets										
Current Assets										
Cash		\$ 7,835								
Accounts Receivable	\$ 99,400									
Less: Allowance for Bad Debts	4,970	94,430								
Inventory		51,000								
Total Current Assets			\$	153,265						
Property, Plant, and Equipment										
Land		70,000								
Building	350,000									
Less: Accumulated Depreciation- Building	10,000	340,000								
Equipment	80,000									
Less: Accumulated Depreciation- Equipment	20,000	60,000								
Leased Equipment	92,000									
Less: Accumulated Depreciation- Equipment	11,500	80,500								
Total Property, Plant, and Equipment				550,500						
Total Assets			\$	703,765						
Liabilities and Stockholders' Equity										
Current Liabilities										
Accounts Payable		\$ 26,440								
Lease Payable		83,360								
Interest Payable		6,650								
Total Current Liabilities			\$	116,450						
Long Term Debt										
Note Payable				380,000						
Total Liabilities			\$	496,450						
Stockholders' Equity										
Common Stock		160,000								
Retained Earnings	70,515									
Less: Dividends	23,200	47,315								
Total Stockholders' Equity				207,315						
Total Liabilities and Stockholders' Equity			\$	703,765						

	-		8,				
	Cash	Accounts Receivable	Allowance for Bad Debt	Inventory	Land	Building	Accumulated Depreciation- Building
No. 1	\$ 160,000						
No. 2	400,000						
No. 3	(420,000)				\$ 70,000	\$ 350,000	
No. 4	(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							
Part B							
B1			\$ (994	4)			
B2				(177,000)			
B3							\$ (10,000)
B4	(16,000)						
B5	(30,914)						
Balance	\$ 426	\$ 99,400	\$ (99-	<u>4) \$ 62,800</u>	<u>\$ 70,000</u>	\$ 350,000	\$ (10,000)

### **Glenwood Heating, Inc. – Chart of Accounts**

			U,								
		Accumulated Depreciation-		Accounts	Interest	No	te	Common	Retained		
	Equipment	Equipment		Payable	Payable	Pay	yable	Stock	Earnings	Divi	dends
No. 1								\$160,000			
No. 2						\$	400,000				
No. 3											
No. 4	\$ 80,000										
No. 5				239,800							
No. 6											
No. 7											
No. 8				(213,360)							
No. 9							(20,000)				
No. 10											
No. 11										\$	(23,200)
No. 12					\$ 6,650						
<u>Part B</u>											
B1											
B2											
B3											
		\$	(9,000)								
B4											
B5											
Balance	\$ 80,000	\$	(9,000)	\$ 26,440	\$ 6,650	\$	380,000	\$160,000	<u>\$</u> -	\$	(23,200)

# **Glenwood Heating, Inc. – Chart of Accounts (Continued)**

Γ

								Other		Pro	vision
			Bad	Debt	Depr	eciation	Interest	Operating	Rent	for	Income
	Sales	COGS	Exp	ense	Expe	nse	Expense	Expenses	Expense	Тах	es
No. 1											
No. 2											ł
No. 3											ł
No. 4											ł
No. 5											l
No. 6	\$ 398,500										
No. 7											
No. 8											l
No. 9							\$ (21,000)				
No. 10									\$ (34,200)		
No. 11											
No. 12							(6,650)				
Part B											
B1			\$	(994)							
B2		\$ (177,000)									
B3					\$	(10,000)					
						(9,000)					
B4								\$ (16,000)			
B5										\$	(30,914)
Balance	\$ 398,500	\$ (177,000)	\$	(994)	\$	(19,000)	\$ (27,650)	\$ (16,000)	\$ (34,200)	\$	(30,914)

# **Glenwood Heating, Inc. – Chart of Accounts (Continued)**

		Cash	Acco	ounts eivable	Allo for Deb	wance Bad It	Inventory	Land	Building	Accu Depr Build	mulated eciation- ling	Equ	uipment
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			\$ 3	398,500									
No. 7		299,100	(2	299,100)									
No. 8		(213,360)											
No. 9		(41,000)											
No. 10	)	(34,200)											
No. 11	L	(23,200)											
No. 12	2												
Part B													
B1					\$	4,970							
B2							(188,800)						
B3										\$	(10,000)		
B4		(16.000)											
		(,-••)											
B5		(23,505)											
Balar	nce	\$ 7,835	\$	99,400	\$	4,970	\$ 51,000	\$70,000	\$ 350,000	\$	(10,000)	\$	80,000

# **Eads Heaters, Inc. – Chart of Accounts**

				Accu	umulated						
	Accumulated			Dep	reciation-						
	Depreciation	- Le	eased	Leas	ed	Acc	ounts	Interest	Note	Lease	Common
	Equipment	Ec	quipment	: Equi	ipment	Рау	vable	Payable	Payable	Payable	Stock
No. 1											\$ 160,000
No. 2									\$ 400,000		
No. 3											
No. 4											
No. 5							239,800				
No. 6											
No. 7											
No. 8						(	213,360)				
No. 9									(20,000)		
No. 10											
No. 11											
No. 12								\$ 6,650			
Part B											
B1											
B2											
B3											
	\$ (20,00	0)									
B4		\$	92,000							\$ 92,000	
										(8,640)	
				\$	(11,500)						
B5											
Balance	\$ (20,00	0) \$	92,000	\$	(11,500)	\$	26,440	\$ 6,650	\$ 380,000	\$ 83,360	\$ 160,000

# Eads Heaters, Inc. – Chart of Accounts (Continued)

			/							
										Provision
									Other	for
	Retained				Bad Debt	Dep	preciation	Interest	Operating	Income
	Earnings	Dividends	Sales	COGS	Expense	Ехр	ense	Expense	Expenses	Taxes
No. 1										
No. 2										
No. 3										
No. 4										
No. 5										
No. 6			\$ 398,500							
No. 7										
No. 8										
No. 9								\$ (21,000)		
No. 10									\$(34,200)	
No. 11		\$ (23,200)								
No. 12								(6,650)		
Part B										
B1					\$ 4,970					
B2				(188,800)						
B3						\$	(10,000)			
							(20,000)			
B4										
								(7,360)		
							(11,500)			
B5										\$ (23,505)
Balance	<u>\$ -</u>	<u>\$ (23,200</u> )	\$ 398,500	<u>\$(188,800)</u>	<u>\$ 4,970</u>	\$	(41,500)	<u>\$ (35,010)</u>	<u>\$(34,200</u> )	<u>\$ (23,505</u> )

# Eads Heaters, Inc. – Chart of Accounts (Continued)

Molson Coors Brewing Company

# Profitability and Earnings Persistence

Case Problem 2

Madelyn Smith 9-20-2017

#### **Summary**

Molson Coors Brewing Company produces high-quality beers that are designed to appeal to a wide range of consumer tastes, styles, and price preferences. Molson Coors Brewing Company provides a consolidated statement of operations, a comprehensive income statement, and consolidated balance sheets for their investors. In addition to these financial statements, the company also includes notes to further explain their operations. These notes are essential to fully understanding their financial statements because they explain the special items that appear on the statements, and also that the company does import some of their beverages from non-owned partner brands.

The Generally Accepted Accounting Principles require Molson Coors Brewing Company to issue a classified income statement because it is a very useful tool for investors when trying to decide whether or not a company is worth investing in. The classified income statement makes the more complex statements easier for users to read and includes more information than an unclassified income statement. This case highlights the importance of understanding the different income statement items and how they affect the reported firm performance. It is important to understand how certain items are different and why they are reported separately on the financial statements. It is also necessary to include notes to explain anything of importance that is not obvious from the statements.

#### A) What are the major classifications on an income statement?

- 1. Operating Section
  - a. Sales or Revenue
  - b. Cost of Goods Sold
  - c. Selling Expenses
  - d. Administrative or General Expenses
- 2. Nonoperating Section
  - a. Other Revenues and Gains
  - b. Other Expenses and Losses
- 3. Income Tax
- 4. Discontinued Operations
- 5. Noncontrolling Interest
- 6. Earnings per Share

#### B) Explain why, under U.S. GAAP, companies are required to provide

#### "classified" income statements.

Companies are required to provide classified income statements in order to

disclose essential information about the origins of revenues and expenses to

investors.

# C) In general, why might financial statement users be interested in a measure of

#### persistent income?

A persistent income can help financial statement users predict probable future incomes for a company.

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

Change in equity of an entity during a period from transactions and other events and circumstances from nonowner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.

Comprehensive income is a more expansive view of income because it includes the income and expenses that usually bypass the income statement because they have not yet been realized.

- E) The income statement reports "Sales" and "Net sales." What is the difference? Why does Molson Coors report these two items separately? Sales consists of the revenue from the sale of goods in the company. Net sales is the revenue less the excise taxes that were included in the price of goods. The excise taxes are taxes charged on the company, so the company includes the tax in the price of the product so that the consumer pays for it.
- F) Consider the income statement item "Special items, net" and information in Notes 1 and 8.
  - 1. In general, what types of items does Molson Coors include in this line item?

Special items are usually:

- Infrequent or unusual items
- Impairment or asset abandonment-related losses
- Restructuring charges and other atypical employee-related costs
- Fees on termination of significant operating agreements and gains (losses) on disposal of investments

2. 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.

The special items are charges incurred or benefits realized that the company does not believe to be indicative of their core operations. The company classifies these items as operating expenses because they are not necessarily non-recurring. I agree with this classification if the items truly are recurring.

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 nonoperating expense, and "Special items, net" which Molson Coors classifies as operating expenses?
"Other income (expense), net" consists of gains and losses that are one-time events for the company, but "Special items, net" items are not necessarily non-recurring.

#### H) Refer to the statement of comprehensive income.

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

The comprehensive income is \$760.20 for 2013. This is higher than the net income of \$572.50.

# 2. 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 for 2013 includes foreign currency translation adjustments, unrealized gain of on derivative instruments, reclassification of derivative loss to income, pension and other postretirement benefit adjustments, amortization of net prior service cost and net actuarial loss to income, pension and other postretirement benefit adjustments, amortization of net prior service cost and net actuarial loss to income, and ownership share of unconsolidated subsidiaries' other comprehensive income.

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

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

Molson Coors' effective tax rate is 12.8 percent. This number was calculated by dividing the income tax expense of 84 by the pretax income of 654.5.

2. Determine a tax rate that you expect to persist for the company.

Assume that Molson Coors' domestic operations will continue to be taxed at the combined statutory rate that prevailed in 2013.

The persistent tax rate will be closer to 9.8 percent. This is found by taking the special items out of income from operations in 2013. The special items in 2013 were a lot higher than in previous years, so they should not be included in the persistent income. Pearson PLC

# Accounts Receivable

Case Problem 3

Madelyn Smith 10-4-2017

#### **Summary**

Pearson PLC is an international company headquartered in London, England. The company has multiple divisions, such as education, business information, and consumer publishing. Pearson operates under the International Financial Reporting Standards (IFRS); therefore, some of the terminology is different than what is used under the Generally Accepted Accounting Principles (GAAP) in the United States. In order to complete this case, it was necessary to understand the different terminology for accounts receivable. All of Pearson's sales were made on credit, so the company had to allow for possible returns and allowances and also for bad debts. It is important for a company to allow for these things because they do not want to overstate their revenue and have to later go back and make an announcement that they actually did not make as money as they had originally reported. When estimating the allowance for doubtful accounts, a manager is better off overestimating the amount of bad debts because it would be better to say that the company actually made more money than originally thought rather than saying they made less. It is also important to estimate how many sales returns and allowances there will be because that will also affect the amount of revenue. Pearson's actual returns were higher than the amount allowed for this year, but the company already had a balance in their sales returns and allowances from the previous years that was able to cover for the extra returns this year

The company does business in more than 60 countries, so it is important to notice how the different exchange rates can have an effect on the allowance for bad and doubtful accounts. Another important item to make note of is that the company inherited some bad debt from the company they acquired. This bad debt is now a part of Pearson and must be included in the allowance for bad and doubtful accounts. A) What is an account receivable? What other names does this asset go by? Accounts receivable are oral promises of the purchaser to pay for goods and services sold. Account receivables can also be called trade receivables.

#### **B)** How do accounts receivable differ from notes receivable?

A note receivable is a written promise to pay a certain sum on a future date, but an account receivable is an oral promise for a short-term extension of credit. Also, notes receivable are interest bearing, whereas accounts receivable are 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 reduces either an asset, liability, or owners' equity account. Pearson's two contra accounts are: provision for bad and doubtful debts and provision for sales returns. The provision for bad and doubtful debts account allows the company to estimate the amount of their accounts receivable that they will not receive. The provision for sales returns allows the company to estimate the amount of their products that will be returned and therefore should not be included in their accounts receivable. Managers might consider the company's past percentages of accounts receivable that they were unable to collect and the past percentage of items returned when deciding how much to allow for in the provision for doubtful accounts and the provision for sales returns. 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?

The percentage-of-sales procedure provides a reasonably accurate estimate of the receivables realizable value by using one composite rate that reflects an estimate of the uncollectible receivables. The aging-of-accounts procedure applies a different percentage based on past experiences to the various age categories. The aging-of-accounts is more accurate because it identifies which accounts require special attention by indicating the extent to which certain accounts are passed due. Also, the percentage-of-sales procedure does not provide a representationally faithful estimate of net realizable value.

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

Pearson extends credit to customers who may not be able to pay because that is a necessary risk in doing business. If a business uses a credit basis, it is inevitable that some people will not pay off their debts, but if the company is too wary and denies customers it will be difficult for them to run a business. Managers have the difficult task of judging how much of their accounts receivable will be uncollectible. It is better for a manager to overestimate their allowance for doubtful accounts than to underestimate it.

- F) Note 22 reports the balance in Pearson's provision for bad and doubtful debts (for trade receivables) and reports the account activity ("movements") during the year ended December 31, 2009. Note that Pearson refers to the trade receivables contra account as a "provision." Under U.S. GAAP, the receivables contra account is typically referred to as an "allowance" while the term provision is used to describe the current-period income statement charge for uncollectible accounts (also known as bad debt expense).
  - I. Use the information in Note 22 to complete a T-account that shows the activity in the provision for bad and doubtful debts account during the year. Explain, in your own words, the line items that reconcile the change in account during 2009.

Provision (Allowance) for Bad and Doubtful Accounts					
Exchange differences	5	72	Beginning Balance		
Utilised	20	26	Income Statement Movements		
		3	Acquisition Through Business		
		76	End Balance		

Exchange differences represent the differences in the exchange rate that resulted from selling in foreign countries.

The income statement movements are the new estimated bad and doubtful accounts for the year.

Utilised refers to the actual amount of accounts receivable that was written off this year.

The acquisition through business comes from the amount of bad debts that Pearson took on from the new company they acquired.

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

Bad and Doubtful Debts Expense (Income Statement)26Allowance for Doubtful Accounts (Balance Sheet)26Allowance for Doubtful Accounts (Balance Sheet)20Accounts Receivable (Balance Sheet)20

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

The provision for bad and doubtful debts expense is in the operating section of the income statement under revenue because it is a contra revenue account.

- G) Note 22 reports that the balance in Pearson's provision for sales returns was £372 at December 31, 2008 and £354 at December 31, 2009. Under U.S. GAAP, this contra account is typically referred to as an "allowance" and reflects the company's anticipated sales returns.
  - I. Complete a T-account that shows the activity in the provision for sales returns account during the year. Assume that Pearson estimated that returns relating to 2009 Sales to be £425 million. In reconciling the change in the account, two types of journal entries are required, one to record the estimated sales returns for the period and one to record the amount of actual book returns.

Allowalice for					
		3/2	Beginning		
Actual Returns	443	425	Estimated Returns		
		354	Ending		

Allowance for Colos Doturns and Allowances

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

Sales Returns and Allowances (Income Statement)	425	
Provision for Sales Returns (Balance Sheet)		425
Provision for Sales Returns (Balance Sheet)	443	
Accounts Receivable (Balance Sheet)		443

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

Estimated sales returns appears under the revenue section of the income statement as it is a contra revenue account.

H) Create a T-account for total or gross trade receivables (that is, trade receivables before deducting the provision for bad and doubtful debts and the provision for sales returns). Analyze the change in this T-account between December 31, 2008 and 2009. (Hint: your solution to parts f and g will be useful here). Assume that all sales in 2009 were on account. That is, they are all "credit sales." You may also assume that there were no changes to the account due to business combinations or foreign exchange rate changes. Prepare the journal entries to record the sales on account and accounts receivable collection activity in this account during the year.

Gross Trade Receivables						
Beginning	1,474					
Gross Credit Sales	5,624	20	Receivables Written Off			
		443	Returns			
		5,216	<b>Receivables</b> Collected			
Ending	1,419					
Trade Receivables	5,62	4	5 624			
Cash 5,216		6	5,024			
Trade Receivab	le		5,216			
Problem 6-2

# Intermediate Accounting Problem

Case Problem 4

Madelyn Smith 10-11-2017

#### **Summary**

In preparation for an upcoming intermediate exam, we were asked to choose a problem from the intermediate textbook that we found difficult. This is problem 6-2 from chapter six from the Intermediate Accounting textbook. This annuity problem has been solved and explained for someone with only a basic understanding of accounting.

Using the appropriate interest table, provide the solution to each of the following four questions by computing the unknowns.

A) What is the amount of the payments that Ned Winslow must make at the end of each of 8 years to accumulate a fund of \$90,000 by the end of the eighth year, if the fund earns 8% interest, compounded annually?

FV=Rent (FVF- OA n=8, i=8%) 90,000=Rent (10.63663) Rent= \$8,461

The formula used to solve this problem is the formula for a future value of an ordinary annuity. A future value formula is used because Ned wishes to have \$90,000 in eight years and he needs to know how many payments he must make each year to achieve that goal. The future value is an ordinary annuity because Ned will make each payment at the end each year and he will not earn interest on the last payment. In order to determine what the future value factor (FVF) is you must look at the table for the future value of an ordinary annuity where the number of periods is eight and the interest is eight, this number is 10.63663. To

find the rent, divide the future value of \$90,000 by the future value factor of 10.63663. The rent payed by Ned at the end of each year for eight years is \$8,461

B) Robert Hitchcock is 40 years old today and he wishes to accumulate \$500,000 by his sixty-fifth birthday so he can retire to his summer place on Lake Hopatcong. He wishes to accumulate this amount by making equal deposits on his forfeit through his sixty-fourth birthdays. What annual deposit must Robert make if the fund will earn 8% interest compounded annually?

FV= Rent (FVF- AD n=25, i=8%) 500,000= Rent (78.95442) Rent= \$6,333

A future value formula is also used for this problem, but it is a future value of and annuity due instead of an ordinary annuity because Robert is starting the payments today and the last payment will earn interest. To find the future value factor, look at the chart for a future value of an annuity due where the number of periods is 25 and the interest is 8%. The number is 78.95442. Then you have to divide 500,000 by 78.95442 to find out that the rent is \$6,333. Robert needs to make 25 payments of \$6,333 with an interest rate of 8% in order to have \$500,000 by his 64<sup>th</sup> birthday.

## C) Diane Ross has \$20,000 to invest today at 9% to pay a debt of \$47,347. How many years will it take her to accumulate enough to liquidate the debt?

PV= FV (PVF n=?, i=9%) 20,000= 47,347 (PVF n, i=9%) 0.4224132469= PVF n, i=9% N=10 years

This problem can be solved with either a present value of a lump sum formula or a future value of a lump sum formula. I chose to use the present value. Diane has \$20,000 today so that is her present value. Her future value is \$47,347 because that is the amount she needs in the future to pay her debt. Her interest rate is 9% so we need to solve for the amount of years that it will take her to reach her goal. In order to find the value of the present value factor (PVF), you must divide the present value by the future value, this number is 0.4224132469. According to the chart for the present value of a lump sum, where the interest equals 9% and the PVF is 0.42241, the number of periods is 10. If Diane invest \$20,000 today with a rate of 9%, she will be able to pay off her debt in 10 years. Palfinger AG

## Property, Plant, and Equipment

Case Problem 5

Madelyn Smith 11-8-2017

#### **Summary**

Palfinger AG is an Austrian company that manufactures hydraulic lifting, loading, and handling solutions worldwide. Their financial statements are prepared with the International Financial Reporting Standards (IFRS) and not with the Generally Accepted Accounting Principles that are used in the United States. One way that this difference affects this case is that the IFRS refers to "self-constructed assets" as "prepayments and assets under construction."

For this case it was necessary to be able to read and analyze a company's financial statements and understand what the numbers and accounts represented. For example, it is imperative to know that assets that are not in use are not depreciated and that is why there is no depreciation for the prepayments and assets under construction account. Another important aspect of this case is understanding how the different methods of depreciation will have an impact on the financial statements. If a company chooses a depreciation method does not represent their actual depreciation in the best way, then their financial statements will most likely be inaccurate. Palfinger chooses to use the straight-line depreciation method, which may not be the best option for their company as that method depreciates equipment evenly over a period of time. The problem with this is that if Palfinger uses the equipment a lot more in one period than another, the depreciation expense will be underestimated in one period and then overestimated in a later period. Another problem with depreciating equipment incorrectly is that if it is sold before it is depreciated it might be valued in the books wrong and then the company could end up reporting a gain on the equipment because the depreciation was overestimated or it could report a loss because the depreciation was underestimated.

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These seemingly small decisions can have a large impact on a company's financial statements and it could be presenting false information which is why companies should always consider all possible methods.

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

The company most likely has a lot of land with large buildings and whatever equipment is necessary to construct large machines. They probably have their own cranes for maneuvering the parts and a lot of their own large machines to construct the products.

## B. The 2007 balance sheet shows property, plant, and equipment of €149,990.What does this number represent?

This number represents the company's buildings, investments in third-party buildings, the plant and machinery, fixtures, fittings, and equipment less their depreciated amounts.

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

Equipment includes fixtures, fittings, and equipment.

D. In the notes, Palfinger reports "Prepayments and assets under construction." What does this subaccount represent? Why does this account have no accumulated depreciation? Explain the reclassification of €14,958 in this account during 2007.

This subaccount represents assets that the company is constructing themselves. An asset that is still under construction cannot be depreciated because it is not finished and not in use. An asset can only be depreciated once it is in use. That amount is reclassified because the machine went into use and is now being depreciated.

# 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.

Assets are depreciated as soon as they are put into operation. Depreciation is performed on a straight-line basis over the prospective useful lives of the relevant assets. The anticipated economic or technical useful life is used to determine the expected useful life of property, plant, and equipment. The straight-line depreciation method allocates an equal portion of an asset's cost to depreciation expense each period which is better for buildings and office furniture. The unitsof-production method allocated depreciation on a per-unit basis each period. This method allocates more depreciation in periods of heavier use and less in periods of lower use which would be a more realistic method for this company since it uses a lot of machines. The declining-balance method allocates a greater amount of depreciation expense to the early years of an assets life.

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?

Replacement investments and value-enhancing investments are capitalized and depreciated over either the new or the original useful life. The other approach is the substitution approach. This approach just removes the cost of the old asset and replace it with the cost of the new asset.

- 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 amount spent on the purchase of new property, plant, and equipment for 2007 is  $\notin 61,444$  as seen in the totals section for additions.

 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 amount of government grants for purchases of new property, plant, and equipment was €733. These grants are assistance given to the company from the government for Palfinger's land and buildings and plant and machinery. Grants related to assets require either setting up the grant as deferred income or deducting it from the carrying amount of the asset. Palfinger chose to deduct their grants from the amount of the asset.

#### iii. Depreciation expense for fiscal 2007.

The depreciation expense for 2007 was €12,557 for Palfinger's property, plant and equipment.

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

The net book value of property, plant, and equipment that was disposed is  $\in 1,501$ . The acquisition cost of the property, plant, and equipment was  $\in 13,799$  and the depreciation of that equipment was  $\in 12,298$ .

H. The statement of cash flows (not presented) reports that Palfinger received proceeds on the sale of property, plant, and equipment amounting to €1,655 in fiscal 2007. Calculate the gain or loss that Palfinger incurred on this transaction. Hint: use the net book value you calculated in part G IV, above. Explain what this gain or loss represents in economic terms.

Palfinger incurred a gain of €154. Palfinger received €154 more for the property, plant, and equipment than it was worth.

I. Consider the €10,673 added to "Other plant, fixtures, fittings, and equipment" during fiscal 2007. Assume that these net assets have an expected useful life of five years and a salvage value of €1,273. Prepare a table showing the depreciation expense and net book value of this equipment over its expected life assuming that Palfinger recorded a full year of depreciation in 2007 and the company uses:

i.	
1.	

Straight-line depreciation.

1-Jan-07	€0	€ 10,673
31-Jan-07	1,880	€ 8,793
31-Jan-08	1,880	€ 6,913
31-Jan-09	1,880	€ 5,033
31-Jan-10	1,880	€ 3,153
31-Jan-11	1,880	€ 1,273

	Depreciation Expense	Net Book Value	
1-Jan-07	€0	€ 10,673	
31-Jan-07	4,269.20	6,403.80	
31-Jan-08	2,561.52	3,842.28	
31-Jan-09	1,536.91	2,305.37	
31-Jan-10	922.15	1,383.22	
31-Jan-11	553.29	829.93	

- J. Assume that the equipment from part I. was sold on the first day of fiscal 2008 for proceeds of €7,500. Assume that Palfinger's accounting policy is to take no depreciation in the year of sale.
  - i. Calculate any gain or loss on this transaction assuming that the company used straight- line depreciation. What is the total income statement impact of the equipment for the two years that Palfinger owned it? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment.

The equipment would have been worth  $\in 8,793$  when it was sold, so Palfinger would have a loss of  $\in 1,293$ . The loss will increase the operating expenses because Palfinger books the difference between the carrying amount and the net realizable value through the income statement in either the operating income or operating expenses and a loss would be an expense. The depreciation recorded while Palfinger owned the equipment would be  $\notin 1,880$  and this would need to be taken out of the accumulated depreciation on the income statement. The  $\notin 8,793$  that the equipment was worth would need to be taken out of the actual sale will need to be added to revenue.

ii.

**Double-declining-balance depreciation.** 

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. The equipment would have been worth €6,403.80 when it was sold, so Palfinger would recognize a gain of €1,096.20 on the sale. This gain would increase the operating income. The depreciation of €4,269.20 would still need to be taken out of the accumulated depreciation on the income statement. The €6,403.80 that the equipment was worth will need to be taken out of the accumulated depreciation on the income statement. The €7,500 from the sale will be added to revenue.

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

The combined income statement impact will actually be identical for both depreciation methods. The amount of depreciation is offset by the gain for the double-declining method and by the loss for the straightline method. Volvo Group

## Research and Development Costs

Case Problem 6

Madelyn Smith 11-22-2017

#### **Summary**

This case dealt with Volvo Group a company that supplies commercial vehicles. Volvo follows IFRS Standards and not U.S. GAAP because they are headquartered in Torslanda, Sweden. This case focuses on research and development costs because Volvo invests millions of Swedish Krona in research and development activities in order to achieve new breakthroughs on reducing environmental impact and meeting future emissions and other regulations globally.

In order to complete this case, it is necessary to know what kinds of costs should be classified as research and development expenses. These mostly include the costs for developing new products or systems. Under IFRS, a company has the option to capitalize some of these costs rather than to expense them if certain criteria are met. In the United States, GAAP requires that all research and development costs be expensed, but IFRS allows companies to capitalize the development if the costs that are capitalized have a high degree of certainty that they will result in future financial benefits for the company and they can prove the technical functionality of a new product or software prior to its development being reported as an asset.

Allowing companies to capitalize their development costs provides more accurate financial statements. IFRS does not allow companies to expense research expenses as those costs are too difficult to accurately assess what products benefitted from what research. Development costs are easier to assign and can therefore be reasonably attached to certain products and capitalized instead of expensed. After capitalizing certain costs they can more accurately be assigned throughout the life of the product. The

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company can amortize the costs over the useful life of the newly developed product instead of having to expense them all at once.

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?

The costs for development of new products, production systems, and software are likely included in this amount.

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

The costs that are capitalized must have a high degree of certainty that they will result in future financial benefits for the company. It must be possible to prove the technical functionality of a new product or software prior to its development being reported as an asset. 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?

The company would consider the estimated useful life of the assets in determining the amortization because that is how long the asset will be of use to the company.

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? In my opinion, IFRS provides financial statements that better reflect costs and benefits of periodic R&D spending because it gives the option to capitalize the costs of developing assets that will benefit the company financially. Under U.S. GAAP a company has to expense all of the costs from R&D. Although IFRS does better reflect the costs and benefits of R&D, only 3-5% of projects result in revenue so the company will not be able to report a lot of benefits.

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

The amount of capitalized product and software development costs, net of accumulated amortization at the end of fiscal 2009 is SEK 11,409. It is included in the intangible assets line on the balance sheet.

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

Capitalized Product and Software, net				
Beginning Balance \$12,381				
Amounts Capitalized	2,602	\$	3,126	Amortization
			448	Adjustment
End 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. (11 year summary with 2007)
  - 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 (included in R&D			
expense)	2,357	2,864	3,126
4) Total R&D costs			
incurred during the			
year = 1 + 2 - 3	10,759	13,634	12,669

#### iii. What proportion of Total R&D costs incurred did Volvo

Group capitalize (as product and software development

#### intangible asset) in each of the three years?

In 2007 Volvo Group capitalized 19.12%. In 2008 they capitalized

15.77%. In 2009 it was 20.54%.

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

(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?

The proportion of total research and development costs incurred to net sales from operations for Navistar is 3.17% and the proportion for Volvo is 4.95%. Volvo has a higher proportion of their research and development costs incurred to their net sales from operations.

Domo

# Data Analytics Case

Case Problem 7

**Madelyn Smith** 5-1-2018

#### **Summary**

As technology continues to progress, accountants must evolve with it. Technology is changing the way that companies conduct their business and accountants must adapt and take the time to learn skills in data analytics. Learning these skills can give a current or future CPA a competitive advantage over their peers in the field of accounting. Firms are looking for accountants who are proactive and have the skills to navigate data analytics programs. Being proficient in data analytics can be a key factor in becoming a successful professional. There are many different technological tools and programs that use data analytics and can be used to improve effectiveness and efficiency for accountants and their clients.

Domo is a cloud-based tool that collects real-time data from a variety of different sources and combines all of it into one system that uses widgets to generate charts, files, graphs, and other aesthetically pleasing visuals. The use of real-time data allows accountants to immediately see changes to the data and the financials of their clients. Domo has many interesting features that can be utilized in order to help auditors, tax planners, advisors, and others to do their jobs more quickly and easily. It is a time saving tool that can allow accountants to spend more time focusing on analyzing the data and delivering their derived information and suggestions to their clients in a timely manner.

Domo, like other data analytics tools, can be expensive to implement. The price varies depending on the amount of users and the number of features a company wants to invest in. It is not an extremely difficult tool to learn how to

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use and Domo offers a free one year tutorial for users to learn how to master the program. As long as a company learns how to effectively use the majority of the tool's assets, the tool will be worth the price. A. 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.

Domo is a business-intelligence tool that was created in 2010 by entrepreneur Josh James to help businesses find effective and viable solutions to today's most pervasive business challenges. It is used to make decisions by giving the decision maker a view of real-time data in a single dashboard. Domo uses the cloud for its technology platform. It develops personalized model cases by combining cloud and local data, and it can also combine various data sets with standard SQLs.

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

In order to use this tool, a person must have SQL and data preparation skills, as well as strong written and verbal communication skills. SQL skills can be obtained from online classes. The University of Mississippi offers computer science classes that can also teach students how to navigate SQL. Domo also has a website (www.domo.com/university) that can teach users how to become experts at using the tool through watching webinars and videos. Users can access this website with a free one year trial, but after that there are different monthly fees associated with plans that offer different features.

- C. 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.
  - I. Auditing
    - a. Domo can allow an auditor to quickly discover problem areas in the balance sheet because the tool offers a view of real-time data. This will allow the auditor to alert the company of any material misstatements in a reasonable amount of time so that the company can fix whatever error has occurred.
    - b. Domo allows an auditor to set alerts for sensitive metrics. This allows the auditor to never lose track of the cash flow because they will receive alerts for any outstanding balances or debt payments.
    - c. Domo has an interesting feature where the user can get customized
      PowerPoint presentations by just clicking a button. This button combines
      relevant data and reports from the cloud interface and arranges them into
      pleasing visuals for a PowerPoint presentation. This can be useful to an
      auditor who is giving a presentation to a company or to other partners.
      Auditors can be saved a lot of time by using this feature and it can make
      the information easier to comprehend for the person viewing the
      presentation.

- II. Tax Planning
  - a. Domo can combine data and be used to predict better tax yield and compliance numbers. The program can process the data and information and then combine them in ways that give a variety of options to the user. A tax planner can simply upload data into the cloud and then view the charts and reports that Domo creates in order to see which scenarios would give a company a better tax yield. Domo could show which states or even countries would provide better tax rates.
  - b. There is currently a push for global tax transparency. Companies will soon be required to produce larger volumes of data in new formats. Domo is a great tool to assist with this. Domo can simplify the process of combining the information and provide the necessary templates to produce the information in whatever format is required.
  - c. Most businesses are required to file their taxes online. Domo can be used in conjunction with other applications that run tax functions in order to make the process run more smoothly. A tax planner could help the business decide which programs to use alongside Domo to easily submit tax information.
- III. Financial Statement Analysis/Valuation/Advisory
  - a. Domo contains dashboard widgets that give trend indicators that can be useful in advisory. The tool uses the data from the company and provides the decision maker with data displays that the user can then interpret and use to explain the trends to the company. Domo can combine data from

many different sources and displays information in easy to read visuals. These simple visuals make it easier for companies to see what their advisor is recommending to them and how these recommendations can affect their company.

- b. A possible problem in advisory could be that only a few of the advisors are doing the majority of the work. Domo can redistribute clients and develop a balanced scorecard to make sure that the work of advisors is being distributed evenly. Balanced scorecards help track the execution of the activities necessary to increase performance. It uses targets to keep users on track and make a company more efficient and effective.
- c. Financial statement analyzers can use the real-time data insights to monitor a business' bottom line. This will allow the analyzer to know which projects are working for the business. It will also let the user know when the business should change course.
- D. 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.

Our team should invest in the acquisition and training of Domo because it is a versatile easy to use tool that is able to integrate all of our company's data into one cloud system. This tool can take information from many different sources, such as spreadsheets, databases, and even social media and combine the information into charts and graphs. These charts and graphs can provide both micro- and macro-level visibility and insight into many different aspects of the company.

#### E. Conclusion

Although Domo can be expensive, it will save a lot of time and provide deeper insight than currently possible. The staff will need to be trained in using Domo and its different widgets, but once trained the staff will have access to all types of information and data. The staff will no longer need to spend as much time inputting data into various spreadsheets and applications because it will all be available in one place; they will now be able to spend more time analyzing and reviewing the result of the data, which will be a better use of their time and the client's money. The staff will be able to provide more solutions in a shorter time period for the client as well. Rite Aid Corporation

# Long-Term Debt Case Problem 8

**Madelyn Smith** 2-7-2018

#### **Summary**

Rite Aid is a large retail pharmacy in the United States that uses long-term debt to finance its operations. It is important to understand how to report the different kinds of long-term debt. If a debt is secured, then it should be separated and from the unsecured debt on the balance sheet because in a case where all of the debt cannot be paid off, the secured debt should be paid first to avoid losing the assets that were part of the promised collateral. The guaranteed debt must also be specified on the balance sheet because it is different from other debt in that it is backed by another party who will be in charge of paying off the loan if the original debtor fails to do so.

This case also highlights the differences between the discounts and premiums that can be associated with long-term debt. When a company issues debt at an amount lower than the face value, then the company is selling it at a discount because the market rate of interest is lower than the stated rate on the debt. If the debt issued is an amount that is higher than the face value, then it is being issued at a premium because the market rate of interest is higher than the stated rate on the debt. These discounts and premiums must be amortized over the life of the bond using either the effective interest method or the straight-line method if the difference is immaterial. If the debt is issued at par, then there will not be a discount or a premium to amortize over the life of the debt.

Rite Aid has a lot of long-term debt with different requirements and different interest rates. Some of their debt is classified as "senior" because it take priority over the other debt. Some of their debt was issued at a fixed-rate because its interest rate will remain the same throughout its whole life. The company also has convertible debt that has the ability to be changed to other corporate securities. Various kinds of debt are

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necessary to finance different kinds of projects, and the terms that are agreed upon by the different lenders are likely to contain their own terms and policies.

- 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 debts are backed by collateral. If the company is unable to pay these debts, then their lenders will be able to repossess whatever assets are being used as collateral. The unsecured debt is not backed by any collateral, and the lender would have to pursue other measures to try to get what they are owed. It is important to distinguish these two types of debt because if Rite Aid is unable to pay off all of their debts, it would be wise for them to pay off their secured debts first so that they do not lose any of their assets that have been promised as collateral.
  - ii. What does it mean for debt to be "guaranteed"? According to note 11, who has provided the guarantee for some of Rite Aid's unsecured debt?

If a debt is "guaranteed," then someone else has promised to pay the debt if the company that owes the money cannot fulfill its obligation. Some of Rite Aid's unsecured debt is guaranteed by their subsidiaries.

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

The senior notes take priority over the other unsecured debt because it has greater seniority in the issuer's capital structure. Fixed-rate bonds are long term debt notes that have a predetermined interest rate that does not change. Convertible bonds can be changed into other corporate securities during some specified period of time after issuance. These bonds give the security of a bond holding with the added option of conversion if the value of the stock appreciates significantly.

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

Rite Aid has different types of debt because it is borrowing money at different times, from different lenders, and for different kinds of projects. The terms of the debt will be different with each lender depending on their financial situations and how likely they believe that Rite Aid is to pay off their debt. The interest rates vary because the market rate changes. B. Consider note 11, Indebtedness and Credit Agreement. How much total debt does Rite Aid have at February 27, 2010? How much of this is due within the coming fiscal year? Reconcile the total debt reported in note 11 with what Rite Aid reports on its balance sheet.

As of February 27, 2010, Rite Aid has \$6,370,899 in debt. Rite Aid owes \$51,502 in the coming fiscal year. Along with the current debt, the balance sheet also reports \$6,185,633 in long-term debt and \$133,764 in lease obligations for a total of \$6,370,899 in debt.

- C. Consider the 7.5% senior secured notes due March 2017.
  - i. What is the face value (i.e. the principal) of these notes? How do you know?

The face value is \$500,000 because the note was issued at par since there are not any discounts or premiums attached to it.

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

Cash 500,000 Notes Payable 500,000

These entries increase assets and increases liabilities.
iii. Prepare the annual interest expense journal entry. Note that theinterest paid on a note during the year equals the face value of theotetimes the stated rate (i.e., coupon rate) of the note.

Interest Expense 37,500 Interest Payable 37,500

These entries decrease assets and liabilities.

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

Notes Payable 500,000 Cash 500,000

These entries decrease assets and liabilities.

- D. Consider the 9.375% senior notes due December 2015. Assume that interest is paid annually.
  - What is the face value (or principal) of these notes? What is the carrying value (net book value) of these notes at February 27, 2010?
     Why do the two values differ?

The face value is \$410,000 and the carrying value on February 27, 2010, is \$405,951. The two values are different because the note was issued at a discount.

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

Rite Aid paid \$38,438 in 2009.

- iii. Determine the total amount of interest expense recorded by Rite Aid on these notes for the year ended February 27, 2010. Note that there is a cash and a noncash portion to interest expense on these notes because they were issued at a discount. The noncash portion of interest expense is the amortization of the discount during the year (that is, the amount by which the discount decreased during the year). Rite Aid paid \$39,143 in interest expense in the year ended February 27, 2010.
- iv. Prepare the journal entry to record interest expense on these notes for fiscal 2009. Consider both the cash and discount (noncash) portions of the interest expense from part iii above.

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

These entries decrease assets and decrease liabilities, but they also increase liabilities because Discounts on Notes Payable is a contra liability account.

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

The total rate of interest recorded for fiscal 2009 was 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.

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

Theses entries increase assets and increase liabilities, but the discount on note payable also decrease liabilities.

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

These notes were issues at the effective annual interest rate of 10.1212%.

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

					Straight-
			Bond		Line
	Interest	Interest	Discount	Net Book	Interest
Date	Payment	Expense	Amortization	Value of Debt	Rate
6/30/2009				\$402,620	10.1212%
6/30/2010	\$39,975	\$40,750	\$775	403,395	10.1212%
6/30/2011	39,975	40,828	853	404,248	10.1212%
6/30/2012	39,975	40,915	940	405,188	10.1212%
6/30/2013	39,975	41,010	1,035	406,223	10.1212%
6/30/2014	39,975	41,115	1,140	407,363	10.1212%
6/30/2015	39,975	41,230	1,255	408,618	10.1212%
6/30/2016	39,975	41,357	1,382	410,000	10.1212%

### iv. Based on the above information, prepare the journal entry that Rite

Aid would have recorded February 27, 2010, to accrue interest

### expense on these notes.

Interest Expense	27,167	
Interest Pay	able	517
Discount or	n Note Payable	26,650

The interest expense decreases assets. The interest payable increases

liabilities and the discount on note payable decreases liabilities.

### v. Based on your answer to part iv., what would be the net book value of

### the notes at February 27, 2010?

The net book value of the notes would be \$403,137 at February 27, 2010.

Merck & Co., Inc.

# Shareholder's Equity

Case Problem 9

Madelyn Smith 2-23-2018

#### **Summary**

Merck and Co., Inc. is a worldwide pharmaceutical company that develops new products to improve human health. Merck, like many other companies, issues equity to raise debt. They issue common stock to raise capital and fund their research and development. Merck is authorized to sell a certain amount of shares, but not all of these shares are currently issued. Some of these shares that aren't issued are outstanding shares, but the rest are held in treasury. These are shares that the company bought back from shareholders. Companies buy back their stock for many different reasons. Sometimes they want less people to have ownership in the company, sometimes they want to increase their earnings per share, or sometimes they believe that their stock is being undervalued. It is important to understand how a company accounts for its treasury stock in their financial statements. Merck uses the cost method which records treasury stock at the amount for which it was repurchased, not its par value. A company's stocks can be bought back either on the open market at the market rate or they can make a tender offer. In a tender offer, a company can extend an offer to shareholders that stipulates the amount of shares they wish to repurchase along with the price they are willing to pay. The investors will then tell the company the amount they wish to tender and their preferred prices, and the company will choose which offers to accept.

Merck pays dividends to its stockholders because they want to show that the company is performing well and they also want to attract new investors by proving that they have enough profits to reward their stockholders. A possible shareholder would probably not be interested in investing in a company that never rewarded its

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shareholders by paying dividends to them. Paying dividends is also a good indicator that a company believes that they will continue to do well in the near future because otherwise they would not be giving money away.

### A. Consider Merck's common shares.

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

Merck is authorized to issue 5,400,000 shares.

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

Merck has issued 2,983,508,675 shares as of December 31, 2007.

# iii. Reconcile the number of shares issued at December 31, 2007, to the dollar value of common stock reported on the balance sheet. The common stock reported on the balance sheet is 29.8 million which is equal to the 2,983,508,675 shares times their one cent par value.

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

There are 811,005,791 shares held in treasury stock.

v. How many common shares are outstanding at December 31, 2007?There are 2,172,502,884 common shares outstanding.

### vi. At December 31, 2007, Merck's stock price closed at \$57.61 per share. Calculate the total market capitalization of Merck on that day. The total market capitalization was \$125,157,891,147.24.

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

Companies pay dividends on their common or ordinary shares because investors are more likely to buy stock in a company that pays dividends. Paying dividends can also be a sign that a company is performing well and believes that they will continue to perform well in the future. A company's share price typically decreases because the company is giving out cash and decreasing its overall value.

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

There are many different reasons why a company might want to repurchase its own stock. A company might buy back stock to reduce the amount of people who have ownership in the company. They also might buy it back if they believe that the stock is being undervalued. The corporation can buy back their stock when it has a low price and then resell it once the market is valuing their stock correctly. Another possible reason for repurchasing is to make the company look more attractive to investors by decreasing the amount of shares and therefore increasing the earnings per share. E. Consider Merck's statement of cash flow and statement of retained earnings. Prepare a single journal entry that summarizes Merck's common dividend activity for 2007.

Dividends 3,310,700,000 Cash 3,307,400,000 Dividends Payable 3,400,000

- G. During 2007, Merck repurchased a number of its own common shares on the open market
  - i. Describe the method Merck uses to account for its treasury stock transactions.

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

- Refer to note 11 to Merck's financial statements. How many shares did Merck repurchase on the open market during 2007?
   Merck repurchased 26,500,000 shares on the open market during 2007.
- iii. How much did Merck pay, in total and per share, on average, to buy back its stock during 2007? What type of cash flow does this represent?

Merck paid in total \$1,429,700,000 and \$53.95 per share to buy back its stock. This represents financing cash flows.

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

An asset is something that a company owns and can benefit from in the future. Treasury stock is not an asset because it does not have a future benefit for the company. Treasury is considered a contra equity account because it reduces stockholders equity.

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

(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		2.64%	3.65%
Dividend payout		100.97%	74.94%
Dividends to total assets		6.84%	7.45%
Dividend to operating cash flows		47.25%	49.11%

Merck had a large increase in their dividend payout percentage because they still paid a similar amount of dividends but their net income was lower in 2007 than in 2006. They had a slight decrease in dividend yield because the stock price increased so they weren't able to pay as much per share. Their dividends to total assets decreased because they increased their total assets and decreased their dividends paid. Their dividend to

operating cash flows also decreased because their dividends paid decreased and their operating cash flows increased.

State Street Corporation

# Marketable Securities

Case Problem 10

Madelyn Smith 5-1-2018

### **Summary**

State Street Corporation is a financial holding company that operates in Investment Servicing and Investment Management. Due to the fact that State Street's main business operations involve investment, they include the acquisition and selling of securities in their operating section of the financial statements. As a part of State Street's business operations, they purchase marketable securities. These securities are typically used by an investor who has idle cash and wishes to purchase either debt or equity in another corporation. Investors can either buy trading, available-for-sale, or held to maturity securities. The security chosen is usually based on management intent and how quickly they would like to receive a return.

Trading securities are bought and sold in a rapid fashion. They are generally sold within three months. Held to maturity securities are debt investments that an investor plans to keep until their maturity date. Available-for-sale securities are the securities that are not classified as either trading or held to maturity.

Investors are able to make money from their securities in a variety of ways. One way is appreciation, which is when an investor buys a security at a low price and then sells it when the price rises. Equity trading and available-for-sale securities can also earn money through the payment of dividends, and debt securities can receive money through interest payments.

When accounting for securities there are different methods to be used. Trading and available-for-sale securities are both adjusted to their fair values, but held to maturity securities are amortized using the cost method. When adjusting trading and available-forsale securities to their fair values, an unrealized holding gain or loss is also recognized. The gains or losses flow through income for trading securities, but available-for-sale securities skip net income and flow straight to equity. These unrealized gains and losses are recognized in accounting, but they are not actually realized until the securities are sold and a profit or loss occurs.

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?

Trading securities can be either debt or equity securities that are bought and held primarily for sale in the near term to generate income on short-term price differences.

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

Cash 1 Dividend/ Interest Revenue 1

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

Fair Value Adjustment-Trading 1 Unrealized Holding Gain-Income 1 B. Consider securities available-for-sale. Note that State Street calls these, "Investment securities available for sale."

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

Securities available-for-sale can be either debt or equity securities that are not classified as held-to-maturity or trading securities. These securities can be sold at any time because they do not have a maturity date.

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

Cash 1 Dividends/ Interest Revenue 1

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

Fair Value Adjustment-Available For Sale 1 Unrealized Holding Gain-Equity

### C. Consider securities held-to-maturity. Note that State Street calls these,

"Investment securities held to maturity."

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

Held-to-maturity securities are debt securities that the company has the positive intent and ability to hold to maturity. Equity securities are never classified this way because stocks are a perpetuity and do not have a maturity date.

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- If the market value of securities held-to-maturity increased by \$1 during the reporting period, what journal entry would the company record? There would be no journal entry because held-to-maturity securities are not adjusted to fair value and unrealized holding gains and losses are not recognized. Instead, these securities are amortized using the cost method throughout their lives.
- 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 is \$637,000,000. The market value is the same because these securities are updated to the fair value on the company's books.

 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. (All journal entries are in millions of dollars)

Fair Value Adjustment-Trading85Unrealized Holding Gain-Income85

- 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 year-end balance for investment securities held to maturity is \$11,379,000,000.

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

The market value is \$11,661,000,000.

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 is the \$11,379,000,000 that is State Street's year-end balance account. The amortized cost represents the acquisition cost adjusted for the amortization of the discount. The amortized cost is higher than the original cost because the balance on the books is increasing, therefore the securities were sold at a discount.

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 market rate is based on the current interest rates and the amortized cost is based on the purchase price adjusted for the amortization. The fair value of the securities is greater than the amortized cost which suggests that interest rates have decreased.

- 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 year-end balance is \$109,682,000,000. This represent the current fair value of the investment securities available for sale.

ii. What is the amount of net unrealized gains or losses on the available-forsale 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 is a \$1,119,000,000 gain. This is calculated by subtracting the unrealized losses of \$882,000,000 from the unrealized gains of \$2,001,000,000.

 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 from sales of available-for-sale securities is \$55,000,000. This is calculated by subtracting the gross realized losses from sales of available-for-sale securities of \$46,000,000 from the gross realized gain of \$101,000,000. This gain would increase income and cash flows for 2012.

G. State Street's statement of cash flow for 2012 (not included) shows the following line items in the "Investing Activities" section relating to available-for-sale securities (in millions):

Proceeds from sales of available-for-sale securities: \$5,399 Purchases of available-for-sale securities: \$60,812

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

Investment in Available-for-sale 60,812 Cash 60,812

ii. Show the journal entry State Street made to record the sale of available-

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

Cash	5,399		
Unrealized Holding Gain	67		
Investment in AFS s	ecurities	5,441	
Realized Gain on AF	FS		55

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

Book value is equal to the cash proceeds minus any realized gain. The original cost would be \$5,344,000,000.

ZAGG Inc.

# Deferred Income Taxes

Case Problem 11

Madelyn Smith 4-11-2018

### **Summary**

ZAGG Inc. designs protective, plastic shield for wristwatches and mobile device accessories. Similar to most other companies, ZAGG has a book income that is different from its taxable income. A company's book income reflects the amount of revenues minus expenses the company has recognized during the current period according to GAAP's regulations. The reason this is different from taxable income is that taxable income has to be prepared according to the restrictions of the Internal Revenue Services (IRS). Differences in timing are the main reason that book income and taxable income vary.

The timing differences in recognition of assets and liabilities result in the recording of deferred tax assets and deferred tax liabilities in order to attain the income expense reported for financial statements. If a company records a deferred tax asset then they will have a future deductible amount for their taxable income, but if a company has a deferred tax liability then they will have a future taxable amount for their income statement. If a company in not certain that it will be able to earn enough profits to benefit from the deferred tax assets, then they will need to create a valuation allowance account for the amount believed to be uncollectable. Timing differences are all temporary differences that will eventually be reversed. There are also permanent differences that lead to variances between the book income and taxable income, but these differences will never be reversed. Permanent differences can result from fines and other things that are considered expenses and subtracted out of book income but are never recognized by the IRS as deductions from taxable income.

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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.

Book income is the amount of income that is reported on the financial statements. A company's book income is their pre-tax financial income that is determined according to GAAP. A company's taxable income is the amount of income that they will actually pay taxes on and it is determined by following the IRS' standards. ZAGG's book income for fiscal 2012 is \$23,898,000 which is labeled as Income before provision before income taxes.

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

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

Permanent tax differences are differences between a company's pre-tax financial income and their income taxes payable to the IRS that will never be recognized in both. An example of this would be if a company subtracted an expense from their pretax financial income to pay a fine for breaking environmental regulations. This expense would never be recognized by the IRS and would never be taken out of the company's taxable income.

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

A temporary tax difference results from a timing difference in recognition between pre-tax financial income and taxes payable. This can occur because the IRS requires revenues to be recognized when they are received, but companies typically wait until they have actually earned the revenue to recognize it under GAAP.

#### iii. Statutory tax rate

The statutory tax rate is the tax rate that is mandated by law to be used to determine income taxes payable.

### iv. Effective tax rate

The effective tax rate is calculated by dividing tax expense by pre-tax income. This rate is not the same as the statutory rate because of the timing differences between temporary differences and because companies also have to use the different statutory rates for the income they receive in other countries.

### 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?

Income tax expense must be calculated using the regulations that GAAP requires. These regulations are different than those that the IRS requires companies use in order to calculate taxable income for the current tax bill. The two different set of regulations causes the income tax expense and the actual income taxes paid to vary. Income tax expense includes both the income taxes payable and also any deferred tax liabilities or deferred tax assets that have been incurred or are being reversed during the period.

The codification ASC 740 states that tax benefits or liabilities should be recognized once a critical event occurs. This requires that deferred tax liabilities are recognized for future taxable amounts and deferred tax assets are recognized for future deductible amounts when computing income tax expense. These liabilities and assets are computed using the marginal tax rate. For income taxes payable these events are recognized whenever the money is either received or paid out. Sometimes a company might receive money for prepaid rent. This money would be added to taxable income but it will not be recognized in the income tax expense until the rent money has been earned.

There are many circumstances that will cause these two reporting methods to differ from each other. One example is that the methods might choose altering ways of calculating depreciation. A company may choose to calculate depreciation one way for financial statement purposes and select an alternate way for income tax purposes. This would cause a temporary difference in the form of either a deferred tax liability or deferred tax asset that would eventually be reversed at a later time and accounted for in both the income tax expense as well as the actual income taxes payable.

Another requirement under GAAP is that if a company is uncertain that it will actually be able to earn enough of a profit to collect all of the benefits from a deferred tax asset, then it needs to create a valuation allowance account to reduce

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the deferred tax asset to the amount that it expects to be able to deduct from its income taxes payable.

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

Deferred income tax assets occur when a company will receive a future tax deduction. These can occur when a company has expenses in their taxable income that have not yet been recognized in their income tax expense. A company will debit deferred tax assets and once they receive the deduction in their taxable income they will credit the deferred tax asset account. A company can also receive deferred tax assets in years when they have a net loss. A company can go back the past two years and receive refunds on taxes paid, but if they are not able to fully offset their loss then the company can carryforward a deferred income tax asset as long as they can prove with certainty that they will have a net income that will allow them to collect all of the benefits. If they are not certain that they will be able to utilize the full amount of benefits, the company will need to create a valuation allowance account as mentioned in part c.

A deferred tax liability represents an amount that will be taxed in the future because it was recognized in the current period income tax expense, but has not yet been recognized in the taxable income. The original amount of the deferred tax liability will be credited and once it is recognized in the taxable income it will be reversed out and debited. Before the new tax laws, the corporate income tax rate was 35% but it is now 21%. This affected companies in many ways, including with deferred tax assets and deferred tax liabilities. Companies who had deferred tax assets received a charge because their deferred tax assets accounts have an amount that is now being taxed at 21% instead of the higher 21%. Companies with deferred tax liabilities now have less liabilities with the new tax rate, which means they will not be taxed as much as they anticipated 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 used when a company believes that they will not be able to realize the full amount of their deferred tax assets. A company should record a deferred income tax valuation allowance when they are unable to reasonably prove that they will be able to use the deferred tax assets.

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

 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	
DTA, net of DTL		8,293
Income Tax Payable		17,686

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	
DTA, net of VA		8,002
DTL	291	
Income Tax Payable		17,686

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?

ZAGG's effective tax rate is 39.3%. This is calculated by dividing the tax expense of 9,393,000 by the pretax income of 23,898,000. The difference between the statutory rate and the effective tax rate could be because of either temporary or permanent differences that occurred.

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. This can be found on the balance sheet by adding the current deferred tax assets of 6,912,000 ad the noncurrent deferred tax assets of 6,596,000.

Apple Inc.

# Revenue Recognition

Case Problem 12

Madelyn Smith 5-1-2018

### **Summary**

Apple Inc. sells its products throughout the world online, in retail stores, its direct sales force, and through third-parties. Due to the fact that Apple offers a variety of services and goods, they have to be conscientious of when they recognize their revenue. The new revenue recognition standard from ASC 606 lays out how companies should recognize revenue.

Companies must recognize revenue in order to depict the transfer of goods or services to customers that properly reflects the amount that the company expects to be compensated. To recognize revenue a company must: identify the contract with the customer, identify the performance obligations, determine the transaction price, allocate the price to the obligations, and once the performance obligation is satisfied the company can recognize revenue. A company does not have to receive the cash to recognize revenue, they only need to have transferred the goods or services. If a company does receive the cash before they complete the service or transfer the goods, they must credit unearned revenue.

Recognizing revenue can be difficult for services that occur over a period of time or for contracts that contain more than one obligation. For services that occur over a period of time, the revenue should be recognized over that period of time using an appropriate allocation method. For multiple-element contracts, revenue should be applied as accurately as possible to the individual elements within the contract. Managers might choose to recognize revenue in a way that best serves themselves if they receive promotions or bonuses based on how much revenue they bring into the company. They may try to recognize revenue as early as possible in order to increase the company's

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current revenue, even if it is not the most beneficial method to use for the company as a whole.

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

Revenue is the income a company receives from its normal business operations, such as selling goods or services. Gains occur when the company makes a profit from business that is outside of its normal operations. A gain can occur from selling old equipment or unused land.

B. Describe what it means for a business to "recognize" revenues. What specific accounts and financial statements are affected by the process of revenue recognition? Describe the revenue recognition criteria outline in the FASB's Statement of Concepts No. 5. (Use the new revenue recognition standard from ASC 606.)

When a company "recognizes" revenues they are accounting for revenues that have been realized. A company does not need to receive cash to recognize revenues, they can usually be recognized once the goods have been transferred or services have been rendered. According to the new revenue recognition standard from ASC 606, a company should recognize revenue in an amount that reflects the consideration to which they expect to be entitled for the exchange. The balance sheet accounts that are affected are accounts receivable and revenue. Accounts receivable would have a debit and revenue would have a credit. It would also affect the sales on the income statement. 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? (Refer to Apple's most recent 10-k) 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. Their products are considered delivered once they are shipped. Apple's most recent 10-k discloses that the company will adopt the new revenue recognition standards in the first quarter of 2019. They will use the full retrospective transition method and they do not expect any material impacts on the amount and timing of revenue recognized on the financial statements.

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

Multiple-element contracts are arrangements that include more than one product or service. They pose revenue recognition problems because the elements may be delivered at different times and it can be difficult to determine how the revenue should be measured and which elements the revenue should be assigned to.

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

Managers might receive bonuses based on their revenue, they may have certain revenue goals that they are expected to meet, and their bosses may give out promotions based on who is bringing in a lot of revenue for the company. These different incentives can cause managers to choose a revenue recognition process that will benefit them now and not necessarily be the best choice for the company as a whole.

## 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.

If a customer is paying a monthly fee, then revenue should be recognized over time with an appropriate method of allocation according to step five of ASC 606.

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

The revenue from the accessories sold in store should be recognized when they are sold and the online accessories should be recognized when they are shipped to the customer because ASC 606 says that a performance is satisfied when the good is transferred to the customer.

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

If the third-party reseller is acting as the principal, that is they have control of the goods before transferring them to the customer, then revenue is recognized on a gross basis. If the third-party reseller is acting as an agent, arranging but not controlling, then revenue is recognized on a net basis.

### iv. Revenue from gift cards

According to the new standard, revenue should not be recorded at the time a gift card is sold. A liability should be recorded instead. On my honor, I pledge that I have neither given, received, nor witnessed

any unauthorized help on these cases.

Signed,

Madelyn Smith