AN INVESTIGATION OF FINANCIAL ACCOUNTING STATEMENTS AND REPORTING TECHNIQUES

By:

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ABSTRACT

RACHEL ANN MAY: An Investigation of Financial Accounting Statements and Reporting Techniques

(Under the direction of Victoria Dickinson)

The following report includes solutions to a series of financial reporting case studies completed in fulfillment of the requirements of the honors ACCY 420 course at the University of Mississippi from the fall of 2015 through the spring of 2016. Each case examines various accounting topics and principles using a company's financial statements. Each topic was thoroughly researched as assigned. Included in each case is an analysis of each company and its financial stability along with various mathematical calculations to better understand each situation. As the cases progress, the accounting topics become more advanced. Topics range from generic financial accounting to more specialized areas such as pension plans and benefits.

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CASE ONE: FINANCIAL ANALYSIS OF HOME HEATER COMPANIES

Eads Heating, Inc. versus Glenwood Heating Inc.

By: Rachel A. May

9/9/2015

Executive Summary

The following report contains financial information from the two companies Eads Heating, Inc. and Glenwood Heating, Inc. Both companies had identical transactions throughout the year, but preformed very different adjusting entries at the end of the period. After the adjusting entries were performed, one can see that the best company to invest in is Eads Heating. Eads looks to the future and provides room for growth of the company. Investors and creditors should have faith that the future benefits of Eads's adjusting entries will outweigh the current expenses. The detailed transactions and financial statements of the year 20X1 prove that in the end, Eads Heating seems to be a better investment decision instead of Glenwood Heating.

Analysis

Upon analysis of the two companies, Eads Heating, Inc. and Glenwood Heating, Inc., it seems that the best decision for the lender would be to invest in Eads Heating. In order to arrive at this conclusion, the various transactions and adjustment entries from both companies were examined (see **Appendix A Case One and Appendix B Case Two**). From that information, financial statements were assembled. The income statement for Eads Heating, Inc., presented in **Figure 1**, reveals that Eads actually has a lower net income than Glenwood as seen in **Figure 2.**

Figure 1:

Eads Heaters, Inc. Income Statement For the Year Ended December 31, 20X1			
Net Sales			398,500
Cost of Goods Sold			188,800
Gross Profit on Sales			209,700
Selling Expenses			
Other Operating Expenses		34,200	
Administrative Expenses			
Depreciation-Expense	41,500		
Bad Debt Expense	4,970		
Total Administrative Expenses		46,470	
Total Selling and Administrative Expenses			80,670
Income from Operations			129,030
Other Expenses and Losses			
Interest Expense			35,010
Income before Income Taxes			94,020
Income Taxes			23,505
Net Income			70,515

Figure 2:

Glenwood Heating, Inc. Income Statement For the Year Ended December 31, 20X1			
Net Sales			398,500
Cost of Goods Sold			177,000
Gross Profit on Sales			221,500
Selling Expenses			
Other Operating Expenses		34,200	
Administrative Expenses			
Depreciation-Expense	19,000		
Rent Expense	16,000		
Bad Debt Expense	994		
Total Administrative Expenses		35,994	
Total Selling and Administrative Expenses			70,194
Income from Operations			151,306
Other Expenses and Losses			
Interest Expense			27,650
Income before Income Taxes			123,656
Income Taxes			30,914
Net Income			92,742

Upon closer inspection, one can see that the differences in these two companies' net incomes come largely from the differing methods of estimation used to calculate the depreciation and bad debt expenses (**Appendix A Case One and Appendix B Case Two** show the detailed transactions). Glenwood seemed to be more optimistic in hopes that only one percent of accounts receivable will be uncollectible. Eads, however, estimated that

five percent of accounts receivable would become bad debts. As a result, the higher estimation percentage negatively impacted Eads's net income. Eads also depreciated its delivery equipment using the double-declining balance method, thus causing a much higher depreciation expense at the end of the year. Both companies use the same equipment, so while Eads has chosen to depreciate more of the equipment's value earlier, Glenwood will have to depreciate this equipment later. As a result, Glenwood's investors could see a fall in net income in the years to come due to a larger depreciation expense. Eads's depreciation methods will be more beneficial for the company and its investors in the future.

After Net Income was devised, the retained earnings statements for both companies were assembled. Eads Heating, Inc. showed that it also had lower retained earnings for the year 20X1 (see **Figure 3**) than Glenwood Heating, Inc. (see **Figure 4**). However, the dividends to investors were equal. Assuming management has the stockholders' best interests in mind, it can be assumed that in the future when Eads is able to boost its net income, it will also increase its dividends to stockholders.

Figure 3:

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

Figure 4:

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

After the companies developed their statements of retained earnings, they were able to publish their balance sheets. Eads's balance sheet (see **Figure 5** on next page) shows that Eads has a higher value of assets than Glenwood (Glenwood's balance sheet shown in **Figure 6**). However, with this comes a higher level of liabilities. The main difference in the two companies is in the way Eads handled their lease equipment contract. Eads looked to the future and developed a contract for the next eight years while Glenwood only extended the contract through year two. As a result, the lease equipment is considered an asset on Eads's balance sheet, and the contract is considered a liability because Eads has to make payments every year. This also contributes to the increased depreciation expense seen on the income statement because Eads has to depreciate this asset like any other long-term asset.

Figure 5:

Eads Heating, Inc.			
Balance Sheet			
As of December 31, 20X1			
Assets			
Current Assets			
Cash			7,835
Accounts Receivable		99,400	
Less: Allowance for Bad Debt Expense		4,970	94,430
Inventory			51,000
Total Current Assets			153,265
Property, Plant, and Equipment			
Land		70,000	
Building		350,000	
Equipment		80,000	
Lease Equipment		92,000	
Less: Accumulated Depreciation-Building	10,000		
Less: Accumulated Depreciation-Equipment	20,000		
Less: Accumulated Depreciation-Lease Equipment	11,500		
Total Accumulated Depreciation	41,500		
Total Plant, Property, and Equipment			550,500
Total Assets			703,765
Liabilities and Stockholders' Equity			
Current Liabilities			
Accounts Payable			26,440
Interest Payable			6,650
Total Current Liabilities			33,090
Long-term Liabilities			
Notes Payable			380,000
Lease Payable			83,360
Total Liabilities			496,450
Stockholders' Equity			
Common Stock		160,000	
Retained Earnings		$ 47,315	
Total Stockholders' Equity			$207,315
Total Liabilities and Stockholders' Equity			$703,765

Figure 6:

Glenwood Heating, Inc.			
Balance Sheet			
As of December 31, 20X1			
Assets			
Current Assets			
Cash			426
Accounts Receivable		99,400	
Less: Allowance for Bad Debt Expense		994	98,406
Inventory			62,800
Total Current Assets			161,632
Property, Plant, and Equipment			
Land		70,000	
Building		350,000	
Equipment		80,000	
Less: Accumulated Depreciation-Building	10,000		
Less: Accumulated Depreciation-Equipment	9,000		
Total Accumulated Depreciation	19,000		
Total Plant, Property, and Equipment			481,000
Total Assets			642,632
Liabilities and Stockholders' Equity			
Current Liabilities			
Accounts Payable			26,440
Interest Payable			6,650
Total Current Liabilities			33,090
Long-term Liabilities			
Notes Payable			380,000
Total Liabilities			413,090
Stockholders' Equity			
Common Stock		160,000	
Retained Earnings		$ 69,542	
Total Stockholders' Equity			$ 229,542
Total Liabilities and Stockholders' Equity			$ 642,632

Following the creation of the balance sheet, the companies were able to make statements of cash flows. A statement of cash flows shows a summary of the cash inflows and outflows during a period. As seen in **Figure 7**, the operating activities portion of the cash flows statement was better for Eads than the operating activities for Glenwood (**Figure 8**). Both companies showed negative operating cash flows, but Eads's large depreciation expense (among other things) significantly increased this portion of the statement of cash flows thus making the total cash flows of the company higher. This is important because the company's cash flows show potential or current investors how much cash the company actually generated or lost during this period. Glenwood's total is lower than Eads's total meaning that Eads lost less cash throughout the year. The large negative numbers seen on both companies' statements of cash flows could be some cause for concern, but since the companies just began this year, they were required to make multiple large purchases (like those found under investing activities) in order to begin business operations. In the end, Eads's cash flows show again that Eads is the best choice to invest in or loan money to given the choice of the two.

Figure 7:

Eads Heating, Inc.		
Statement of Cash Flows		
For the Year Ended December 31, 20X1		
Cash Flows from Operating Activities		
Net Income		70,515
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities		
Depreciation Expense	41,500	
Increase in Inventory	(51,000)	
Increase in Accounts Receivable	(94,430)	
Increase in Accounts Payable	26,440	
Increase in Interest Payable	6,650	(70,840)
Net cash Provided by Operating Activities		(325)
Cash Flows from Investing Activities		
Purchase of Equipment	(80,000)	
Purchase of Land	(70,000)	
Purchase of Building	(350,000)	
Net Cash used by Investing Activities		(500,000)
Cash Flows from Financing Activities		
Increase in Notes Payable	(380,000)	
Payment of Cash Dividends	(23,200)	
Issuance of Common Stock	160,000	
Net Cash Provided by Financing Activities		(243,200)
Net Increase in Cash		(743,525)

Figure 8:

Glenwood Heating, Inc.		
Statement of Cash Flows		
For the Year Ended December 31, 20X1		
Cash Flows from Operating Activities		
Net Income		92,742
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities		
Depreciation Expense	19,000	
Increase in Inventory	(62,800)	
Increase in Accounts Receivable	(98,406)	
Increase in Accounts Payable	26,440	
Increase in Interest Payable	6,650	(109,116)
Net cash Provided by Operating Activities		(16,374)
Cash Flows from Investing Activities		
Purchase of Equipment	(80,000)	
Purchase of Land	(70,000)	
Purchase of Building	(350,000)	
Net Cash used by Investing Activities		(500,000)
Cash Flows from Financing Activities		
Increase in Notes Payable	(380,000)	
Payment of Cash Dividends	(23,200)	
Issuance of Common Stock	160,000	
Net Cash Provided by Financing Activities		(243,200)
Net Increase in Cash		(759,574)

When all the financial statements were completed, the companies were able to create ratios in order to compare their own company to other similar firms. The full list of ratios and their results can be seen in **Appendix C Case One**. The first category of ratios is liquidity ratios. Liquidity ratios measure the company's ability to pay off debts that mature within the current year. The current ratio reveals the rate at which current assets are rising with respect to current liabilities. Both of these companies have a relatively similar current ratio, but Glenwood appears to be slightly more liquid from this figure. However, upon further investigation, one can find that Eads actually appears to be more liquid overall. Eads has a higher acid-test ratio meaning that it is more liquid than Glenwood if inventory is not taken into account. Inventory is considered the least liquid of all the current assets because it can be difficult to sell if funds are needed quickly. The other current assets can be used almost immediately if needed and are much less likely to result in losses so the acid-test ratio is often seen as a better measure of liquidity. The accounts receivable turnover ratio and the days to collect receivables ratios reveal that the companies are very similar in their ability to collect their receivables. The inventory turnover ratio and days to sell inventory ratio, on the other hand, are much better for Eads than Glenwood. This means that Eads's inventory can be sold easier than Glenwood's inventory. Similarly, the operating cycle is shorter for Eads meaning the average number of days between a customer's purchase and the collection of cash for that sale is shorter than Glenwood. These ratios prove that Eads is the most liquid company between the two. As a result, loaning money to this company (especially in the short term) would be a safer decision because this company shows the ability to pay off its debt easier than Glenwood using just its current assets.

The next type of ratios examined was profitability ratios. Profitability ratios show how profitable the firm is operating and utilizing its assets. These ratios include gross profit margin, profit margin, return on assets, return on owners' equity, and earnings per share. At first glance, these ratios give the impression that Glenwood would make the better investment. As seen in **Appendix C Case One** the ratios for profitability show Glenwood as being more profitable. However, while ratios do help us evaluate financial statements, they can be misleading if one does not look past the actual number. For example, in the analysis of the income statement, the majority of the difference between Glenwood and Eads came from estimation accounts such as depreciation expense and bad debt expense. A company could lowball an estimation in order to increase net income to show larger profitability ratios. Eads depreciated a large amount of its delivery equipment in the first year of business so the company's expenses will be lower in the future than Glenwood's. These calculations show that while ratios can be informative to decision makers, they can also mislead them into believing one company is a better investment than another if the investors/lenders do not investigate the causes of the variances between the numbers.

The last category of financial ratios calculated was the long-term solvency ratios. These ratios show the companies' abilities to cover long term obligations. The debt ratio is slightly higher for Eads meaning that Eads has a higher percentage of assets provided by debt. This also means that they have a higher risk. However, this is because Eads chose to renew its contract for the lease equipment for eight years, thus increasing its liabilities leading to a higher debt ratio. However, this will ensure that they have the lease equipment for the next eight years whereas Glenwood will have to renew their lease again at the end

of their year if they wish to continue to use the equipment. The last ratio examined was the times interest earned ratio. This ratio investigates the company's ability to pay its interest expenses from its earnings. Glenwood has a higher ratio, but this can be explained by the fact that Eads has more interest to pay due to its lease agreement terms. As a result, Eads has more long term debt, but the company is using this debt in order to finance things like equipment that will provide future benefits.

Appendix A Case One: Financial Transactions and Adjustments for Eads

Figure 9:

Financial Transactions and Adjustments for Eads Heating, Inc.							
Transaction Number	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation, Building
1	160,000						
2	400,000						
3	#######				70,000	350,000	
4	(80,000)						
5				239,800			
6		398,500					
7	299,100	(299,100)					
8	#######						
9	(41,000)						
10	(34,200)						
11	(23,200)						
12							
totals:	47,340	99,400	-	239,800	70,000	350,000	-
Adjusting Entry Number							
1			4,970				
2				(188,800)			
3							10,000
4a							
4b							
4c	(16,000)						
5	(23,505)						
adjusted totals:	7,835	99,400	4,970	51,000	70,000	350,000	10,000

Figure 10:

Financial Transactions and Adjustments for Eads Heating, Inc.					
Transaction Number	Equipment	Accumulated Depreciation, Equipment	Leased Equipment	Accumulated Depreciation, leased Equipment	Accounts Payable
1					
2					
3					
4	80,000				
5					239,800
6					
7					
8					(213,360)
9					
10					
11					
12					
totals:	80,000	-	-	-	26,440
Adjusting Entry Number					
1					
2					
3		20,000			
4a			92,000		
4b				11,500	
4c					
5					
adjusted totals:	80,000	20,000	92,000	11,500	26,440

Figure 11:

Financial Transactions and Adjustments for Eads Heating, Inc.								
Transaction Number	Interest Payable	Note Payable	Lease Payable	Common Stock	Retained Earnings	Dividends	Sales	Cost of Goods Sold
1				160,000				
2		400,000						
3								
4								
5								
6							398,500	
7								
8								
9		(20,000)						
10								
11						23,200		
12	6,650							
totals:	6,650	380,000	-	160,000	-	23,200	398,500	-
Adjusting Entry Number								
1								
2								188,800
3								
4a			92,000					
4b								
4c			(8,640)					
5								
adjusted totals:	6,650	380,000	83,360	160,000	47,315	23,200	398,500	188,800

Figure 12:

Financial Transactions and Adjustments for Eads Heating, Inc.						
Transaction Number	Bad Debt Expense	Depreciation Expense	Interest Expense	Other Operating Expense	Rent Expense	Provision for income taxes
1						
2						
3						
4						
5						
6						
7						
8						
9			21,000			
10				34,200		
11						
12			6,650			
totals:	-	-	27,650	34,200	-	-
Adjusting Entry Number						
1	4,970					
2						
3		30,000				
4a						
4b		11,500				
4c			7,360			
5						23,505
adjusted totals:	4,970	41,500	35,010	34,200	-	23,505

Appendix B Case One: Financial Transactions and Adjustments for Glenwood

Figure 13:

Financial Transactions and Adjustments for Glenwood Heating, Inc.							
Transaction Number	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation, Building
1	160,000						
2	400,000						
3	########				70,000	350,000	
4	(80,000)						
5				239,800			
6		398,500					
7	299,100	(299,100)					
8	########						
9	(41,000)						
10	(34,200)						
11	(23,200)						
12							
totals:	47,340	99,400	-	239,800	70,000	350,000	-
Adjusting Entry Number							
1			994				
2				(177,000)			
3							10,000
4a (Jan 5)							
4b (Dec 31)	(16,000)						
5	(30,914)						
adjusted totals:	426	99,400	994	62,800	70,000	350,000	10,000

Figure 14:

Financial Transactions and Adjustments for Glenwood Heating, Inc.						
Transaction Number	Equipment	Accumulated Depreciation, Equipment	Leased Equipment	Accumulated Depreciation, leased Equipment	Accounts Payable	Interest Payable
1						
2						
3						
4	80,000					
5					239,800	
6						
7						
8					(213,360)	
9						
10						
11						
12						6,650
totals:	80,000	-	-	-	26,440	6,650
Adjusting Entry Number						
1						
2						
3		9,000				
4a (Jan 5)			16,000			
4b (Dec 31)			(16,000)			
5						
adjusted totals:	80,000	9,000	-	-	26,440	6,650

Figure 15:

Financial Transactions and Adjustments for Glenwood Heating, Inc.								
Transaction Number	Note Payable	Lease Payable	Common Stock	Retained Earnings	Dividends	Sales	Cost of Goods Sold	Bad Debt Expense
1			160,000					
2	400,000							
3								
4								
5								
6						398,500		
7								
8								
9	(20,000)							
10								
11					23,200			
12								
totals:	380,000	-	160,000	-	23,200	398,500	-	-
Adjusting Entry Number								
1								994
2							177,000	
3								
4a (Jan 5)		16,000						
4b (Dec 31)		(16,000)						
5								
adjusted totals:	380,000	-	160,000	69,542	23,200	398,500	177,000	994

Figure 16:

Financial Transactions and Adjustments for Glenwood Heating, Inc.					
Transaction Number	Depreciation Expense	Interest Expense	Other Operating Expense	Rent Expense	Provision for income taxes
1					
2					
3					
4					
5					
6					
7					
8					
9		21,000			
10			34,200		
11					
12		6,650			
totals:	-	27,650	34,200	-	-
Adjusting Entry Number					
1					
2					
3	19,000				
4a (Jan 5)					
4b (Dec 31)				16,000	
5					30,914
adjusted totals:	19,000	27,650	34,200	16,000	30,914

Appendix C Case One: Financial Ratios

Figure 17:

Financial Ratios for Eads Heating, Inc. and Glenwood Heating Inc.		
	Eads	**Glenwood**
Liquidity Ratios		
Current Ratio	2.46	3,04
Acid-test Ratio	1.64	1.89
Accounts Receivable Turnover	4.22	4.05
Days to Collect Receivables	86.49	90.13
Inventory Turnover	3.70	2.82
Days to Sell Inventory	98.60	129.50
Operating Cycle	189.64	220.55
Profitability Ratio		
Gross Profit Margin	0.53	0.56
Profit Margin	0.18	0.23
Return on Assets (ROA)	0.10	0.14
Return on Owners' Equity (ROE)	0.34	0.40
Earnings Per Share (EPS)	22.04	28.98
Long-Term Solvency Ratios		
Debt Ratio	0.71	0.64
Times Interest Earned	3.69	5.47

CASE TWO: ANALYSIS OF PROFITABILITY AND EARNINGS PERSITENCE

An Examination of Molson Coors Brewing Company's Core Operations

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9/23/2015

Analysis:

Upon examination of Molson Coors Brewing Company's past three years of financial performance, information was gathered in order to forecast income statement information for the year 2014. The projected income statement for 2014 along with footnotes is shown in **Appendix A Case Two.** The figures in this statement were gathered using estimation techniques based off the previous years. The yearly sales have grown pretty steadily over the past three years. As a result, we decided to increase the sales by 7.5 percent for the year 2014. The excise taxes seemed to increase proportionately with sales by about thirty percent each year. As a result, we took the projected sales and multiplied them by thirty percent to arrive at the final excise tax amount. These two calculations allowed us to arrive at the forecasted net sales. Cost of goods sold was found in a similar way. This is because more beer sales call for a greater total cost to make and ship the beer. Over time, the cost of goods sold has been about forty percent of sales. This year we chose to apply a rate of 43 percent of sales to cost of goods sold in order to account for things like inflation and other miscellaneous additional expenses. This allowed us to arrive at the gross profit. From there, other operating expenses were examined. The marketing, general and administrative expenses have also increased over time. We applied a 4 percent growth rate in these expenses for the upcoming year. The special items seen in the income statement were a little harder to predict. Upon examining the special items summary statement, we found that many of the numbers for the upcoming year could not be estimated in advance due to the amount of uncertainty in the future. For example, the footnote one in **Appendix A Case Two** discusses restructuring costs. These are expenses associated with the restructuring programs of the company's many locations. These

programs attempt to reorganize many aspects of the company in order to eventually cut down on costs in the long run. The company provided no information about their intent to preform future restructuring programs. As a result, this item was left out of the calculation for special items because it is completely independent of the past years, and we have found no good way to estimate it for the years to come. The only consistent special item appearing in the special items table seems to be the release of non-income-related tax reserve in Europe. These seemed to be fairly frequent which led to our decision to include these expenses in the overall forecasted income. The amount seems to be increasing over time causing us to value 2014's release at 5.1 million dollars. The next item on the income statement that was calculated was the equity income in MillerCoors. While this revenue is not part of the company's core operations, it is something that has occurred every year. Its consistent growth over the past three years caused us to value the current year's dividend revenue at 550 million dollars. With all of these figures we were able to derive the total operating income. The operating income is the majority of the income that one can expect to be recurring year after year. These are the primary figures a potential investor would look at when making an investing or lending decision because the information here is somewhat similar from year to year. If the company has poor operating income, its core operations are likely not producing enough revenue to offset the costs. This would cause financial statement users to be wary of investing their personal funds in the company because the company cannot support itself.

After the operating income was forecasted for the upcoming year, parts of the non-operating expenses could also be predicted based on assumptions from the past. We assumed that the interest expense for the upcoming year would stay relatively constant. No

information about an increased need for borrowing to finance future operations is give, so we assume they will simply continue making interest payments on the current debt outstanding. Interest revenue, on the other hand, seems to be increasing at a relatively constant rate. We assume next year the revenue from the portion of beer included in this section of the statement will continue to increase as well. The next category of items examined includes items like gains and losses not related to core operations. As a result, we also found this information hard to predict for the upcoming year due to the uncertainty of what is to come for the company. This is also discussed in **Appendix A Case Two** in the footnotes section as well. After these steps were completed, a tax rate could be calculated.

The years 2011, 2012, and 2013 had tax rates of 12.8%, 26.1%, and 12.8% respectively. Many things go into the calculation of a year's tax rate. Examining these factors for the past three years allowed us to forecast a tax rate as well. The factors for the 2014 tax rate calculation can be seen in **Appendix B Case Two.** The statutory Federal income tax rate always begins at thirty-five percent, and from there, estimations again allowed us to get to our projected tax rate of 14.9%. After calculating the forecasted rate, we were able to find the net income from continuing operations. This after tax number serves as our prediction for the 2014 net income. No figures for discontinued operations were included in the statement because we have no reason to believe that any of the current operations will be discontinued at this point in time.

Finally, the company's earnings per shares were able to be calculated. We used the past values of outstanding stock gathered from the income statement to predict the total shares outstanding for the year 2014. We predict that 184 million basic shares will be

outstanding in 2014. This shows a small amount of growth from the previous year's shares outstanding. The earnings per share also appear to increase with this number due to the higher income. Higher earnings per share are valuable to investors because it means investors make more profit on each outstanding share. The predicted income statement in **Appendix A Case Two** shows a lack of earnings per share for discontinued operations. This is again due to the fact that no information has been provided about what operations are likely to be discontinued during the next fiscal year. We also calculated a weighted-average amount of shares diluted. We estimated this number to be about 185 million from past trends. The net income in the end is a result of what we assume to be continuing operations. This net income comes as a result of estimations based on past performances throughout the companies last three years of operation.

The income statement figures we calculated for 2014 includes the information that investors should be most concerned with. The omitted items (such as gains and losses from non-operating activities) are not indicative of the company's true performance. Infrequent events are not something that investors consider heavily because they do not see them happening in the future. This means if overall net income is lower one year because of a large loss from something completely outside of the company's core operations, investors are likely to excuse this. However, if a company's operating income was to fall, investors would be more concerned. Investors want to see that the actual business of the company is providing profit. Profitable companies increase returns to investors. This is because an increase in operating income will cause stock appreciation. Stock appreciation describes the process in which the overall price of stocks will increase. This is beneficial to current owners and potential owners who see a high operating growth probability.

Appendix A Case Two: Projected Income Statement for 2014

Figure 18:

Molson Coors Brewing Company and Subsidiaries Consolidated Statements of Operations (In Millions, Except per Share Data	31-Dec-14
Sales	$ 6,449.57
Excise taxes	$ (1,934.87)
Net sales	$ 4,514.70
Cost of goods sold	$ (2,773.32)
Gross Profit	$ 1,741.38
Marketing, general and administrative expenses	$ (1,241.55)
Special items, net (non income related tax reserve) (1)	$ (5.10)
Equity income in MillerCoors	$ 550.00
Operating income (loss)	$ 1,044.73
Other income (expense), net	
Interest expense	$ (183.80)
Interest income	$ 15.00
Other income (expense), net (2)	$ -
Total other income (expense), net	$ (168.80)
Income (loss) from continuing operations before income taxes	$ 875.93
Income tax benefit (expense)	$ 130.51
net income (loss) from continuing operatioins	$ 745.42
Basic net income (loss) attributable to Molson Coors Brewing Company per share	
From continuing operations	$ 4.05
From discontinued operations (3)	
Basic net income (loss) attributable to Molson Coors Brewing Company per share:	$ 4.05
Diluted net income (loss) attributable to Molson Coors Brewing Company per share	
From continuing operations	$ 4.03
From discontinued operations (3)	
Diluted net income (loss) attributable to Molson Coors Brewing Company per share	$ 4.03
Weighted-average shares-basic	$ 184.00
Weighted-average shares-diluted	$ 185.00
Amounts attributable to Molson Coors Brewing Company	
Net income (loss) from continuing operatioins	$ 745.42
Net Income (loss) from discontinued operations, net of tax (3)	$ -
Net income (loss) attributable to Molson Coors Brewing Company	$ 745.42

Notes:

(1) At this time, we cannot estimate restructuring cost across each country but have decided in the interest of full disclosure to make note of but to not add an estimate

to our income statement. We can expect this figure to be within the 5-40 million dollars for 2014

(2) Due to future uncertainty and a lack of information, we have elected to remove this line item although we consider the reoccurrence very probable.

(3) Although discontinued operations appear probable from past income statements, the exact amount is inestimable within a reasonable degree of certainty.

Appendix B Case Two: Projected Tax Rate for 2014

Figure 19:

(values in percent)

	Effective Tax Rate Projection for 2014
	31-Dec-14
Statutory Federal income tax rate	35
State income taxes, net of federal benefits	1.4
Effect of foreign tax rates	-29
Effect of foreign tax law and rate changes	0.5
Effect of unrecognized tax benefits	4
Change in valuation allowance	2
Other, net	1
Effective tax rate	14.9

Appendix C Case Two:

The following are questions we answered regarding the company and its operating activities:

CONCEPTS:

a. What are the major classifications on an income statement?
    - The classifications on an income statement include the operating section, non-operating section, and the income tax expense section. These sections divide the income statement in a way in which it is useful to investors in determining which expenses/revenues come from the company's core operations.

b. Explain why, under US GAAP, companies are required to provide "classified" income statements.
    - Classified income statements provide information to current and potential investors, creditors, and lenders that can aid in the decision making process. They provide a history of the company's performances, a basis for predicting future performance, and help assess the risk or uncertainty of achieving future cash flows. The classified income statement is more investor friendly. It separates different operations into individual parts. Classified income statements allow comparisons to be made between certain departments of different companies.

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

- Persistent income has more predictive value than income that does not continue from year to year. Therefore, potential investors/creditors value this information more because it shows the fundamental quality of relevance.

d. Define comprehensive income and discuss how it differs from net income
    - Comprehensive income is the change of equity of an entity during a period from transactions and other events and circumstances from non-owner 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 broader measure than net income. It includes certain items such an unrealized holding gains/losses on available-for-sale securities, certain pension adjustments, and certain foreign currency translation gains/losses.

PROCESS:

e. The income statement reports "Sales" and "Net Sales". What is the difference? Why does Molson Coors report these two items separately?
    - Sales are an unadjusted representation of the period's core operation sales whereas Net Sales are an adjusted representation of sales less excise taxes.

f. Consider the income statement item "Special items, net" and information in Notes one and eight.
    i. In general, what types of items does Molson Coors include in this line item?

- Infrequent or unusual items, impairment or asset abandonment-related losses, restructuring charges and other atypical employee-related costs, along with fees on termination of significant operating agreements and gains (losses) on disposal of investments.

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

- These items are not only temporary but also a onetime expense or occurrence. The special items for the most part are brought about through one time occurrences that have to do with operating. The exceptions being acts of god such as the floods. However currently the operating expense is the best definition under GAAP, unless and ETIF has been released concerning the event.

g. Consider the income statement item "Other income (expense), net" and the information in Note six. What is the distinction between "Other income (expense), net" which is classified a non-operating expense, and "special items, net" which Molson Coors classified as operating expense?

- The "Other income (expense), net" category includes expenses such as interest expense and interest revenue account. The other income and expense table includes items that are aside from core operations. These items have not

occurred directly from operations in the company, events like currency rates are not related to the operations of Molson Coors.

h. Refer to the statement of comprehensive income.

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

- The company currently has 760.2 dollars in comprehensive income in 2013. The net income in 2013 is 567.3 dollars. There is more comprehensive income than net income because you include peripheral activities in the calculation of comprehensive income.

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

- The difference between net income and comprehensive income lies in the nature of the income represented, the 2013 comprehensive includes income outside the core operations, it includes the currency gains or losses, unrealized gains, pension adjustments, and subsidiaries. So, net income is a better look at the business' state and stability of the core operations and the comprehensive income shows a more realized state of the current year's income for the business as a whole.

ANALYSIS:

i. Identify items on Molson Coors' income statement that you consider non-persistent. For each item indicate whether you do not expect the item itself to recur

or whether the item might recur on future income statements but at potentially very different amounts.

- We expect the majority of items in the operating income portion of the income statement to be persistent. However, we do not consider many of the special items category to be persistent from year to year. As a result, this is why much of this section is not used to predict income for the 2014 year. While there will likely be special items in 2014, we cannot predict what the value would be. We also classify other income (expense) as non-persistent because the gains and losses are not related to the company's core function and are therefore not predictable. Discontinued operations are also hard to forecast because we have no insight into what the company has planned for the future.

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

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

      - 12.8%

   ii. 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

      - 14.9% (calculations explained in **Appendix B Case Two**).

k. Calculate an estimate of persistent income for Molson Coors. To assist you in this, make the following assumptions: Income from discontinued operations is a non-recurring items. "Special items, net" and "Other income (expense), net" are non-recurring items. Taxes on all items will be at the persistent rate you determined in part *j*, above. All other items are considered persistent.

- The persistent income is the net income without the discontinued operations items, the special items, and the other income expense items. This means the persistent income is equal to $746.40 in the year 2013.

l. Examine Molson Coors income statements for 2013 and 2012 and the relevant notes to the financial statements.

i. Identify items that you consider "non-operating" explain each item briefly.

- We consider items below the operating income to be non-operating. For example, interest revenue, is money that is made outside of the regular realm of business. All the non-operating items have this characteristic. They either make the company money or cost it money, but it is not a revenue or expense that comes from making or shipping beer for this company.

ii. Calculate the total after-tax amount of the non-operating items you identified. To simply this calculation, assume that the company's three-year marginal tax rate (federal, state and foreign) of 12% applies to non-operating items in both years. Note: some non-operating items are reported net of tax on the income statement. Use the marginal tax only for the items that are reported "before" tax on the income statement.

- The after tax amount of non-operating items can be found by subtracting the net income from the operating portion of the statement. This should provide you with the difference between the items. This number would give you $238.40 for the year 2013.

iii. Calculate net operating profit after tax for 2013 and 2012. HINT net operating profit after tax is calculated as net income before the effect of the after-tax amount of non-operating items.

- Net operating profit after tax is the operating income multiplied by the tax rate. In 2013 this figure is $702.57. In 2012 this figure is $641.01.

m. Examine Molson Coors balance sheets 2013 and 2012. Footnotes to the financial statements (not included with the case) reveal that the notes receivable (and the current portion thereof) relate to loans made to customers.

i. Identify assets and liabilities that you consider "non-operating"

- Affiliates are a non-operating line item because they do not directly pertain to the core operations of Molson Coors. Goodwill, Properties, other intangibles and the company's investment in Miller Coors are long term assets not directly tied to the operations of the core business. Certain liabilities also pertain more the actual core of the business. Loans to customers for them to finance their purchases through the company are operating liabilities. However, we classify most of the other items as non-operating because the business of making and selling of beer can occur without them.

ii. Calculate net operating assets for 2013 and 2012.

- Net operating Assets for 2013: $1,456.50 - (net operating liabilities for 2013) 1555.2= -$98.70
- Net operating assets for 2012: $1,695 - (net operating liabilities for 2012) 1,353.1 = $341.90

n. Calculate Molson Coors' Return on net operating assets (RNOA) for 2013 and 2012. Compare the two returns. Note: To simplify the analysis, use year-end values for net operating assets rather than averages.

- 2013= -5.7
- 2012= 1.28

o. Compute the operating profit margin and net operating asset turnover components of Molson Coors' RNOA for 2013 and 2012. Use the components to explain the change in RNOA from 2012 to 2013

- 2013 profit margin= 13.43%
- 2012 profit margin= 15.44%
- 2013 operating asset turnover= -60.78
- 2012 operating asset turnover= 16.42

p. Recalculate Molson Coors' return on net operating assets RNOA for 2013, using the persistent income numbers from part *k*, above Compare the RNOA to the one you calculated with the reported income statement numbers in part n above note: your new RNOA calculations will use the same net operating assets as in part *l* above which RNOA calculation is a better predictor of future profitability?

- For 2013 this would give you -7.56. This would be a better indicator because it uses persistent income that is more dependable than the value calculated in part *l*.

CASE THREE: ANALYSIS OF STATEMENT OF CASH FLOWS

Eads Heating, Inc. versus Glenwood Heating Inc.

By: Rachel A. May

10/7/2015

Executive Summary

A statement of cash flows is very important to financial statement users. Cash flows reveal information about cash receipts and cash payments of a company over a particular time period. This statement shows where cash comes from, what it was used on, and the change in the company's overall cash balance. This report discusses how a statement of cash flows can be constructed given various sources of data such as the income statement and balance sheet. Further, this report will apply the results of the cash flow statement in order to show its usefulness to those inside and outside the company. The data in this case comes from Golden Enterprises, Inc. from the years 2012-2013. The company's information should allow one to better understand the complexities of the statement of cash flows.

Analysis:

The statement of cash flows can be constructed by separating cash activities into three types: operating, investing, and financing. The operating portion of the statement is normally calculated first. The cash flows statement shown in **Appendix B Case Three** for the fiscal year ended May 31, 2013 shows Golden Enterprises' cash flows statement calculated with the indirect method. Under this method, the computation of cash from operating activities is found by starting with net income and making adjustments to convert it to cash. The direct method, on the other hand, reconstructs the income statement by putting it on the cash basis which is followed by a reconciliation. Since this statement is computed with the indirect method, we began with net income. We found this on the May 31, 2013 income statement. After this, we began making adjustments to net income. This starts with adding back the depreciation expense for the year because this was taken out of net income even though no cash was exchanged. Next, deferred income taxes were subtracted from net income because it too is a noncash account that should not go into net income on the cash basis. Then, the gain on the sale of equipment was deducted. The amount of the gain came from Golden Enterprises' subsidiary consolidated statements of income. Then, the change in receivables from 2012 to 2013 was calculated. The balance sheet shows a $106,367 decrease in receivables. Decreases in receivables should be added to net income because the accrual basis of accounting recognizes receivables as revenue whereas they are not recognized as revenue until cash is exchanged on the cash basis. The change is inventory was calculated in a similar manor. Inventory decreased by $200,985 in 2013 based on the balance sheet. This decrease should be added back to net income. The change in prepaid expenses showed a decrease by $200,137. This should also be added

back because a decrease in prepaid expenses means more cash and cash equivalents for the business. The change in cash surrender value of life insurance also decreased by $62,906. This means that more cash is on hand as well, meaning it should also be added back. The other assets account increased by $191,298. As a result, it was deducted from net income. Accounts payables decreased by $1,216,399. This was deducted as well because this means that less capital is currently available for the company because it has spent the cash to cover the expenses. Accrued expenses were added back because they increased during this period. The salary continuation plan, on the other hand was deducted because it was decreased. The last account affecting cash flow from operating activities is accrued income taxes. These are found by finding the difference in last year's account balance and this year's account balance. The change of $113,369 should be added to net income. The sum of net income along with the adjustments made to it result in the company's overall cash flow from operating activities.

The next portion of the cash flows statement is the investing activities section. This section is related to capital expenditures. These are often noncurrent assets along with short term investments. This company only had two activities in this section: the purchase of new property, plant, and equipment for $4,149,678 cash and the sale of property and equipment for $74,514. The purchase of new long term assets decreases cash flows and the sale of property and equipment increases cash flows. As a result, investing activities shows a highly negative balance due to the company's large purchases.

The final section of the cash flows statement is financing activities. This includes cash flows related to noncurrent liabilities and equity for the most part. During 2013, Golden Enterprises issued new debt. This creates positive cash flow for the company

because it gives them access to more cash for the current period. The company also paid off some of its old debt. This must be deducted from cash flow because it decreases the amount of cash on hand. Other factors influencing financing activities this period are changes in checks outstanding in excess of bank balances, purchases of treasury shares, and cash dividends paid. This year all of these activities result in a decrease in cash flows. The balance in checks outstanding has decreased from the current year causing a deduction from cash flows. Treasury shares held by the company were decreased by $6,860. This amount should be added to the cash flows statement when a company acquires more treasury stock and decreased when a company reduces its treasury stock. The cash paid for dividends figure was found on the statement of changes in stockholder equity. One can find that their retained earnings decreased by $1,467,879 as a result of cash dividends. This will also decrease cash flow. The sum of these items gives financial statement users the total amount of cash flow from financing opportunities.

After the total operating, investing, and financing cash flow activities have been totaled, they can be combined to calculate the total increase or decrease in cash and cash equivalents for the period. The outcome of Golden Enterprises' cash flows for May 31, 2013 was a decrease of $1,136,705. This number can be added to the year's beginning balance of cash flows in order to reveal the total cash and cash equivalents available for the year. For Golden Enterprises, the total cash flows at the end of the period were $757,111 because it had positive beginning cash flows. This number will be the next period's beginning cash flow balance when the process is started again.

Appendix A Case Three: Questions

Concept Questions:

a. What information does the statement of cash flows provide? How is this different from the information contained in the income statement?
   - The statement of cash flows shows a detailed summary of all the cash inflows and outflows of a period. It also reveals the sources and uses of cash during the period. The cash receipts and payments of an enterprise often reveal more useful information for lenders and creditors than the income statement. This is because it shows the company in more liquid terms. Cash is a company's most liquid asset so it can be useful to investors looking to determine how much the company is actually bringing in or spending in a period.

b. What are two different methods for preparing the statement of cash flows? Which method does Golden Enterprises use? How do you know? Why do you think most companies prepare their statement of cash flows using the indirect method?
   - The two methods are indirect and direct. The indirect method starts with net income and makes adjustments to convert it to a cash basis. The direct method reconstructs the income statement by putting it on a cash basis. This must be followed by a reconciliation of net income to the cash provided by operating activities. This step is already done in the indirect method. As a result, many companies prefer to use this method. Golden Enterprise uses the indirect method for their cash flows statement in this case. We know this because the statement starts with net income and then adds/subtracts the changes in the

operating activity accounts. There is also no reconciliation to follow the original statement like there would be if it was direct.

c. What are the three sections of the statement of cash flows?
   - Operating activities, financing activities, and investing activities

d. How do each of the three sections of the statement of cash flows relate to the balance sheet?
   - The balance sheet is a source that companies use gather information for the preparation of the statement of cash flows. The operating activities section includes changes in things like accounts receivable and accounts payable in order to put net income on a cash basis. The investing activities section includes cash flows related to the noncurrent assets on the balance sheet expect for short-term investments. The financing section includes cash flows related to the noncurrent liabilities on the balance sheet along with short-term notes payable and dividends payable.

e. The balance sheet includes an item called "Cash and cash equivalents." What are "cash equivalents?"
   - Cash equivalents are very short-term, highly liquid investments. They are normally collected within ninety days or less. As a result, they are often included with cash.

f. Net income is determined on an accrual basis. Yet, net income is the first item on the statement of cash flows. Explain this apparent inconsistency.
   - The operating activities portion of the statement converts the net income to a cash basis. When things like accounts receivable and depreciation expenses are

added/subtracted back, it represents the difference between the accrual basis and the cash basis.

Process Questions:

g. (see statement of cash flows in **Appendix B Case Three**)

Analysis Questions:

h. Depreciation and amortization are added back to net income in the operating section of the statement of cash flows. Does the depreciation expense actually generate cash for Golden Enterprises?
   - Depreciation expense does not generate cash. However, it is added back to net income because on an accrual basis it was subtracted in the calculation of net income. However, no cash was exchanged for this expense. This is only the allocation of the cost of the asset over time. As a result, it should be added back when calculating cash flow from operating activities.

i. Use the 2013 statement of cash flows you constructed and the statements of income for 2012 and 2013, to evaluate Golden Enterprises' profitability and ability to generate cash. Comment on the nature of the differences between net income and cash from operations in each year.
   - The major difference in the company's cash and cash equivalents at end of the fiscal years came from the operating portion of the statement. While all the additions/subtractions vary in the exact change from beginning to the end of the year, the major difference comes from the net income. The operating activities section of the cash flows statement makes adjustments to net income to convert

it to a cash basis. As a result, if net income is lower one year than another, it will cause a decrease in the operating portion of the cash flows statement. The difference in net income arose from the fact that in 2013, the company had more expenses to set off revenues.

j. Refer to the company's statements of cash flows for 2012 and 2013. Has Golden Enterprises maintained its productive capacity, expanded it, or decreased it over the last three years? Explain.

- The income statement for the year 2013 reveals that the company did in fact have more sales than the year 2012. This would lead one to think that they have increased productive capacity. However, they have spent even more money trying to produce this amount. As a result, overall productive capacity seems to have decreased. This is shown by the lower net income and cash flows balance in May of 2013 than in 2012. The cash flows statement shows that cash and cash equivalents generated by the company's operations are decreasing. The end of the year balances also show that less cash is on hand in the more recent cash flow statement. If this trend continues, they will eventually be left with negative cash flows.

k. In the Management discussion and analysis section of Golden Enterprises' 2013 Form 10-K, the company indicates that it expects to spend approximately $5,000,000 on property, plant, and equipment in fiscal 2014-a greater than 20% increase in capital expenditures over that in fiscal 2013. Discuss Golden Enterprises' capacity for making these capital expenditures. What are the likely

sources of cash to fund the increased level of investment in property and equipment?

- The company still has $757,111 dollars left in its end of the year cash and cash equivalents account at the end of 2013. This cash is available for use the next year. If management predicts that all other portions of the cash flows statement stay relatively the same, then the company would start to experience negative total cash flows if property and equipment was increased by this amount. In order to fund this, the company could issue more debt or common stock in order to increase the cash flows under the operating portion of the statement of cash flows. This increase would offset the decrease in cash from the investing section of the statement of cash flows.

Appendix B Case Three: The Statement of Cash Flows

Figure 20:

Golden Enterprises, Inc. and Subsidiary Consolidated Statements of Cash Flows		
For the Fiscal Years Ended May 31, 2013		
Cash flows from operating activities		
Net income		$ 1,134,037
Adjustments to net income to net cash by operating activities		
Depreciation Expense	$ 3,538,740	
Deferred income taxes	$ (185,939)	
Gain on sale of property and equipment	$ (61,040)	
Change in receivables-net	$ 106,367	
Change in inventory	$ 200,985	
Change in prepaid expenses	$ 200,137	
Change in cash surrender value of insurance	$ 62,906	
Change in other assets-other	$ (191,298)	
Change in accounts payable	$ (1,216,399)	
Change in accrued expenses	$ 954,938	
Change in salary continuation plan	$ (49,774)	
Change in accrued income taxes	$ 113,369	
Net cash provided by operating activities		$ 4,607,029
Cash flows from investing activities		
Purchase of property, plant and equipment	$ (4,149,678)	
Proceeds from sale of property	$ 74,514	
Net cash provided by investing activities		$(4,075,164)
Cash flows from financing activities		
Debt proceeds	$ 38,361,200	
Debt repayments	$ (38,287,529)	
Change in checks outstanding in excess of bank balances	$ (267,502)	
Purchases of treasury shares	$ (6,860)	
Cash dividends paid	$ (1,467,879)	
Net cash provided by financing activities		$(1,668,570)
Net decrease in cash and cash equivalents		$(1,136,705)
Cash and cash equivalents at beginning of year		$ 1,893,816
Cash and cash equivalents at end of year		$ 757,111

CASE FOUR: AN EXAMINATION OF ACCOUNTS RECEIVABLE

An Analysis of Pearson Plc.

By: Rachel A. May

10/28/2015

Analysis

After evaluating Pearson's financial statements and notes, we were able to find a considerable amount of information on the company's accounts receivable. **Appendix A Case Four** discusses some of the common questions about accounts receivable concepts. **Appendix B Case Four** reveals some of the company's transactions that enabled them to arrive at the net accounts receivable for balance sheet purposes. The first transaction examined was the change in the provision for bad and doubtful debt accounts in Section F of **Appendix B Case Four**. This T-chart follows the provision from the beginning of the year balance, through write offs and other gains/losses, to the end of the year balance for the year 2009. The journal entries to arrive at the ending balance are also given in **Appendix B Case Four**. The provision for bad and doubtful accounts is a contra-asset. This means that it offsets the accounts receivable asset to allow for an estimate of receivables that will not be collected. Next, we examined the company's provision for sales returns in Section G. This account will also offset accounts receivable because the company cannot expect to collect from customers that are returning their purchases. Section H in **Appendix B Case Four** follows the gross trade receivables account. This account is increased when sales are made. This is because new sales establish new accounts receivable when they are bought on credit. The account is decreased when cash is collected, when write offs occur, and when sales are returned. The cash collections mean that the customers have paid so their accounts receivable balance is decreased. Write offs occur when the company no longer expects to collect these receivables due to bad debts. Sales returns, as previously mentioned, decrease the sales account and therefore, the need

to collect those sales. Section I goes about estimating bad debts in a new way. It takes into account the length of time the receivables have been outstanding. Older receivables are much less likely to be collected. As a result, the past due accounts should have a higher estimated percentage of receivables to be uncollectible. Next, Section J shows the calculation of accounts receivable turnover ratio and the average collection period. As shown in the appendix, the accounts receivable turnover ratio increased slightly in 2009 and the average collection period decreased. These ratios measure the ability of the company to collect on its receivables. The company seems to be collecting receivables faster in 2009 than in 2008. This is likely a good thing for the company because it means they are receiving cash faster. Section K in **Appendix B Case Four** gives ways for the company to reduce its average collection period. The main ways to do this are to establish a stricter credit policy and a discount that incentivizes customers to pay early. Pearson's financial statements reveal many things about the company and its ability to make sales that will later turn into cash to be collected by the company.

Appendix A Case Four:

a. What is an account receivable? What other name does this asset go by?
An account receivable is money owed by customers to another entity in exchange for goods or services that have been delivered or used, but not yet paid for. Accounts receivable may also go by the name of receivables or oral promises.

b. How do accounts receivable differ from notes receivable?
Notes receivable are written promises to pay a certain sum of money on a specified future date. Accounts receivable are oral promises of the purchaser to pay for goods and services. Notes have a contract while accounts receivable do not.

c. What is a contra account? What two contra accounts are associated with Pearson's trade receivables (see Note 22)? What types of activities are captured in each of these contra accounts? Describe factors that managers might consider when deciding how to estimate the balances in each of these contra accounts.
A contra account is an account that has a normal balance that is the opposite of the normal balance for its related account. It is used to reduce the value of the related account. Pearson uses two contra asset accounts to reduce trade receivables, including provisions for bad and doubtful debts and anticipated future sales returns. The provision for bad and doubtful debts account is an allocation for receivables that are not expected to be collected. In addition, some of the goods Pearson sells will be returned, and the customer will not be charged for the sale. Managers should consider the length of time the receivables have been outstanding when estimating them, and the trustworthiness of their customers who buy on account. Managers should look at past trends in order to determine the right estimation techniques for future accounts receivable contra accounts.

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 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?
In the percentage-of-sales approach, the company has a percent that they have calculated based on past experience that they multiply by net sales in order to get the year's bad debt expense. This amount can then be combined with the beginning balance of allowance for doubtful accounts to come up with the cumulative allowance for doubtful account balance. The aging-of-accounts procedure can use an aging schedule to apply a different percentage based on past experience to the various age categories. In this method, the percentage is multiplied by accounts receivable instead of sales. This helps to identify which accounts require special attention by indicating the extent to which certain accounts are past due. Managers must have the net sales amounts which are calculated by subtracting sales discounts and sales returns and allowances from sales for the percentage-of-sales approach. Under each method, the company must have some knowledge of the past

uncollectible receivables as well in order to formulate a percent that can be used to get the total. For the aging of accounts method, the company must also have information about when the balance were/are due so the correct percentages can be applied. The aging of accounts method is likely more precise because it takes into account the length of time the credit has been past due instead of applying the same percentage to all sales.

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.

A company expects that some customers will be unable to pay the funds that it owes. Although Pearson is aware of the likelihood of this happening, it still extends credit to the risky customer because it wants its sales to increase. Regardless of whether a customer pays its credit balance or defaults on its credit, Pearson's gross sales will not change. In addition, the company does not know which of its customers will be unable to pay debts. Every time a company lends to a customer, it runs some risk of the customer not paying off the credit. An individual may never respond to the request for funds, or a company may go bankrupt before it is able to pay.

Appendix B Case Four:

f. Provision for bad and doubtful debts

i. **Figure 21:**

Provision for bad and doubtful debts			
		£	72,000,000
£	5,000,000		
		£	26,000,000
£	20,000,000		
		£	3,000,000
		£	76,000,000

There were multiple accounts that changed the balance in the provision for bad and doubtful debts account from the beginning of the year to the end of the year. The first of these accounts was the exchange differences account. This account represents a gain or loss from the year's bad debt. For 2009 the 5,000,000 euros in this account represents 5,000,000 euros the company got that they did not expect to get from bad debt. The income statement movement account captures the bad and doubtful debts expense for 2009. The utilized account includes the write offs of the year. The 20,000,000 euros in this account reduces the provision for doubtful accounts because now these bad debts have actually been written off and are no longer expected to be paid off. The last change in the provision for bad doubtful debts comes from the acquisition through business combination account. This account represents a change in bad debts brought about through mergers with other businesses. This year it increased the provision for bad and doubtful debts by 3,000,000 euros.

ii. **Figure 22:**

Bad debt expense		£ 26,000,000.00	
Provision for bad and doubtful debts			£ 26,000,000.00
Bad debt expense is an income statement account.			
Provision for bad and doubtful debts is a balance sheet account.			
Provision for bad and doubtful debts		£ 20,000,000	
Accounts receivable			£ 20,000,000
Both of these accounts are balance sheet accounts.			

iii. Provision for bad and doubtful debt expense is included in the operating portion of the income statement.

g. **Figure 23:**

Provision for sales returns		
	€ 372,000,000.00	beg bal
	€ 425,000,000.00	estimate
€ 443,000,000.00		
	€ 354,000,000.00	end bal

Figure 24:

	Estimate:				
Sales returns and allowances		€ 425,000,000.00	income statement		
	Provision for sales returns	€ 425,000,000.00	contra receivable- balance sheet		

Figure 25:

	Return:	
Provision for sales returns		€ 443,000,000.00
	Accounts receivable	€ 443,000,000.00

The estimated sales returns appear on the income statement as a contra revenue account. Sales returns are found right below sales on the income statement. Typically, sales are presented net of sales returns and sales discounts prior to subtracting the cost of goods sold.

h. **Figure 26:**

Gross trade Receivables	
£ 1,474,000,000	
£ 6,049,000,000	
	£8,479,000,000
	£ 20,000,000
	£ 443,000,000
£ 1,419,000,000	

Figure 27:

Accounts receivable			£ 6,049,000,000	
	Sales			£ 6,049,000,000
Cash			£ 8,479,000,000	
	Accounts receivable			£ 8,479,000,000

i. **Figure 28:**

	Trade Receivables balance (1)	Estimated % uncollectable (2)	Accounts estimated uncollectible (1 x 2)
Within due date	£ 1,096,000,000	2%	£ 21,920,000
Up to three months past due date	£ 228,000,000	4%	£ 9,120,000
Three to six months past due date	£ 51,000,000	25%	£ 12,750,000
Six to nine months past due date	£ 20,000,000	50%	£ 10,000,000
Nine to 12 months past due date	£ 4,000,000	60%	£ 2,400,000
More than 12 months past due date	£ 20,000,000	90%	£ 18,000,000
Total	£ 1,419,000,000		£ 74,190,000

The auditor would be comfortable with the balance of the provision for bad and doubtful accounts. The difference between the provision balance of €76 million is only €1.81 million off from the estimated balance by the aging method, and this difference is immaterial.

j. **Figure 29:**

Ratio Analysis		
	2009	2008
Credit sales, net	£ 5,624,000,000	£ 4,811,000,000
Average gross accounts receivables	£ 1,446,500,000	£ 1,282,500,000
Accounts receivable turnover	3.89	3.75
average collection period	93.88	97.30

The trend over the past two years is that accounts receivable are being collected faster. This could be caused by many things including implementing a stricter credit policy and offering discounts to customers who pay quickly. This will give the company access to cash faster. Another significant reason for the change is that 2009 had a lot more sales than the year 2008.

k. Right now McGraw Hill is collecting almost fifteen days faster than Pearson. Pearson needs to find a way to enforce customer payment. Pearson could send letters and make phone calls informing the customers of their past due balance the second that the accounts are past due. The company should also establish a discount that gives customers an incentive to pay early. If the company does this, they are very likely to see their average collection period ratio drop because customers will feel it is more important for them to pay quickly.

CASE FIVE: AN ANALYSIS OF INVENTORY AND RECEIVABLES

Graphic Apparel Corporation

By: Rachel A. May

11/4/2015

Analysis:

Upon analysis of the local t-shirt company, Graphic Apparel Corporation (GAC), we were able to arrive at an understanding of the way in which the new owner, Nicki, manages the company's accounts. Nicki has experienced several challenging situations since she took over ownership that test the way GAC's books should be kept. Nicki's current methods of measuring receivables, sales returns, and inventory depart from the generally accepted measurement techniques in the accounting world.

Nicki currently accounts for receivables by recognizing revenue as soon the customer orders and pays for the shirts. According to GAAP, revenue must follow the performance obligation. This means that Nicki should not be recognizing revenue until she has fulfilled her part of the agreement to make the shirts. If GAC begins recognizing revenue only after it is earned, it will push back some of the revenue to the following year. However, it will be more useful to the financial statement users. Until she fills the customers' orders, she should account for these cash collections as unearned revenue in the current liability section of the balance sheet.

GAC currently records sales returns in the month in which they will be returned by customers. The company has no way of estimating predicted returns. In 2014, a leak in the warehouse roof damaged about half of 2014 inventory. Nicki tried to salvage these shirts, but she is concerned that they will be returned at the end of the season. Her income statement should reflect probable returns so as not to overstate net income for the year.

The last major discrepancy between GAC's financial reporting and the generally accepted practices is the way in which GAC reports its inventory. GAC has historically been able to report its inventory at cost to the company because it has been lower than the

market value. However, due to the stained shirts GAC now has in its inventory, Nicki must adjust her inventory level to show the shirts' decrease in value. This decrease can be reported as a loss on the income statement. This loss will decrease the company's net income, and the company will also have fewer assets on the balance sheet.

The changes mentioned above will help in the way Nicki handles transactions within the company; however, as a whole, the changes will also cause her current ratio to fall. When Nicki switched to debt financing, the bank began requiring GAC to keep a minimum current ratio of at least one. After Nicki makes the above changes, GAC will have a current ratio under one. In order to meet the bank's requirement, Nicki will need to take several steps in order to raise her current ratio. These adjustments will ensure that Nicki is using proper accounting techniques and allow GAC to grow even larger.

Appendix A Case Five:

1. What are the key changes affecting GAC this year?

   The company was sold from the previous owner to Nicki. After this event, Nicki switched some of the design ideas because she wanted to meet the changing fashion standards. This caused her to lose some of her more reliable customers. She quickly replaced them with other companies, but these companies have a harder time meeting the company's credit requirements. During 2014, there was also a leak in the warehouse roof that damaged a lot of Nicki's inventory. Another significant change was the switch from equity financing to debt financing. The bank now has requirements for the company's current ratio.

   a. Who owns GAC? Nicki bought the company from the previous owner in January of 2014.
   b. Who uses GAC's financial statements? GAC's financial statements were previously just used for tax purposes, but now they are also being used by the bank because the company has shifted from equity financing to debt financing.
   c. What is significant about GAC's business relationship with its new user? The new user (the bank) requires the company to have a current ratio of 1.0. If GAC violates this, they could be required to have an external audit.

2. What are the big events to account for in 2014?
   a. How is the custom shirt business working out? Custom shirts must be paid for in advance and GAC does not allow these sales to be returned. In August of 2014, Nicki secured 10,000 dollars of custom shirt orders.
   b. What do we know about GAC's customer base? GAC once had very reliable, conservative customers, but after the change in design of the company's shirts, this changed. GAC's new customers are harder to collect receivables from than the old reliable customers.
   c. How is the new graphic design working out? The new design lost the company some very loyal customers, but it allowed the company to gain some new edgier customers.
   d. What happened at the warehouse this year? The warehouse had a leak in the roof that damaged about half of the plain shirts that had been purchased for 2014.

3. What is the revenue principle? At what point does GAAP indicate revenue should be recognized?

   The revenue recognition principle states that revenue cannot be reported until the performance obligation has been satisfied. This means that revenue must be earned before the company can recognize it on their financial statements. GAAP indicates revenue should also be recognized after it is earned.

4. When does GAC report its revenue from custom orders? Under what circumstances would this be appropriate?

   With the custom orders, revenue is recognized when a signed order and payment is received from the customer. The exceptions to recognizing revenue after the performance obligation include construction revenue, completion of production on

agriculture products and extractive materials, and when cash is collected on things like sales of assets on installments according to GAAP.

5. What alternative point in time exists for reporting revenue from custom orders?
   When Nicki actually gives the customers their shirts, she should recognize revenue.
6. What method do you think is best for recognizing revenue from custom shirts? What arguments support that method?
   The best method recognizes revenue after the performance obligation has been satisfied because it ensures that the company does not recognize revenue for an order that it cannot fulfill.
7. How would changing to this alternative method affect GAC's financial statements? How would changing to this alternative method affect GAC's current ratio?
   Their revenue would be lower because it would push some of the cash receipts to next year's revenue if the orders have not been fulfilled. The current ratio would be the same because this would require an unearned revenue account as well as more inventory on the books. Unearned revenue is a current liability that would increase the denominator and, therefore, decrease the current ratio. However, since the company would have more inventory on the books, the current assets are greater as well, increasing the numerator. These increases cancel each other out resulting in an equal current ratio.
8. At what value does GAAP require accounts receivable to be reported?
   Accounts receivable must be recognized at net realizable value.
9. What method of accounting for bad debts does GAC use? When is this method okay?
   GAC uses the direct write off method. This method is not to be used under GAAP. GAAP requires bad debt expense to be estimated in the period in which they occur to comply with the expense recognition principle.
10. Has anything changed this year to suggest this approach is no longer acceptable? What do you learn from the number of days to collect receivables in 2014 and 2013?
    When the company replaced its old, reliable companies with newer companies, their ability to collect accounts receivable changed. With the old companies, they did not have a lot of bad debts, but the newer companies struggle to follow through with the credit policies.
    *The following chart shows the calculation of the accounts receivable turnover ratios and the days to collect sales in 2014 versus 2013:

Figure 30:

Year:	Net Sales	Average Accounts Receivable	Accounts Receivable Turnover
2013	170,000	15,500	10.97
2014	179,950	23,750	7.58
	Days in Year	Accounts Receivable Turnover	Days to Collect Sales
2013	365	10.97	33.28
2014	365	7.58	48.17

The company is having a harder time collecting receivables in 2014 than it did in 2013 because the average time to collect sales is much longer.

11. What alternative method could GAC use for bad debts? Does any evidence suggest it is better?
    The company could use the allowance method for bad debts in which bad debts are estimated in the period in which they occur. This is supported by the expense recognition principle.
12. What method of accounting for bad debts do you think GAC should use?
    The allowance method is more accurate because it recognizes bad debt expense in the period in which it occurs. As a result, this method would be more acceptable for GAC to use.
13. How would changing to this alternative method affect GAC's financial statements? How would changing to this method affect GAC's current ratio?
    The assets and equity portion of the balance sheet would decrease due to the decrease in accounts receivable and increase in bad debt expense. Net income would also decrease because of the recognition of bad debt expense. The current ratio would decrease because current assets are decreasing.
14. When does GAC report sales returns? Under what circumstances is that method acceptable?
    GAC reports sales returns in the month in which the goods are returned by retail customers. This is an acceptable method when there is no good way to estimate the returns in the period in which they are sold or when the amount is immaterial.
15. Have circumstances surrounding returns changed in 2014? How?
    Returns are more likely in 2014 because of the water damage. Half of GAC's shirts were stained, and Nicki noticed that these shirts are not selling well in the retail stores. As a result, sales returns are much more likely.
16. What does GAAP recommend under these new circumstances?
    GAAP would recommend an estimation of these returns because it is very probable that they will be returned and measurement is possible.
17. Should GAC consider this alternative? Why? Are sales returns material to the key external user?
    GAC should consider this alternative because the high level of sales they have on their current income statement is not a fair representation of what is actually happening in the company. External users are not aware of the potential returns and will think that the company is more profitable than it is. Sales returns are material to key external users because they take away from a company's revenue.
18. Which method of accounting for sales returns do you think is best?
    The estimation method is the best method because it states sales at their net value. If the company does not expect to get the money from the sales, it should not be put into the calculation of net income. Without an estimation of sales returns, net income would be overstated.

19. How would changing to this alternative method affect GAC's financial statements? How would changing to this alternative method affect GAC's current ratio?
    This change would decrease net income by taking away from the current sales. It would also decrease the company's current assets by taking away some to the accounts receivables from the sales. Since net income is lower, retained earnings would also be lower, reducing equity. The current ratio would decrease because the current assets would decrease with no change to liabilities.
20. Using what measurement does GAAP require inventory to be reported?
    GAAP requires inventory to be measured and recorded at its cost to the company. However, if inventory declines in value from its historical cost, a company should abandon the historical cost principle and report inventory at lower-of-cost-or-market. The cost of the inventory can be computed using techniques such as FIFO, LIFO, and average cost. The market cost is generally the cost to replace the item by purchase or reproduction. Companies generally value their inventory at the lower of these two costs.
21. Using what measurement has GAC been reporting its inventory? When is this appropriate?
    The company has been reporting its inventory at lower-of-cost-or-market. Nicki determines the cost of shirts using the weighted average method. GAC also defines market value as the net realizable value of the shirts and their replacement cost. Recently, the inventory has been valued at cost. This is acceptable, when the market cost is above this value.
22. Has anything changed this year to suggest this approach is no longer acceptable? What do you learn from the number of days to sell inventory in 2014 versus 2013?
    The inventory is now worth a lot less than it was when it was first purchased. Historically, the market price has been greater than the cost. However, because the shirts were damaged, they are not worth the same amount anymore in the market. As a result, their lower-of-cost-or-market value will probably change from using the cost to using the market value.
    *The following chart shows the calculation of days to sell inventory in 2014 versus 2013:

Figure 31:

Year:	Ending Inventory	Cost of Goods Sold	Days in Year	Days to Sell Inventory
2013	9,000	81,000	365	40.56
2014	24,500	93,000	365	96.16

    Inventory is taking a lot longer to sell in 2014 versus 2013. The time it takes to sell inventory has more than doubled what it used to be.
23. Is there any evidence to suggest that GAC will have will have to mark down its selling price below cost? What does the gross profit percentage in 2014 indicate about the margin of difference between selling price and cost?
    *The following chart shows the calculations leading up to the gross profit percentage:

Figure 32:

Year:	Gross Profit	Net Sales	Gross Profit Percentage
2013	89,000	170,000	52.35%
2014	86,950	179,950	48.32%

This chart shows how that the percentage of profit made from each dollar of sales. The decrease in this ratio since last year shows how GAC is making less profit per shirt. However, it does mean that the company can reduce the selling price of each shirt in 2014 by almost fifty percent without incurring a loss. GAC will likely have to mark down its shirts. Because Nicki suspects that there are so many shirts left over at the end of the year, GAC may have to mark down prices in order to avoid a complete loss. This would help the company still get some sales.

24. What do you think GAC should do when reporting its inventory of graphic shirts?
    The impairment of the inventory should be reported through a loss on the income statement. The journal entry could be reported as a debit to the loss on write down of inventory and a credit to the inventory account itself in order to show how much the value has dropped.
25. How would changing to the alternative method affect GAC's financial statements? How would changing to this alternative method affect GAC's current ratio?
    The decrease in inventory value would decrease the company's current assets while the loss will cause net income (and thus the equity portion of the balance sheet) to fall. This will also decrease the company's current ratio because of the decrease in the company's current assets.
26. If all the proposed changes were made, how would GAC's current ratio change?
    The overall results of the proposed changes would cause GAC's current ratio to fall. As discussed above, the only changes that will affect the ratio are the creation of the allowance for doubtful accounts entries and the decrease in the inventory amount due the inventory impairment. The calculation of the changes in the ratio before and after these suggestions can be found in **Appendix B Case Five**.
27. How much additional equity would Nicki need to contribute to return GAC to a current ratio of 1.0?
    Nicki must increase her current ratio by five percent. In order to do this, GAC has to make more sales to create additional revenue for the company. This revenue will establish new receivables/cash that will boost the company's current assets. These current assets will then increase the current ratio because the numerator will be larger. In order to make the ratio at least equal to one, the numerator must be greater than or equal to the denominator. The denominator is currently 2,180 dollars larger than the numerator. In other words, current liabilities are 2,180 dollars more than current assets. If Nicki was able to make sales of 2,180 dollars, she would increase her equity and her current assets enough so that the ratio would be equal to one again.
28. What next steps would you recommend for Nicki?
    Nicki needs ways to raise additional revenue. GAC could branch out and begin creating more than just shirts in order to fund the business. GAC could start

producing accessories and other apparel to generate more assets. Nicki could also start advertising more in order to find more customers who would be willing to order more shirts. Nicki will also have to get new inventory for next season so she is not forced to refund as much money to retail stores next year.

Appendix B Case Five:

The current ratio is calculated by dividing current assets by current liabilities. The ratio was more than one, which met the bank's requirements. However, after Nicki completes the previously mentioned recommendations, the ratio's value will drop below one. The changes that caused the ratio's decline were the addition of the allowance for doubtful accounts and the provision for the sales returns due to her damaged inventory.

Figure 33:

Current Ratio before Recommendations:	
$\frac{61{,}000}{45{,}180}$	1.35
Current Ratio after Recommendations:	
$\frac{61{,}000 - 3{,}000 - 15{,}000}{45{,}180}$	0.95

CASE SIX: AN ANALYSIS OF DEPRECIATION EXPENSE AND FRAUD

Planes and Garbage

By: Rachel A. May

11/18/2015

Analysis

Upon analysis of Northwest Airlines, Delta Airlines, and United Airlines and the companies' use of depreciation expense, it is clear that an asset can be valued and expensed in a variety of ways. Depreciation expense involves estimation. These three companies all use the straight-line method to depreciate their planes. However, each company still expenses a different amount each year. This is due to the differences in estimating useful lives between companies. Delta Airlines uses the largest useful life among the three; as a result, Delta's depreciation expense is the smallest each year. Due to their unique useful lives, each company will also have a different book value at a given time. When planes are sold, each company will record gains and losses compared to the book value of the planes. A company with a longer useful life will have a greater book value if owned for the same amount of time as a company with a shorter useful life. Because estimation is required to calculate depreciation, it is also an area in which companies can attempt to manage earnings. If a company wants to decrease income for tax purposes, it could over depreciate its assets. On the other hand, it could do the opposite if the company is in need of a higher net income in a particular year. Depreciation expense continues to be a matter of great concern due to its varying methods of calculation.

Appendix A Case Six:

Part I:

Figure 34:

Depreciation Expense Calculations for Airline Companies			
	Northwest	Delta	United
Book Value January 1, 2005	$ 75,000,000	$ 75,000,000	$ 75,000,000
Residual	$ 3,750,000	$ 3,750,000	$ 3,750,000
Depreciable Amount	$ 71,250,000	$ 71,250,000	$ 71,250,000
Useful Life	14.5	20	27.5
Annual Depreciation	$ 4,913,793	$ 3,562,500	$ 2,590,909
Accumulated Depreciation at December 31, 2008	$ 19,655,172	$ 14,250,000	$ 10,363,636
Book Value at December 31, 2008	$ 55,344,828	$ 60,750,000	$ 64,636,364
Sale Price I	$ 55,000,000	$ 60,000,000	$ 65,000,000
Gain (Loss) on Sale I	$ (344,828)	$ (750,000)	$ 363,636
Sale Price II	$ 60,000,000	$ 60,000,000	$ 60,000,000
Gain (Loss) on Sale II	$ 4,655,172	$ (750,000)	$ (4,636,364)

2. Why would these three companies depreciate the same equipment using different useful lives? Describe at least two possible explanations.

Companies could use different useful lives in order to provide different depreciation expenses for the year. If a company is looking to increase its net income, it may use a larger useful life so depreciation expense is lower. If a company is looking to decreases taxes, it may want a lower income before taxes so it may use a shorter useful life. Another reason for the different estimations of useful lives could be the fact that different companies may have historically used the planes longer than others. Some companies may retire planes quicker than others due to safety concerns causing different useful lives. One company could also fly a particular plane more than another company over the time they use it.

3. Which set of sales prices (I or II) do you think is more realistic?

The sale price I would likely be more realistic because the planes were estimated to depreciate at different rates. As a result, the planes are likely worth different values. It is highly unlikely that they will sell at the same price.

Appendix B Case Six:

Part II:

1. Summarize the charges against Waste Management?

Waste Management was the largest waste services company at one time. Chief executive officer, Dean Buntrock, among others worked to falsify earnings and other measures for the company. One method the company used was improperly eliminating or putting off expenses in order to make earnings seem higher. The company decreased its depreciation expenses by using unusually large useful lives and salvage values. Waste Management used "netting" to conceal the understated expenses. This process involved setting one-time gains off against what should have been an operating expense. Most of the company's fraud occurred at the corporate headquarters. Arthur Andersen also helped the company commit fraud. They repeatedly issued audit reports that were misrepresentative of the company's current financial status. By 1996, the cumulative impact of the accounting errors was over one hundred million dollars. In the middle of 1997, the company's new chief executive officer found the past accounting techniques to be "spooky." In 1998, the company acknowledged its wrong-doings and agreed to restate financial statements for 1992 through 1996. As news broke, shareholders lost billions in the value of their stock.

2. How did management use depreciation expense to manage earnings?

Depreciation expense was used in order to defer current period expenses. Waste Management extended the useful lives of their garbage trucks. In addition, the company also made substantial increases to the trucks' salvage value. Doing this enabled the company to delay expenses, thus making net income too high.

3. Why do you think the managers of Waste Management wanted to manage earnings?

It is likely that when managers first began doing this, they only wanted to increase earnings in one year in order to keep the company or themselves from taking a hit. However, once a company begins to falsify financial statements, it is very hard to stop. After one year's statements are incorrect, the next year's statements are off in the beginning. The managers likely had to continue fraud so the company could stay operational. It is also possible that pressure was put on some people to continue the fraud. These managers may have wanted to stay loyal to the company and not report the fraud. In the end when the fraud was discovered, the company took a very serious hit because it falsified its statements for such a long time period.

4. What was Arthur Andersen's role in the Waste Management case? What were the terms of its settlement with the SEC? Did Andersen abide by the terms of the settlement?

Andersen provided materially false and misleading audits for Waste Management. The statements, issued by Arthur Andersen, overstated Waste Management's before tax income by over one billion dollars. The firm consented to the entry of a permanent injunction

enjoining it from violating the Securities Exchange Act of 1934 and had to pay a civil money penalty of about seven million dollars. They also had to agree to a censure pursuant to rule 102(e) of the Commission's rules of practice due to the firm's improper conduct. The involved partners were also required to enter an antifraud injunction and were barred from appearing as an accounting for the commission. In the end, Arthur Andersen did not abide by the terms of the settlement. Historically the firm was involved in several accounting scandals over the years. If the firm had taken the SEC's settlement seriously, it is quite possible that Arthur Andersen would still be one of the largest accounting firms in the world. However, because they chose not to take the SEC's settlement seriously, the firm is no longer relevant among the major accounting firms in the world.

CASE SEVEN: CONTINGENT GAINS AND LOSSES

An Analysis of Environmental Obligations

By: Rachel A. May

12/9/2015

Executive Summary

Upon analysis of a construction materials manufacturing company called Construct and the company's purchase of land from BigMix, one will find many contingent situations in regard to the liabilities the company faced. The company purchased the land in order to use it for a production site for construction materials. However, two years after the purchase, the Environmental Protection Agency began investigate the property for potential water contamination. This situation led to many possible liabilities for the company going forward. The booking of these liabilities are further discussed in **Appendix A Case Seven**. The two types of contingencies mentioned here are loss contingencies and gain contingencies. The two have different rules regarding how to account for them due to the conservative approach to accounting. From Construct's environmental issues, one can learn a lot about the booking of contingent liabilities.

Appendix A Case Seven:

1. In 2007, at the time of the purchase, should Construct record a liability for environmental liabilities? If so, how much?
   A liability should not be reported because at the time, it was unlikely that an environmental conflict would occur.
2. In 2008, should the company record any liability due to BigMix filling for Chapter 11? If so, how much?
   No liabilities at this time either because this took place subsequent to the purchase so Construct maintained rights to the land asset.
3. In 2009, should the company record any liability for the potential environmental liability? If so, how much?

   FASB Codification 450-20-25 states that companies can have a loss contingency ranging from probable to remote. Probable means that future events are likely to occur. Remote means that there is only a slight chance of future events occurring. In 2009, there is only a sixty percent chance that the Environmental Protection Agency will assess penalties. As a result, this chance could be considered reasonably possible. Because the liability is only reasonably possible and not probable, the liability should not be recorded this way either.
4. In 2010, should the company record any liability for the potential environmental remediation? If so, how much?
   The company should finally record a liability in 2010. During this year, the company discovered how important this issue was to the Environmental Protection Agency. As a result, the potential losses are now much more probable. The losses can also be reasonably estimated. The total money expected to be paid at this point in time is 400,000 dollars. Part of this will go to legal fees and part will go to fees associated with a remedial investigation and feasibility study.
5. In 2011, should the company record any additional liability for the potential environmental remediation?
   No additional liability should be booked because the company now knows the contaminated soil has not affected water supplies.
6. In 2012, should the company record any gain contingency/contingent asset for the potential settlement?
   The FASB Codification 450-30-20 describes a gain contingency as "an existing condition, situation, or set of circumstances involving uncertainty as to possible gain to an entity that will ultimately be resolved when one or more future events occur or fail to occur." Gain contingencies differ from loss contingencies because companies are supposed to apply a conservative approach to accounting. As a result, gain contingencies should be disclosed if they are likely. However, no formal entry will be made.

CASE EIGHT: EXAMINING LONG-TERM DEBT

Rite Aid Corporation

By: Rachel A. May

2/3/2016

Analysis

Upon examination of Rite Aid Corporation and the company's long term debt, one can determine that Rite Aid acts as a "parent company" by guaranteeing the debt of its subsidiaries. A detailed description of the company's debt can be found in note eleven of the company's financial statements. It is important that each note has a unique interest rate and maturity date. Interest rates are affected by things like market conditions, riskiness, and desired return. There are also many different types of debt. Secured debt is backed by some sort of collateral while unsecured is not. As a result, secured debt is seen as a less risky investment. Within these categories there is also something called senior debt. Senior debt is more of a priority to the company as it is paid first in case of liquidation. Other types of debt include convertible debt which means the debt can be converted into equity. Throughout the year, however, Rite Aid has to make decisions about what to do with each of its debts. With each debt, a company can make the decision to make payments as usual, to repurchase the debt, or to do things like convert the debt into common stock. Detailed descriptions of some of Rite Aid's transactions can be found in the following appendix. In the end, Rite Aid's debt seems to be hurting its financial ratios, and therefore its credit rating. This could be hurting the company because potential and current investors do not like to see ratios that are much worse than industry standards. However, a few of the company's ratios have improved over the last fiscal year, so Rite Aid shows some potential for improving its current situation. Debt is clearly a very big part of Rite Aid. While the many types of debt help fund Rite Aid's business ventures, if Rite Aid does not begin to work on improving its ratios, investors may flee in the near future.

Appendix Case Eight:

A) Long-Term Debt Concepts:

I. Secured debt is backed by a pledge of some sort of collateral while unsecured debt has no collateral put up. Rite Aid has to distinguish between the two of these because the secured debt can be recovered in the event of default while unsecured cannot.

II. If debt is guaranteed then it means that a "parent" company has signed off on the debt to assume debt obligation if the borrower is unable to pay. Rite Aid acts as the company who guarantees the debt of its subsidiaries.

III. The term "senior" pertains to debt that must be paid off before the other types of debt if the company goes bankrupt. Bonds with a fixed rate are less risky because they cannot change, and they ensure that the borrower does not have to pay more interest expense than stated for either the term of the loan or at least part of the loan. Convertible debt can be converted into another type of security such as common stock.

IV. Each interest rate is specific to the type of debt that it is for. These interest rates are determined using information that is on hand at the time that the debt is issued. The different types of debt have differing terms and will be paid off at different times. Each rate also has unique riskiness that directly factors into the interest rate calculation. For this reason, each debt is independent of the next, thus calling for a different interest rate.

B)

Rite Aid has 6,370,899 dollars of total debt at February 27, 2010, in note 11. Of this, only 51,502 dollars is currently maturing, meaning it will be paid for within a fiscal year. This means that the rest of the debt comes from long-term debt, less current maturities and lease financing obligations, less current maturities. Therefore, note 11's total debt is composed of two types of long term debt plus the currently maturing portions of this debt. The sum of these three accounts yields the 6,370,899 dollars of total debt.

C)

I. The face value of these notes is 500,000 dollars. We know this because there is no mention of a discount or a premium with this note. From 2009 to 2010, the carrying value of the note stays the same. This means that the carrying value is equal to the face value and it is, therefore, not at a discount or a premium.

II. Below is the journal entry made by Rite Aid to issue the 7.5 percent notes:

Figure 35:

Cash		500,000	
	Notes Payable		500,000

III. Below is the journal entry made by Rite Aid to record annual interest expense on the 7.5 percent notes:

Figure 36:

Interest Expense		37,500	
	Cash		37,500

IV. Below is the journal entry that will be made by Rite Aid when the 7.5 percent notes mature in 2017:

Figure 37:

Notes Payable		500,000	
	Cash		500,000

D)

I. The face value is 410,000 dollars. The carrying value is 405,951 dollars. This means that the remaining unamortized discount is 4,049 dollars. As the discount is amortized, the carrying value will increase to 410,000 dollars by the time the debt matures.

II. During fiscal 2009, Rite Aid paid 38,437.50 dollars of interest.

III. The interest expense is the cash interest payment plus the discount that was amortized in the past year. This results in a 39,847.50 dollar interest expense.

IV. Below is the entry to record interest expense on the 9.375 percent notes for fiscal 2009:

Figure 38:

Interest expense		39,847.50	
	Discount on Notes Payable		705
	Cash		39,142.50

V. The total rate of interest is calculated by dividing the total interest expense by the carrying value of the note at the beginning of the fiscal year. This results in a total rate of interest of 9.83 percent.

E)

I. Below is the journal entry made by Rite Aid when the 9.75 percent note was issued:

Figure 39:

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

II. The effective interest rate was calculated using the "RATE" formula from excel. In order to determine this, one must input the number of periods (seven), the cash interest payment (expressed as negative 39,975), the present value or cash proceeds (402,620), and the future value or the face amount (expressed as negative 410,000). After these numbers are put into excel, the formula gives the effective interest rate which is equal to 10.1212 percent.

III. Below is an amortization schedule showing the amortization of the discount on the note as it matures with the effective interest rate method:

Figure 40:

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

IV. Below is the journal entry recorded to accrue interest on the 9.75 percent notes with the effective interest rate method:

Figure 41:

Interest Expense		27,166	
	Discount on Notes Payable		516
	Cash		26,650

V. The book value of the note at February 27, 2010 is now 403,136 dollars. This is the beginning of the period book value plus the newly amortized discount calculated above.

VI. Below is an amortization schedule showing the amortization of the discount on the note as it matures with the straight line method:

Figure 42:

Amortization Schedule: Straight-Line Method					
Date	Interest Payment	Interest Expense	Bond Discount Amortization	Net Book Value of Debt	Straight-Line Interest Rate
30-Jun-09	-	-	-	402,620	
30-Jun-10	39,975	41,029	1,054	403,674	10.1906%
30-Jun-11	39,975	41,029	1,054	404,729	10.1640%
30-Jun-12	39,975	41,029	1,054	405,783	10.1375%
30-Jun-13	39,975	41,029	1,054	406,837	10.1111%
30-Jun-14	39,975	41,029	1,054	407,891	10.0849%
30-Jun-15	39,975	41,029	1,054	408,946	10.0589%
30-Jun-16	39,975	41,029	1,054	410,000	10.0329%

VI. The two different methods for amortizing the discount on the notes payable ultimately still yield the same result. However, they arrive at that result differing ways. The straight-line method amortizes the same amount each year; the effective interest rate method amortizes a different amount each year. This amount becomes larger and larger as the bond approaches its maturity date with this method. However, the changes resulting from the different methods are considered immaterial to Rite Aid because the differences between them are so small in the end.

F)

I. Below is the journal entry to record the repurchase of the 9.5 percent senior notes:

Figure 43:

Notes Payable			810,000	
	Gain			3,750
	Cash			797,769
	Discount on Notes Payable			8,481

II. Rite Aid was able to pay less than the face value of these notes because the condition of the market has caused the note to be worth less when the notes are repurchased. This is what has caused the gain on Rite Aid's books.

III. These notes have clearly lost value when they are repurchased. This can happen in one of two ways. Either the firm's market rate of interest has risen above the coupon and effective rate, or the firm has become riskier. As a result, the loan is now worth less.

G)

Convertible notes can be very advantageous for firms and investors in certain situations. Firms are able to sell notes at lower interest rates when they use convertible notes. These means that the coupon payments are often much lower. However, investors have the

opportunity to convert the notes into equity as time goes on. The investors benefit because it is less risky than simply buying common stock from the start. The note promises a guaranteed payment, but if the company does well, the investor can easily convert the note into shares if so desired in the future.

In Rite Aid's case if the 8.5 percent convertible notes were actually converted into common stock, the 158,000-dollar note would be taken out of the notes payable account and put into the common stock account. This would lower liabilities but raise equity. Assets would not be affected by this entry, and no gain or loss is possible when a company issues its own equity.

H)

Below is a chart displaying some of Rite Aid's financial ratios for fiscal year 2009 and fiscal year 2008:

Figure 44:

Ratio	Industry Average	Rite Aid FY2009	Rite Aid FY2008
Common-size debt	43.83%	120.79%	114.41%
Common-size interest expense	0.35%	2.01%	1.82%
Debt to assets	14.41%	78.50%	71.71%
Long-term debt to equity	0.26	-3.78	-4.98
Proportion of long-term debt due in one year	6.11%	0.81%	0.68%
Times-interest-earned (interest coverage)	33.44x	0.07	-4.41

I)

Based on the above ratios for Rite Aid and the Standard and Poor's credit rating opinions, Rite Aid should be awarded a negative CCC credit rating. According to Standard and Poor's website, "An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation." The company's ratios are much worse than the industry average; however, the company is still managing to meet its financial obligations. Rite Aid is clearly vulnerable, but as long as the market and economic conditions remain favorable, Rite Aid should be able to continue operations. However, because the ratios are much worse than industry standards, the negative CCC rating should be given to show that Rite Aid is in the lower portion of this category.

CASE NINE: AN EXAMINATION OF STOCKHOLDERS' EQUITY

Merck and Co. and GlaxoSmithKline

By: Rachel A. May

2/17/2016

Analysis:

Upon examination of the companies Merck and GlaxoSmithKline (Glaxo) and the companies' treatment of stockholder equity, many comparisons can be made. Merck is a United States company and therefore uses GAAP. Glaxo, on the other hand, is a British based company. Many of Glaxo's accounts are called different things, but they are actually quite similar to the accounts on Merck's books. For example, instead of saying outstanding shares, Glaxo calls them free issue shares. Because of these differences, it can be difficult to compare these companies. In **Appendix Case Nine**, one can find a detailed assessment of the two companies. Each company has a certain amount of common stock that they are authorized to issue. However, just because the company can issue this much common stock at one time, does not mean that it will all actually be issued. Treasury stock is common stock that the company has repurchased, or never issued in the first place. It has no voting rights, and it does not pay dividends. These shares must be subtracted from the authorized shares to arrive at the total shares outstanding. This is the number that will be used for calculations later. After determining the outstanding shares, the two companies can easily be compared. Financial ratios can also be found in **Appendix Case Nine**. These ratios give investors a way to compare different companies such as Merck and Glaxo.

Appendix Case Nine:

A. Consider Merck's common shares:

i. Merck is authorized to issue 5,400,000,000 shares of common stock.
ii. Merck has 2,983,508,675 shares of common stock actually issued at December 31, 2007.
iii. The shares have a par value of one cent so multiplying the 2,983,508,675 shares by one cent yields the 29.8 million shown on the balance sheet for the common stock account at December 31, 2017.
iv. There are 811,005,791 shares of common stock being held in treasury at December 31, 2007.
v. There are 2,172,502,884 shares outstanding. This is the difference between the shares issued and the treasury stock balance.
vi. The total market capitalization is equal to the total shares outstanding times the market price per share which equals 125,157,891,147.24 dollars.

B. Consider GlaxoSmithKline's ordinary shares:

i. GlaxoSmithKline (Glaxo) is authorized to issue 10,000,000,000 ordinary shares.
ii. Glaxo has actually issued 6,012,587,026 ordinary shares at December 31, 2007.
iii. There are 5,373,862,962 shares in free issue at December 31, 2007.
iv. There are 504,194,158 common shares in treasury at December 31, 2007.
v. Share capital is equivalent to capital stock on the Merck balance sheet. Share premium is equivalent to other paid in capital on Merck's balance sheet. The share capital is the stock expressed at par value while the share premium is the difference between the market value of the stock and the par value.

C. Companies pay dividends on their common or ordinary shares as a way to provide their stockholders with a return on their investment into the company. After the company pays a dividend, share prices will fall generally by the amount of the dividend paid out to the investors.

D. Companies repurchase their own shares for many reasons. A lot of companies will repurchase their own stock in order to decrease shares available for other people to purchase. This can help prevent a buyout from another company. They may also do this in order to improve their earnings per share ratio and return on equity ratio as well.

E. The following journal entry summarizes Merck's common dividend activity based on the statement of cash flows and statement of retained earnings:

Figure 45: *Numbers in millions*

Dividends Declared		$3,310.70	
	Cash		$3,307.30
	Dividends Payable		$ 3.40

F. Glaxo paid ordinary dividends to shareholders in 2007.

i. The following journal entry summarizes Glaxo's ordinary dividends to shareholders in 2007 based on the statement of cash flows:

Figure 46: *Numbers in millions*

Dividends Declared		£2,905.00	
	Cash		£2,793.00
	Dividends Payable		£ 112.00

ii. The 2,905 pounds is the dividends declared in the actual year calendar year of 2007. It takes the company time to pay its dividends after they are declared. Glaxo normally pays a dividend two quarters after the quarter in which it is declared. As a result, the cash paid in 2007 is different from the number of dividends declared in 2007. Two periods in 2006 get paid in 2007, and two periods in 2007 get paid in 2008.

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

i. Merck accounts for its treasury stock with the cost method. In this method, treasury stock is debited at cost. All entries to the treasury stock account are made at the original repurchase price. On the balance sheet, treasury stock is deducted at the bottom of the stockholder's equity section of the balance sheet.
ii. Merck repurchased 26.5 shares on the open market in 2007.
iii. Merck paid 1,429.7 dollars (in millions) in total per share to buy back its stock during 2007. This resulted in them paying 53.95 dollars per share.
iv. Merck does not disclose its treasury stock as an asset because it is actually a contra-equity account, and it represents the difference between the authorized shares and the issued shares in the equity section of the balance sheet. Reporting this as an asset would be incorrect information to give investors.

H. During 2007, Glaxo repurchased a number of its own shares on the open market:

i. Glaxo repurchased a total of 285 million shares off the open market in 2007. Of these, they actually held 269 million and canceled the remaining 16 million shares.
ii. The company paid 13.16 pounds per share on average for each share it repurchased during 2007.
iii. The Movements in Equity Table is similar to the statement of stockholder's equity under U.S. GAAP. The following journal entry summarizes Glaxo's share repurchases in 2007:

Figure 47: *Numbers in millions*

Retained Earnings		£3,750.00	
	Cash		£3,750.00

If this had been a United States company and GAAP was used, the debit would have been made to treasury stock. However, Glaxo does not use a treasury stock on its balance sheet because it gets debit directly against retained earnings.

I. The following tables show calculations of ratios for both Merck and Glaxo:

Figure 48:

Merck and Glaxo Financial Ratio Figures			
	Merck (Dollars)		Glaxo (Pounds)
(in millions)	2007	2006	2007
Dividends Paid	3,307.30	3,322.60	2,793
Shares Outstanding	2,172.50	2,167.80	5,373.90
Net Income	3,275.40	4,433.80	6,134
Total Assets	48,350.70	44,569.80	31,003
Operating Cash Flows	6,999.20	6,765.20	6,161
Year-end Stock Price	57.61	41.94	97.39

Figure 49:

Dividend Ratios for Merck and Glaxo			
	Merck (Dollars)		Glaxo (Pounds)
Ratios:	2007	2006	2007
Dividends per Share	$ 1.52	$ 1.53	£ 0.52
Dividend Yield	2.643%	3.655%	0.534%
Dividend Payout	1.010	0.749	0.455
Dividends to Total Assets	0.068	0.075	0.090
Dividends to Operating Cash Flows	0.473	0.491	0.453

The ratios were calculated using the figures found in the first table. Merck's ratios seem to be following between the two years. The dividend yield has dropped by a whole percentage and most other ratios with the exception of the dividend payout ratio have fallen as well. However, most of Merck's ratios are higher than Glaxo's. Glaxo's investors appear to be getting a dollar less per share from dividends than Merck's investors. However, Glaxo does have a higher dividend to total asset ratio. This is because Glaxo has much fewer assets than Merck.

CASE TEN: AN ANALYSIS OF MARKETABLE SECURITIES

State Street Corporation

By: Rachel A. May

3/2/2016

Analysis:

State Street Corporation is an American based financial services company. The company has two main lines of business: investment servicing and investment management. As a result, the company deals with many different types of debt and equity financing. Among these types of investments are trading securities, available-for-sale securities, and held-to-maturity securities. Trading securities are purchased with the intent of selling them quickly for a profit. Available-for-sale securities are also meant to be sold before they reach maturity. As a result, both of these securities are written up or down to fair market value as it changes over time. When one of these accounts increases or decreases in value, an unrealized holding gain or loss is recorded, and the investment amount is increased or decreased respectively. However, only gains and losses on trading securities are factored into net income. Gains and losses on available-for-sale securities are factored into equity through comprehensive income. Held-to-maturity securities are very different from trading and available-for-sale securities. They are purchased with the intent of holding them until their maturity date. As a result, the company would not recognize unrealized holding gains and losses as fair market value increases because they are recorded at cost on the books. On the other hand, the company will record realized holding gains and losses when all three types of investments are sold. The realized gains and losses will come from the difference between what the book value and selling price is when the company chooses to get rid of the investments. These gains and losses will all be placed in the non-operating section of the income statement under other revenues and gains or other expenses and losses. These three types of securities seem fundamentally similar but have major differences in the way they are reported under GAAP.

Appendix Case Ten:

A. Consider trading securities:

i. Trading securities are debt and equity securities purchased in connection with trading activities and, as such, are expected to be sold in the near term.

ii. One dollar of dividends or interest revenue received from trading securities would be recorded with the following journal entries:

Figure 50: **All numbers in millions*

Dividend receivable			$1	
	Dividend income			$1
Cash			$1	
	Dividend receivable			$1

iii. If market value of trading securities increased by one dollar during the reporting period, the following journal entry would be made:

Figure 51: **All numbers in millions*

Fair value adjustment(trading account assets)			$1	
	Unrealized holding gain on trading securities-income			$1

B. Consider securities available-for-sale:

i. Securities available-for-sale are those that the company intends to hold for an indefinite period of time. These include securities utilized as part of asset-and-liability management activities that may be sold in response to changes in interest rates, prepayment risk, liquidity needs, or other factors.

ii. One dollar of dividends or interest revenue received from securities available-for-sale would be recorded with the following journal entries:

Figure 52: **All numbers in millions*

Dividend receivable	$1		
Dividend income		$1	
Cash	$1		
Dividend receivable		$1	

iii. If the market value of securities available-for-sale increased by one dollar during the reporting period, the following journal entry would be made:

Figure 53: **All numbers in millions*

Fair value adjustment (available-for-sale)			$1	
	Unrealized holding gain on securities available-for-sale-equity			$1

C. Consider securities held-to-maturity:

i. In general, securities held-to-maturity are equity securities that management has the intent and ability to hold to maturity. They are never classified as equity because equity does not have a set maturity date as these securities do.
ii. If the market value of securities held-to-maturity increased by one dollar during the reporting period, no entry would be made. This is because held-to-maturity securities are recorded at cost and are not adjusted to fair market value.

D. Consider the "Trading account assets"

i. The balance in the "Trading account assets" account on December 31, 2012 is 637 million dollars. The market value of these securities on this date is equal to the 637 million dollars because trading securities are reported at fair market value.
ii. If the unadjusted trail balance for trading account assets was 552 million dollars, the following adjusting entry would be made in order to adjust the account to market value:

Figure 54: **All numbers in millions*

Fair value adjustment (trading securities)		$85	
	Unrealized holding gain on trading securities-income		$85

E. Consider the balance sheet account "Investment securities held to maturity"

i. The 2012 year-end balance in the "Investment securities held to maturity" account is 11,379 million dollars.
ii. The market value of State Street's investment securities held to maturity is 11,661 million dollars.
iii. The amortized cost of these securities represents the selling price of the securities converging to the maturity value of the securities. The amortized cost will be equal to the book value of 11,379 million dollars at December 31, 2012. The unamortized costs include any discounts or premiums on the investments from when they were purchased. As maturity approaches, the unamortized amount gets smaller and smaller.
iv. The interest rates between 2011 and 2012 have changed because the fair market value of the bonds is much larger in 2012 than in 2011 on average. As the securities are being amortized, the fair market value is climbing because the interest rates are going up. This means that if the company was to sell these securities at this point in time, they would sell on the market at the fair market value. The amortized cost is the cost that the company purchased the securities for, plus or minus the amortized premium or discount as it approaches maturity.

F. Consider the balance sheet account "Investment securities available for sale"

i. 11,379 million dollars. This balance represents the market value because securities available for sale are adjusted to fair market value at the end of each year.

ii. The amount of net unrealized gains from available-for-sale securities is equal to 1,119 million dollars. This is difference between the 2,001 million dollars of gains minus the 882 million dollars of losses.

iii. The amount of net realized gains from available-for-sale securities is equal to fifty-five million dollars. This is the difference between the net gains of 101 million dollars and the net losses of forty-six million dollars. Realized gains are classified as other revenues or gains on the income statement. This would be an addition to net income. This gain will be reported in the investment section of the cash flow statement.

G. Consider the sale of some of the available-for-sale securities based on figures from the cash flow statement:

i. The following journal entry was made by State Street to record the purchase of available-for-sale securities in 2012:

Figure 55: **All numbers in millions*

Debt investment (available-for-sale)		$60,812	
	Cash		$60,812

ii. State Street made the following journal entry to record the sale of available-for-sale securities for 2012:

Figure 56: **All numbers in millions*

Cash			$5,399	
Net Unrealized holding gain on available-for-sale securities-equity			$67	
	Gain on sale of available-for-sale securities			$55
	Debt investment (available for sale)			$5,411

iii. Based on the journal entry above, the original cost of the available-for-sale securities sold during 2012 is 5,411 dollars. This is the amount of available-for-sale securities on the books when they were actually purchased.

iv. The total amount of net unrealized holding gains at the end of the year 2012 for available-for-sale securities is calculated in the following t-chart:

Figure 57:

Net unrealized holding gain (loss) on available-for-sale securities (in millions)	
$ 181	
$ 67	
	$ 1,367
	$ 1,119

State Street would have to make the following journal entry (next page) to mark the available-for-sale securities on hand to market value:

Figure 58: **All numbers in millions*

Fair value adjustment (available-for-sale)			$1,367	
	Unrealized holding gain on securities available-for-sale-equity			$1,367

This entry would not change the company's statement of cash flows. This is because the gain is unrealized and goes into equity. If it had been sold, and the gain was realized, the cash flows would have increased for 2012.

CASE ELEVEN: AN ANALYSIS OF REVENUE RECOGNITION

Groupon

By: Rachel A. May

3/25/2016

Analysis

Upon analysis of Groupon, a digital coupon company, one can see many issues involving revenue recognition. Revenue can sometimes be very difficult when it comes to determining which period it should be recognized in. Groupon faces a unique situation with revenue because it receives money from customers that it must send to merchants who provide coupons. Earlier in Groupon's business life, the company recorded revenue using the gross method. This method involves booking all money received from customers as revenue regardless of whether it will later be paid to a merchant or not. The company later restated all its financials in terms of the net method. The net method only recognized the difference between what is received from the customer and what is paid to the supplier as revenue. The net method resulted in a lower level of overall sales and cost of sales. As a result, this change dramatically changed Groupon's financial statements. Later Groupon also received criticism for the way it handled items that were likely to be returned. Instead of recognizing all of this revenue, the company could estimate the portion that will be returned in the future. The issue of how to recognize revenue will continue to plague companies in the future. Groupon's unique business plan causes the company to have certain issues that other companies may have never faced.

Appendix Case Eleven:

1. Walmart's business model includes leading on prices, being competitive on assortment, differentiating on access, and delivering a great experience. Amazon's business model includes lowering cost structure and prices, creating selections, insuring positive customer experiences, and creating more traffic for sellers. Groupon's business model begins with both customers and merchants signing up. Groupon features a deal, customers pay Groupon, and then Groupon pays its merchants and customers redeem their coupons with the merchant. These three companies are required to publish risk factors along with their financial statements. Because these companies are competitors, many of their risk factors are the same. Amazon says that they face intense competition, a strain of resources, and exposure to legal, financial, and competitive risks. Walmart's risk factors include impediments to expansions, failure to attract and retain associates, and competition from other retailers. Groupon also faces risks involving market growth, the threat of not getting enough customers who want the same product, and the threat of losing the companies it gets coupons from. All of the companies are also subject to economic risks in the market. If the companies are unable to find the resources and customers, they are unable to grow. As a result, their revenue will likely begin to decrease, resulting in less net income for the companies.
2. It is said, "Revenue and revenue growth are more important than income and income growth for new business, especially in the new-age economy." This is because revenue is very important for determining stock prices. Stock prices are frequently determined using income calculations. However, if the company operates at a net loss, the system breaks down. Revenue, on the other hand, can always be used to calculate stock prices because it can never be negative.
   The following graph shows Amazon's stock prices throughout most of this time frame:

Figure 59:

**chart provided by businessinsider.com*

The following chart shows Amazon's revenue and income for the years 1997 through 2014:

Figure 60:

Amazon's Revenue and Income for years 1997-2014		
Year	Revenue (in millions)	Income (in millions)
1997	$ 147	$ (31)
1998	$ 609	$ (125)
1999	$ 1,640	$ (720)
2000	$ 2,762	$ (1,411)
2001	$ 3,122	$ (567)
2002	$ 3,933	$ (149)
2003	$ 5,264	$ 35
2004	$ 6,921	$ 588
2005	$ 8,490	$ 359
2006	$ 10,711	$ 190
2007	$ 14,835	$ 476
2008	$ 19,166	$ 645
2009	$ 24,509	$ 902
2010	$ 34,204	$ 1,152
2011	$ 48,077	$ 631
2012	$ 61,093	$ (39)
2013	$ 74,452	$ 274
2014	$ 88,988	$ (241)

Based on the graph and chart, one can start to see the relationship between revenue, net income, and stock prices. Despite the fact that the net loss in the first few years continues to grow, the stock price still rises. This is because the company is in its first few years so its increasing revenue causes the stock price to rise. After the years go on, net income seems to affect stock price more. This supports the above statement about revenue growth being more important than net income in the earlier years of a business.

3. Below is a common size income statement expressing cost of goods sold as well as other expenses the company incurred:

Figure 61:

Common Size Income Statement					
	2009			2010	
	Gross	Net		Gross	Net
Sales	100.00%	100.00%		100.00%	100.00%
Cost of goods sold	64.14%	30.34%		59.26%	10.39%
Gross margin	35.86%	69.66%		40.74%	89.61%
Marketing expense	15.13%	33.79%		36.89%	90.86%
General and Admin Expense	24.67%	44.14%		32.79%	68.17%
Other Expenses				28.48%	64.94%
Net Loss	4.41%	7.52%		57.95%	134.26%

Based on these calculations, one can see that the net method results in much larger gross profit percentages while the gross method results in a much larger cost of goods sold percentage.

The total asset turnover ratio is also affected by the level of revenue a company produces. The chart below shows the calculation of asset turnover for the company in the years 2009 and 2010:

Figure 62:

Asset Turnover Ratio					
	2009			2010	
	Gross	Net		Gross	Net
Total sales (numerator)	30.4	14.5		731.4	312.9
Total assets (denominator)	12.3	12.3		118.8	118.8
Asset turnover ratio	2.47	1.18		6.16	2.63

As the calculations above show, a company's total asset turnover ratio with be greater if they use the gross sales method instead of the net sales method.

4. After the SEC posed a number of questions regarding Groupon's choice of accounting principles for revenue recognition, the company provided amended revenues for the years affected.
   a. Originally Groupon used the gross method for recording revenue. This resulted in higher revenue and higher cost of sales than the net method. This is because under the gross method, all cash received from customers was booked as revenue. When Groupon gave the company who provided the coupons its money, it was recorded as a cost of the sale. However, under the net method, only the money that Groupon will keep for itself is booked as revenue, and the money that will go to the other company is recorded as a liability. As a result, the amended sales are much lower than the original sales.
   b. Groupon likely preferred to use the gross method because it made the company's sales look better. Although neither method affects net income, revenue is so important to companies that Groupon probably wanted to keep reporting it using this method even though it really did not give the company any additional profit.
   c. Groupon defended its use of the gross method by saying that it was in accordance with ASC 605-45-45. Essentially the company said that when customers purchase a voucher, they are purchasing the option to purchase goods or services at a specified price in the future.
   d. Groupon justified its use of the gross method by saying that they were recording revenue off the customers' right to purchase goods or services in the future. However, the revenue recognition principle states that revenue should not be recognized until the performance obligation has been satisfied. Since the

performance obligation has not been satisfied in this case, Groupon's argument is week.

5. Groupon recognized revenue for the sale of high-ticket items in late 2011. Purchasers of the Groupons have a right of return, as specified in the "Groupon Promise," prominently featured on the website:
   a. U.S. GAAP provides guidelines for recognizing revenue when there is a right of return. Generally, it requires the company to make an estimate of the probable returns. Estimation techniques arise from past history of the company along with other market considerations. The allowance for returns is subtracted from gross sales to result in net sales.
   b. I do not think that Groupon should be able to book all the revenue from these sales. This is misleading to investors and other financial statement users. It leads them to believe that the company really made more revenue than it did because a percentage of it will be returned.
   c. Groupon needs to find a way to estimate probable sales returns. The company should examine its past sales of high-ticket items in order to determine the amount likely to be returned in the current year. This amount should be subtracted from gross sales to result in net sales. Cost of goods sold will then be subtracted from net sales on the income statement. This will ultimately lower the company's net income because it will reduce revenue.

6. Many things go into the calculation of net cash flow from operating activities. In 2011, Groupon's restatement of its fourth-quarter financials resulted in a decrease of thirty million dollars of operating income. If this was the only thing that changed, net cash flow from operating activities should have also decreased by thirty million dollars. However, along with this decrease, accounts receivable also decreased because this money will no longer be collected for the sale of these Groupons. A decrease in accounts receivable is added in calculating the cash flow from operating activities. This addition will offset the decrease in operating income in 2014 thus leaving net cash flow from operating activities equal to what it was before the restatement process.

CASE TWELVE: AN ANALYSIS OF DEFERRED INCOME TAXES

ZAGG Inc.

By: Rachel A. May

4/13/2016

Analysis:

Upon analysis of ZAGG Inc., one can learn many things about deferred income taxes. The purpose of deferred income taxes is to reconcile pre-tax financial income on the income statement with taxable income on a company's tax return. These two differences arise from the different objectives of GAAP and the Internal Revenue Service. Financial income and taxable income differences can arise from a variety of situations including permanent differences and temporary differences. Permanent differences result from items that enter into either taxable income or financial income, but not both. However, this case will focus primarily on temporary differences. Temporary differences arise from timing differences under the two separate methods of recording income. These items originate in one period and reverse in a later period. If financial income is greater than taxable income, it causes a future taxable amount, or a deferred tax liability. If financial income is less than taxable income, it causes a future deductible amount, or a deferred tax asset. Deferred tax liabilities represent increases in taxes payable in the coming years as a result of temporary differences in the present year. Deferred tax assets represent the taxes that will be saved in the future as a result of temporary differences at the end of the year. Another account used in reconciling taxable and financial income is a valuation allowance for deferred tax assets. This is used when it is more likely than not that some or all of the asset will not be realized in future years. ZAGG's use of the deferred income tax system results in a net deferred tax asset. This means that as a whole, ZAGG had a higher taxable income than financial statement income in fiscal year 2012. Various temporary differences such as those involving depreciation and allowance for doubtful accounts will be discussed in the appendix below.

Appendix Case Twelve:

a. Book income is also referred to pretax financial income. It is determined according to GAAP. ZAAG's statement of operations for the fiscal year 2012 shows book income of 23,898,000 dollars. Taxable income indicates the amount used to compute income taxes payable. Instead of using GAAP, taxable income is computed according to the Internal Revenue Code.
b. Income Tax Terms:
    i. Permanent tax difference: These are items that either enter into the determination of financial income but will never enter into the determination of taxable income or items that enter into the determination of taxable income but will never enter into the determination of financial income. They affect only the current period, and do not establish any deferred tax liabilities or assets. Examples of permanent tax differences include proceeds from life insurance policies, interest on municipal bonds, and fines or penalties.
    ii. Temporary tax difference: These are timing differences that arise when the tax basis of an asset or liability differs from the reported amounts on the financial statements. Essentially temporary tax differences occur when an income or expense item is recognized in one year on the income statement and another on the tax return. Examples of temporary differences are situations where tax is calculated with accelerated depreciation methods and financial statements are made using straight-line deprecation. Other examples include unearned rent, warranty costs, and installment sales.
    iii. Statutory tax rate: A statutory tax rate is the rate that is legally imposed upon each taxable entity.
    iv. Effective tax rate: The effective tax rate is the average rate at which an entity is taxed. It can be calculated by dividing an entity's total tax expense by its taxable income.

c. A company must report deferred income taxes as part of their total income tax expense. This reconciles taxable income (for tax purposes) to pretax financial income. Financial reporting is done on an accrual method. Tax, on the other hand, uses a modified cash basis for recording revenues. The deferred income taxes represent taxes that must either be paid in the future or taxes that will be lower in the future.
d. Deferred income tax assets represent the increase in taxes refundable in the future as a result of temporary differences deducted in the current year. A deferred tax liability represents the increase in taxes payable in the future years from taxable temporary differences existing at the end of the current year. A deferred income tax asset results when warranty costs are expensed. For taxes, companies can only expense the warranty when the costs actually occur. Under GAAP, financial

reporting uses estimates to attempt to expense the warranty costs in the period in which it is incurred. These different methods cause a future deductible amount, or deferred income tax asset. A deferred income tax liability results when companies use the installment sales method for recognizing profit for tax purposes and the accrual method for recognizing profit for financial reporting purposes.

e. A deferred income tax valuation allowance is a balance sheet account that offsets a portion of the value of a company's deferred tax assets when they are not expected to be realized. It is created if there is more than a fifty percent chance that the company will not realize part of the asset. The changes to this allowance are to be recorded in income. It is often used when a company has a history of unused carryforwards or when a company expects losses in the coming years. This account's balance should be reassessed at the end of the period.

f. Consider the information disclosed in Note Eight

   i. The following entry should be made by ZAGG to record the income tax provision for fiscal 2012:

   Figure 63: **numbers in thousands*

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

   ii. The amount of net deferred income taxes recorded in the proceeding journal entry can be decomposed into deferred tax assets and deferred tax liabilities. The total deferred tax assets is equal to the increase in total deferred tax assets found in table three of note eight. This number is equal to the difference in 14,302,000 dollars minus 6,300,000 dollars, or 8,002,000 dollars. The remaining debit to deferred income taxes comes from a decrease in the total gross deferred tax liabilities. In 2011, the company had 1,086,000 dollars of deferred tax liabilities while this year, it only has 794,000 dollars. The 8,002,000-dollar increase in deferred tax assets and the 292,000-dollar decrease in deferred tax liabilities results in the total deferred income taxes of 8,293,000 dollars.

   iii. The effective tax rate is calculated by dividing the total income tax expense by the income before taxes. ZAGG's total income tax expense is equal to 9,393,000 dollars. The income before taxes is equal to 23,898,000 dollars. This results in an effective tax rate of 39.30 percent. Effective tax rates can be different from statutory tax rates for two reasons. First, the company could have certain permanent differences in taxable income and financial income. The company could also have tax rates that have changed or will change over time.

iv. ZAGG's ending balance in 2012 net deferred income tax assets is equal to 13,508,000 dollars. Of this amount, 6,912,000 dollars is listed as a current asset, and the remaining 6,596,000 dollars is listed as a noncurrent asset

g. The largest component of ZAGG's deferred tax liability, labeled "Property and equipment," relates to differences between book and tax depreciation expense.
   i. As of December 31, 2012, the tax system has recognized a greater depreciation expense than the financial reporting system. This is due to the fact that tax uses an accelerated depreciation method while financial reporting uses straight line. This is a temporary difference, which means that in the end the two methods will give the same depreciation expense. However, for now, the tax system has a larger depreciation expense recorded.
   ii. The following chart calculates the dollar magnitude of the cumulative difference in depreciation expense between the two systems as of December 31, 2012 in thousands:

Figure 64:

Cumulative difference in book and tax depreciation expense:
$2,269
×
Statutory income tax rate
35%
=
Deferred income tax liability relating to property and equipment at 12/31/12
$794

   iii. The balance in the "Property and equipment, net" on the balance sheet at December 31, 2012 if tax depreciation had been used throughout the assets' lives instead of the reported method would be 1,048,000 dollars. This is calculated by subtracting the cumulative difference in book and tax depreciation expense from the current balance net of depreciation.

h. One of ZAAG's deferred income tax assets components relates to the "Allowance for doubtful accounts."
   i. During the year ended December 31, 2012, financial reporting recognized a greater expense than tax for allowance for doubtful accounts. This is because financial reporting uses estimates to recording potential defaults. Taxes do not use estimates as much, and therefore, the deductions for taxable income are fewer.
   ii. The chart on the following page estimates the dollar magnitude of the difference in bad debt expense between the book and tax expense

between the book and tax system for the year ended December 31, 2012 in thousands:

Figure 65:

Current period difference in book and tax bad debt expense in 2012
$654
×
Statutory income tax rate
35%
=
Change in deferred income tax asset relating to the allowance for doubtful accounts
$229

i. The amount of the deferred income tax asset valuation allowance at December 31, 2012 is 713,000 dollars. The footnotes to note eight revealed that ZAGG recorded a full valuation allowance against a deferred tax asset generated by losses on its equity method investment in HzO. They did this because HzO is in the development stage and future profitability is uncertain meaning that it is more likely than not that the deferred tax asset will not be realizable.

j. If on the first day of the next fiscal year the Internal Revenue Service changed the federal statutory tax rate from thirty-five percent to thirty percent, the following journal entry would be required at the time of the change:

Figure 66: **numbers in thousands*

income tax expense		1,930	
	deferred tax asset		1,930

This journal entry was made to bring the deferred asset balance up to date with the new statutory rate. In order to calculate this number, the December 31, 2012 balance in net deferred tax assets should be divided by the old rate of thirty-five percent to get a total cumulative difference of 38,595,286 dollars. When this is multiplied by the new thirty percent rate, the new balance of deferred tax assets is 11,578,286 dollars. The journal entry results in a credit of the difference between these balances to deferred tax assets and a debit to income tax expense.

CASE THIRTEEN: AN ANALYSIS OF RETIREMENT OBLIGATIONS

Johnson and Johnson

By: Rachel A. May

4/20/2016

Analysis:

Upon analysis of the company Johnson and Johnson and its financial statements, one can learn a lot about accounting for retirement obligations. Retirement obligations, or pensions, are used to provide benefits to employees after they retire for services provided to an employer while working for the company. There are two main types of pensions: defined contribution plans and defined benefit plans. With a defined contribution plan, the employee pays in a certain amount of money each year, and an employer pays in a percentage of this to the pension as well. In this type of plan, the performance risk lies with the employee. More and more companies are beginning to use defined contribution plans rather than defined benefit plans. Defined benefit plans calculate payments to retires based on how long the employee worked for the company and his or her level of compensation in the years leading up to retirement. The employer bears the risk of investment failure with defined benefit plans.

Pensions require the use of many unique accounts such as the pension expense account. Many things affect this account including service cost, interest cost, actual return, unexpected return, amortization of prior service costs, and amortization of gains and losses. Many of these items will be discussed further in the appendix that follows. Another account that is used in accounting for pensions is the pension asset/liability account. This account is used to record the change in the total asset or liability over the year. The pension asset/liability account is equal to the difference in the projected benefit obligation and the fair value of the plan asset account. This account is shown on the balance sheet. If the projected benefit obligation is less than the plan assets, a pension liability occurs. If the plan asset account is larger than the projected benefit obligation, then a pension asset will

occur. These accounts are calculated on a pension worksheet. The pension worksheet helps companies like Johnson and Johnson account for pensions in its financial statements.

Johnson and Johnson sponsors several retirement plans. The plans include both defined benefit plans and defined contribution plans. These two plans will be discussed more in the appendix. The company also sponsors termination indemnity plans and postretirement benefits. The following case study shows Johnson and Johnson's retirement obligations focusing on the year 2007.

Appendix Case Thirteen:

a. There are two general types of retirement plans: defined benefit plans and defined contribution plans.
    i. A defined benefit plan is a pension in which the employer's obligation is to provide a certain benefit at the time of retirement. The benefit is typically a function of the employee's years of service and of the compensation level in the years approaching retirement. A defined contribution plan is a pension where the employer is obligated to contribute a certain sum each period based on some formula. In this type of retirement plan, the employee carries the risk of the performance of the fund. The company Johnson and Johnson has various types of retirement and pension plans including defined benefit and defined contributions plans.
    ii. Retirement obligations are liabilities because they must be paid to employees in the future after they retire.
    iii. There are several assumptions that are necessary in order to account for retirement plan obligations. Actuaries must make these assumptions about mortality rates, employee turnover, interest and earning rates, early retirement frequency, and future salaries in order to accurately account for retirement plans.
b. There are four major types of activities that influence pension assets. These activities are service costs, interest costs, actuarial gains or losses, and benefits paid to retirees. Service costs are the expenses caused by the increase in pension benefits payable to employees due to their services in the current year. Interest costs accrue each year on the projected benefit obligation just like any discounted debt. Actuarial gains and losses occur when the actuaries change their assumptions causing a change in the value of the plan. Lastly, benefits paid to retirees are the payments of the liability to the employees who have the pension plans.
c. A company's pension assets are influenced each year by three main types of activities: actual return on pension investments, company contributions to the plan, and benefits paid to retirees. The actual return on pension investments is the increase in pension funds from interest, dividends, and realized and unrealized changes in the fair value of the plan assets. Company contributions to the plan increase the plan assets account. This is the amount that the company puts in to the plan each year. The benefits paid to retirees decreases the plan assets accounts. This occurs when money already paid in to the plan gets distributed to the retirees.
d. Return of plan assets can be recorded as actual return and expected return on plan assets. Actual return on plan assets adjusts pension expense for the interest and dividends that accumulate within the fund as well as increases and decreases in the market value of the fund assets. Expected return, on the other hand, is more of a smoothing technique that uses unexpected return to adjust actual return to expected

return. The adjustment to expected return is recorded with an entry to the account "other comprehensive income gain or loss" in the general journal.

e. The company has retirement plans as well as other benefits plans. The retirement plans are available to most employees worldwide. However, based on note thirteen of the financial statements, the other benefits plans are only available to United States employees and their dependents. The other benefits plans include health care and insurance benefits.

f. Consider Johnson and Johnson's pension expense detailed on page sixty-one of the company's annual report:

   i. Johnson and Johnson reported 646 million dollars of pension expense in the year 2007.

   ii. The following entry records the service cost for the year 2007:

   Figure 67: **numbers in millions*

Pension expense		597	
	Projected benefit obligation		597

   The following entry records the interest cost for the year 2007:

   Figure 68: **numbers in millions*

Pension expense		656	
	Projected benefit obligation		656

g. Consider Johnson and Johnson's retirement plan obligation detailed on page sixty-two of the company's annual report:

   i. The end of the year projected benefit obligation is 12,002 million dollars. This number derives from the estimated change in the amount of total plan benefits obligation from the beginning of the year to the end of the year. This number changes from things like the service costs, interest costs, and actuarial gains or losses. This number is based on assumptions so there is some degree of uncertainty; however, it is calculated with statistical analysis from qualified actuaries. As a result, this number is generally considered reliable.

   ii. The pension-related interest cost for the year is 656 million dollars in 2007. Interest cost is calculated by multiplying the projected benefit obligation at the beginning of the year by the settlement rate. In order to find the settlement rate, the total interest cost should be divided by the beginning of the year value in the projected benefit obligation. This results in a settlement rate of 5.63 percent. This rate is reasonable because it has been calculated based on standards and guidelines set by FASB.

   iii. In 2007, 481 million dollars of benefits were paid to retirees. These benefits were not paid out of cash. Instead, they came from amounts already in the

plan assets account. The entry to recorded benefits paid to employees includes a debit to projected benefit obligation and a credit to plan assets.

h. Consider Johnson and Johnson's retirement plan asset as detailed on page sixty-two of the company's annual report:
   i. The value in the retirement plan assets account on December 31, 2007 is 10,469 million dollars. This value represents the fair value of this asset at year end.
   ii. The actual return on plan assets in 2007 is 743 million dollars. In 2006, the actual return was 966 million dollars. Page sixty-one of the annual report reveals that in 2007 expected return on plan assets was 809 million dollars, and in 2006, expected return was 701 million dollars. In 2007, the difference between these accounts is 66 million dollars. In 2006, the difference in these two accounts is 265 million dollars. The amount in 2007 was fairly insignificant, but the amount in 2006 is significant. Many people disagree as to which of these two returns is more representative to the company's pension expense. Personally, I believe that actual return is more representative of the company's financial position for the current year. However, when comparing the company's financial state from year to year, the sharp changes that would occur due to the use of actual return would mislead investors if used.
   iii. Johnson and Johnson and its employees contributed a total of 379 million dollars in 2007. In 2006, this number was 306 million dollars. This amount includes company contributions and plan participant contributions.
   iv. Johnson and Johnson's retirement plan assets have investments in equity securities and debt securities in the United States. Its international retirement plans have investments in both debt and equity securities along with real estate and other securities.

i. A company's retirement fund can be under funded or over funded. In 2007, Johnson and Johnson's retirement fund is understated by 1,533 million dollars. This is the difference in the company's projected benefit obligation (a noncurrent liability) and the company's plan asset account (noncurrent asset). In 2006, the fund is understated by 2,122 million dollars.