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AN EXPLORATION OF MODERN FINANCIAL REPORTING

by Jane Costner Case

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

Oxford May 2016

Approved by

Advisor: Dr. Victoria Dickinson

ABSTRACT

JANE COSTNER CASE: An Exploration of Modern Financial Reporting (Under the direction of Victoria Dickinson)

The following are solutions to a series of case studies in financial reporting completed in fulfillment of the requirements of the honors ACCY 420 course at the University of Mississippi for both the fall and spring semester of the 2015/2016 academic year. Each case study focused on a particular area of financial reporting for a specific company or set of companies in the same industry. Each case contained a problem set requiring comprehension of accounting concepts, analysis of financial stability, mathematical calculations, and preparation of journal entries and financial statements.

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ACCY 420 CASE 1 SOLUTION

Home Heaters

Financial Analysis and Comparison of Eads Heater, Inc. and Glenwood Heating, Inc.

> Prepared by Jane Case September 9 2015

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I. Executive Summary

Below are a series of comparable financial statements and ratio analysis for year one of operations for both Glenwood Heating, Inc. and Eads Heater, Inc. Transactions for the year for both companies can be found in appendices A and B. As a whole, Glenwood has greater total profitability than Eads, and is superior as a potential investment or potential debtor.

II. Glenwood Heating, Inc. Data

A. Financial Statements

Glenwood Heating, Inc. Income Statement	
For the Year Ended December 31, 20X1	
Sales Revenue	\$398,500.00
Cost of Goods Sold	\$177,000.00
Gross Profit	\$221,500.00
Rent Expense	\$16,000.00
Depreciation Expense	\$19,000.00
Bad Debt Expense	\$994.00
Other Operating Expenses	\$34,200.00
Income from Operations	\$151,306.00
Other Expenses and Losses	
Interest Expense	\$27,650.00
Income from Continuing Operations Before Tax	\$123,656.00
Income Tax	\$30,914.00
Net Income	\$92,742.00
Earnings Per Share	\$28.98

Glenwood Heating, Inc. Statement of Changes in Stockholders' Equity For the Year Ended December 31, 20X1				
Total Retained Earnings Common Stock				
Beginning Balance	\$160,000.00	\$0	\$160,000.00	
Net Income	\$92,742.00	\$69,542.00		
Ending Balance	\$252,742.00	\$69,542.00	\$160,000.00	

Glenwood Heating, Inc. Classified Balance Sheet					
For the Year Ended December 31, 20X1					
	Assets				
Current Assets					
Cash		\$426.00			
Accounts Receivable	\$99,400.00				
Less: Allowance for					
Bad Debts	\$994.00	\$98,406.00			
Inventory		\$62,800.00			
Total Current	•				
Assets			\$161,632.00		
Property, Plant,					
and Equipment					
Land		\$70,000.00			
Building	\$350,000.00				
Less: Accumulated	+	±=			
Depreciation	\$10,000.00	\$340,000.00			
Equipment	\$80,000.00				
Less: Accumulated	† 0.000.00	*= 4 000 00			
Depreciation	\$9,000.00	\$71,000.00			
Total Property,			* 4 0 4 0 0 0 0 0		
Plant, and Equipment			\$481,000.00		
Total Assets			\$642,632.00		
			-		

- \$33,090.00
- \$33,090.00
\$33,090.00
\$33,090.00
\$33,090.00
\$380,000.00
\$413,090.00
Ψ115,0 70.00
_
\$229,542.00
\$642,632.00

Glenwood Heating, Inc. Statement of Cash Flows For the Year Ended December 31, 20X1			
Cash Flows from Operating Activities	- , -		
Net Income		\$92,742.00	
Adjustments to reconcile net income to net			
cash			
Depreciation Expense	\$19,000.00		
Bad Debt Expense	\$994.00		
Accounts Receivable	-\$99,400.00		
Inventory	-\$62,800.00		
Accounts Payable	\$26,440.00		
Interest Payable	\$6,650.00	- \$109,116.00	
Net Cash Flows from Operating Activities	•	-\$16,374.00	
Cash Flows from Investing Activities			
Purchase of Land	-\$70,000.00		
Purchase of Building	\$350,000.00		
Purchase of Equipment	-\$80,000.00		
Net Cash Flows from Investing Activities		-\$500,000	
Cash Flows from Financing Activities			
Proceeds from Borrowing on Note Payable	\$380,000.00		
Proceeds from Issuance of Common Stock Payment of Cash Dividend	\$160,000.00 -\$23,200.00		
Net Cash Flows from Financing Activities Total Net Cash Flows		\$516,800.00 \$426.00	

B. Ratio Analysis - Glenwood

Liquidity or Short-Term, Debt-Paying-Ability Ratios				
Current Ratio:	4.88	Accounts Receivable turnover:	4.01	
Acid-Test Ratio:	2.97	Days to collect Receivables:	91.04	
Inventory Turnover:	2.82	Days to Sell Inventory:	126.31	
Operating Cycle:	217.35			
	Profitabi	lity Ratios		
Gross Profit Margin:	55.58%	Return on Assets:	14.43%	
Profit Margin:	23.27%	Return on Owners' Equity:	57.96%	
Earnings Per Share:	\$28.98	Debt Ratio:	64.28%	
Times Interest Earned:	5.47			

III. Eads Heater, Inc. Data

A. Financial Statements

\$398,500.00
\$188,800.00
\$209,700.00
\$41,500.00
\$4,970.00
\$34,200.00
\$129,030.00
\$35,010.00
\$94,020.00
\$23,505.00
\$70,515.00
\$22.04

Eads Heater, Inc. Statement of Changes in Stockholders' Equity							
	For the Year Ende	ed December 31, 20X1					
	Total Retained Earnings Common Stock						
Beginning	Beginning						
Balance	\$160,000.00	\$0	\$160,000.00				
Net Income	\$70,515.00	\$47,315.00					
Ending Balance	\$230,515.00	\$47,315.00	\$160,000.00				

Eads Heater, Inc.				
Classified Balance Sheet				
For the Year	Ended December 3	1, 20X1		
	Assets			
Current Assets				
Cash		\$7,835.00		
Accounts Receivable	\$99,400.00			
Less: Allowance for Bad Debts	\$4,970.00	\$94,430.00		
Inventory	<u>-</u>	\$51,000.00		
Total Current Assets			\$153,265.0 0	
Property, Plant, and Equipment				
Land		\$70,000.00		
Building	\$350,000.0 0			
Less: Accumulated		\$340,000.0		
Depreciation	\$10,000.00	0		
Equipment	\$80,000.00			
Less: Accumulated	, ,			
Depreciation	\$20,000.00	\$60,000.00		
Leased Equipment	\$92,000.00			
Less: Accumulated				
Depreciation	\$11,500.00	\$80,500.00		
Total Property, Plant, and Equipment			\$550,500.0 0	
Total Assets			\$703,765.0 0	

Current Liabilities and Stockholders' Equity			
Accounts Payable Accrued Interest on Note Payable Payable Total Current Liabilities Sago,000.0 Total Term Debt Twenty-Year 7% Note Payable Lease Payable Total Long Term Debt Sago,000.0 Sago,000.0 \$463,360.0 \$463,360.0 \$496,450.0 Total Liabilities Stockholders' Equity Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par value		olders' Equity	
Payable \$6,650.00 Total Current Liabilities \$33,090.00 Long Term Debt \$380,000.0 Twenty-Year 7% Note Payable 0 Lease Payable \$83,360.00 Total Long Term Debt \$463,360.0 Total Liabilities \$496,450.0 Stockholders' Equity 0 Paid-in Capital Stock Common - Authorized, issued, and 0 outstanding, 3,200 shares of \$50 par value 0 Retained Earnings \$47,315.00 Total Stockholders' Equity \$207,315.0 Total Liabilities and \$703,765.0	Accounts Payable	\$26,440.00	
Twenty-Year 7% Note Payable Lease Payable Total Long Term Debt Stockholders' Equity Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par value Retained Earnings Total Stockholders' Equity Total Stockholders' Equity 7 Stockholders' \$160,000.0 condens \$160,000.0 condens \$47,315.00 condens \$207,315.0 condens \$20		\$6,650.00	
\$380,000.0 Twenty-Year 7% Note Payable	Total Current Liabilities		\$33,090.00
Twenty-Year 7% Note Payable Lease Payable Total Long Term Debt Total Liabilities Stockholders' Equity Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par value Retained Earnings Total Stockholders' Equity Total Stockholders' Equity Total Stockholders' \$207,315.0 Total Stockholders' Equity	Long Term Debt		
Lease Payable \$83,360.00 Total Long Term Debt \$463,360.0 Total Liabilities \$496,450.0 Stockholders' Equity Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par value 0 Retained Earnings \$47,315.00 Total Stockholders' Equity \$207,315.0 Total Stockholders' Equity \$703,765.0		\$380,000.0	
Total Long Term Debt Total Liabilities Stockholders' Equity Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par value 0 Retained Earnings Total Stockholders' Equity Total Stockholders' Equity Total Liabilities and \$463,360.0 \$496,450.0 \$160,000.0 \$207,315.0 \$207,315.0 \$207,315.0 \$703,765.0		-	
Total Long Term Debt Stockholders' Equity Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par \$160,000.0 value 0 Retained Earnings \$47,315.00 Total Stockholders' Equity \$207,315.0 Total Stockholders' Equity \$703,765.0	Lease Payable	\$83,360.00	
Total Liabilities 0 Stockholders' Equity Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par \$160,000.0 value 0 \$47,315.00 Retained Earnings \$47,315.00 Total Stockholders' Equity 0 Total Liabilities and \$703,765.0	Total Long Term Debt	_	
Paid-in Capital Stock Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par value 0 Retained Earnings \$47,315.00 Total Stockholders' Equity 0 Total Liabilities and \$703,765.0	Total Liabilities		
Common - Authorized, issued, and outstanding, 3,200 shares of \$50 par value 0 Retained Earnings \$47,315.00 Total Stockholders' Equity 0 \$703,765.0	Stockholders' Equity		
value 0 Retained Earnings \$47,315.00 Total Stockholders' Equity 0 Total Liabilities and \$703,765.0	Common - Authorized, issued,		
	•		
Total Stockholders' Equity 0 Total Liabilities and \$703,765.0	Retained Earnings	\$47,315.00	
• ,	Total Stockholders' Equity		
• ,	• •	-	\$703,765.0
	Stockholders' Equity	-	

Statement of Cash F	lows	
For the Year Ended Decem	ber 31, 20X1	
Cash Flows from Operating Activities		
Net Income		\$70,515.00
Adjustments to reconcile net income to		
net cash		
Depreciation Expense	\$41,500.00	
Bad Debt Expense	\$4,970.00	
Accounts Receivable	-\$99,400.00	
Inventory	-\$51,000.00	
Accounts Payable	\$26,440.00	
Interest Payable	\$6,650.00	-\$70,840.00
Net Cash Flows from Operating		
Activities		-\$325.00
Cash Flows from Investing Activities		
Purchase of Land	-\$70,000.00	
Purchase of Building	-\$350,000.00	
Purchase of Equipment	-\$80,000.00	
Net Cash Flows from Investing	· · · · · · · · · · · · · · · · · · ·	
Activities		-\$500,000.00
Cash Flows from Financing Activities		
Proceeds from Borrowing on Note		
Payable	\$380,000.00	
Proceeds from Issuance of Common		
Stock	\$160,000.00	
Payment of Cash Dividend	-\$23,200.00	
Payment on Principle of Lease	-\$8,640.00	
Net Cash Flows from Financing		
Activities	<u>-</u>	\$508,160.00
Total Net Cash Flows		\$7,835.00
	=	

B. Ratio Analysis - Eads

Liquidity or Short	t-Term, Debt-l	Paying-Ability Ratios	
Current Ratio:	4.63	Accounts Receivable turnover:	4.01
Acid-Test Ratio:	3.24	Days to collect Receivables:	91.04
Inventory Turnover:	3.70	Days to Sell Inventory:	98.60
Operating Cycle:	189.64		
P	rofitability Ra	atios	
Gross Profit Margin:	52.62%	Return on Assets:	10.02%
Profit Margin:	17.70%	Return on Owners' Equity:	44.07%
Earnings Per Share:	\$22.04	Debt Ratio:	70.54%
Times Interest Earned:	3.69		

IV. Analysis and Recommendations

Eads appears to hold the advantage in certain areas, as indicated by their net operating cash flow and total net cash flow being greater than that of Glenwood. Eads also has the more liquid of the two inventories; with a quicker inventory turnover and fewer days to sell inventory, their operating cycle is shorter. However, Glenwood is clearly the superior company when it comes to central operations and overall profitability. Glenwood has a higher net income than Eads and paid the same amount of dividends, thus allowing them to also have more retained earnings despite their lesser overall cash flow. Glenwood also out-performed Eads in the majority of ratio tests. Glenwood's gross profit margin, profit margin, return on assets, return on owners' equity, and earnings per share are all higher than those of Eads. Glenwood also has a lower debt ratio than Eads. Based on this analysis and the performance of both companies over their first year of operations, I recommend investing in or lending money to Glenwood over Eads.

Appendix A: Transactions for Glenwood Heating, Inc.

Transaction #		Cash		Accounts	Receivable	Allowance	for Bad Debts	
1	\$ 160,000.00							
2	\$ 400,000.00							
3		\$	420,000.00					
4		\$	80,000.00					
5								
6				\$398,500.00				
7	\$ 299,100.00				\$299,100.00			
8		\$	213,360.00					
9		\$	41,000.00					
10		\$	34,200.00					
11		\$	23,200.00					
12								
13							\$ 994.0)0
14								
15								
16		\$	16,000.00					
17		\$	30,914.00					
Ending Balance	\$ 426.00		_	\$ 99,400.00		_	\$ 994.0)0

Transaction #	In	ventory	La	nd		Bu	ilding
1							
2							
3			\$ 70,000.00		\$	350,000.00	
4							
5	\$ 239,800.00						
6							
7							
8							
9							
10							
11							
12							
13							
14		\$ 177,000.00					
15							
16							
17					_		
Ending Balance	\$ 62,800.00		\$ 70,000.00		\$	350,000.00	

Transaction #	Accumulated D	epreciation	on, building	Equip	ment	Accumulated Dep	reciation, E	quipment
1								
2								
3								
4				\$ 80,000.00				
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15		\$	10,000.00				\$	9,000.00
16								
17								
Ending Balance		\$	10,000.00	\$ 80,000.00			\$	9,000.00

Transaction #	Accou	nts Pay	able	Interest	Pay	able	Note	Payabl	е
1								\$	400,000.00
2									
3									
4									
5		\$	239,800.00						
6									
7									
8	\$ 213,360.00								
9							\$ 20,000.00		
10									
11									
12					\$	6,650.00			
13									
14									
15									
16									
17									
Ending Balance		\$	26,440.00		\$	6,650.00		\$	380,000.00

Transaction #	Common Stock	Dividends	Sales
1	\$ 160,000.00		
2			
3			
4			
5			
6			\$ 398,500.00
7			
8			
9			
10			
11		\$ 23,200.00	
12			
13			
14			
15			
16			
17			
Ending Balance	\$ 160,000.00	\$ 23,200.00	\$ 398,500.00

Transaction #	Cost of Goods Sold			Bad Debt	Expense	Depreciat	ion Expense
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13				\$ 994.00			
14	\$	177,000.00					
15						\$ 19,000.00	
16							
17							
Ending Balance	\$	177,000.00		\$ 994.00		\$ 19,000.00	

Transaction #	Interest Expense			Other Opera	ting Expense	Rent	Expense
1							
2							
3							
4							
5							
6							
7							
8							
9	\$	21,000.00					
10				\$ 34,200.00			
11							
12	\$	6,650.00					
13							
14							
15							
16						\$ 16,000.00	
17							
Ending Balance	\$	27,650.00		\$ 34,200.00		\$ 16,000.00	

Transaction #	Provision fo	or Income Taxes
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17	\$ 30,914.00	
Ending Balance	\$ 30,914.00	

Appendix B: Transactions for Eads Heater, Inc.

Transaction #	Ca	ısh			Accounts	Receivab	le	Allowance fo	or Bad	Debts
1	\$ 160,000.00									
2	\$ 400,000.00									
3		\$	420,000.00							
4		\$	80,000.00							
5										
6				\$	398,500.00					
7	\$ 299,100.00					\$	299,100.00			
8		\$	213,360.00							
9		\$	41,000.00							
10		\$	34,200.00							
11		\$	23,200.00							
12									\$	4,970.00
13										
14										
15										
16		\$	16,000.00							
17										
18		\$	23,505.00	_						
Ending Balance	\$ 7,835.00			\$	99,400.00				\$	4,970.00

Transaction #	Inve	ntor	1	La	nd	Build	ling
1							
2							
3				\$ 70,000.00		\$ 350,000.00	
4							
5	\$ 239,800.00						
6							
7							
8							
9							
10							
11							
12							
13		\$	188,800.00				
14							
15							
16							
17							
18							
Ending Balance	\$ 51,000.00			\$ 70,000.00		\$ 350,000.00	

Transaction #	Accumulated Dep	reciation, building	Equi	pment	Accumulated Depre	ciation	Equipment
1							
2							
3							
4			\$ 80,000.00				
5							
6							
7							
8							
9							
10							
11							
12							
13							
14		\$ 10,000.00				\$	20,000.00
15							
16							
17							
18							
Ending Balance		\$ 10,000.00	\$ 80,000.00			\$	20,000.00

Transaction #	Leased E	quipment	Accumulated Deprecia	tion, Leased Equipment	Accounts	Payal	ole
1							
2							
3							
4							
5						\$	239,800.00
6							'
7							
8					\$ 213,360.00	•	
9							
10							
11							
12							
13							
14							
15	\$ 92,000.00						
16							
17				\$ 11,500.00			
18							
Ending Balance	\$ 92,000.00			\$ 11,500.00		\$	26,440.00

Transaction #	Interest	Payabl	e	Note F	ayable		Lease P	ayable	•
1					\$	400,000.00			
2									
3									
4									
5									
6									
7									
8									
9				\$ 20,000.00					
10									
11									
12		\$	6,650.00						
13									
14									
15								\$	92,000.00
16							\$ 8,640.00		
17									
18									
Ending Balance		\$	6,650.00		\$	380,000.00		\$	83,360.00

Transaction #	Common Stock	Dividends	Sales
1	\$ 160,000.00		
2			
3			
4			
5			
6			\$ 398,500.00
7			
8			
9			
10			
11		\$ 23,200.00	
12			
13			
14			
15			
16			
17			
18			
Ending Balance	\$ 160,000.00	\$ 23,200.00	\$ 398,500.00

Transaction #	Cost of G	oods Sold	Bad Debt	t Expense	Depreciation	n Expense
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12			\$ 4,970.00			
13	\$ 188,800.00					
14					\$ 30,000.00	
15						
16						
17					\$ 11,500.00	
18						
Ending Balance	\$ 188,800.00		\$ 4,970.00		\$ 41,500.00	•

Transaction #	Interest	Expense	Other Opera	ting Expense	P	rovision for I	ncome Taxes
1							
2							
3							
4							
5							
6							
7							
8							
9	\$ 21,000.00						
10			\$ 34,200.00				
11							
12	\$ 6,650.00						
13							
14							
15							
16	\$ 7,360.00						
17							
18					\$	23,505.00	
Ending Balance	\$ 35,010.00		\$ 34,200.00		\$	23,505.00	

ACCY 420 CASE 2 SOLUTION

Molson Coors Brewing Company

Profitability and Earnings Persistence

Prepared by Jane Case
September 23 2015

I. Concepts

a.

The major classifications on an income statement are the operating section, non- operating section, income tax, discontinued operations, extraordinary items, non controlling interest, and earnings per share.

b.

Companies are required under US GAAP to provide classified income statements for a variety of reasons. The classified income statement provides detailed financial reporting for the users of the financial statements. Classifying the items into various categories allows users to see how much income came from particular sources, which is useful for decision-making. Breaking the income statement down into detailed categories also provides more transparency, and makes it difficult to conceal fraudulent practices.

c.

Persistent income is sustainable, continuing from one year to the next. Financial statement users, particularly current and future investors, need to know which sources of income can be relied on from year to year.

d.

Comprehensive income includes all revenues, gains, expenses, and losses included in net income, as well as all gains and losses affecting stockholders' equity that bypass the income statement, known as other comprehensive income. Other comprehensive income refers to all non-owner changes in equity.

II. Process

e.

Gross sales include all revenue from sales transactions reported during a period. Net sales reflect various deductions that are taken directly out of the gross sales figure. Three contra-accounts affecting the sales number are Sales returns, allowances, and discounts. Molson reports gross and net sales separately because they have excise taxes taken directly out of sales revenue. To simply report the gross number would be misleading as to how much revenue actually came in from sales.

f.

- i. Generally speaking, Molson includes only atypical, unusual, or infrequently occurring items in "special items."
- ii. Molson reports special items separately because they do not believe those charges or benefits to be indicative of their core operations. For this reason, I disagree with their choice to classify the items as operating expenses. After saying that these changes to income did not result from core operations, it seems contradictory to then classify them as operating expenses.

g.

The other income classification includes items not directly associated with brewing beer, which is the company's core operation. Specifically, the items are interest expense and interest income. Like the special items, other income comes from sources non-central to operations. However, the two classifications differ in that special items are unusual or infrequent, whereas other income (expense) is incurred routinely.

h.

- i. Comprehensive income (in millions) for 2013 is \$760.20, which is \$187.70 higher than 2013 net income of \$572.50
- ii. The difference between net and comprehensive income for 2013 is caused by the following line items: foreign currency translation adjustments, unrealized gain on derivative instruments, reclassification of derivative loss to income, pension and other post retirement benefit adjustments, amortization of net prior service cost and net actuarial gain to income, and ownership share of unconsolidated subsidiaries' other comprehensive income. These items are all related in that they alter the company's total equity, but the sources are not derived from ownership in the company.

III. Analysis

i.

Income from discontinued operations is a non-persistent income source, as the company is not likely to have discontinued operations every year, and the amount is not predictably steady. Special items are also unlikely to be persistent, as they are described as being unusual or infrequent.

j.

- i. The effective tax rate for 2013 is 84/654.5, or 12.83%
- ii. The expected persistent effective tax rate is approximately 13%

k.

Estimated Persistent income (in millions) for Molson Coors is \$726.97

l.

i. Non-operating items

Other income (expense): Incurred via interest, not central operations.

Special Items: Not derived from central operations.

Income from discontinued operations: This income is derived specifically from stopping certain operations.

Net loss attributable to noncontrolling interests: noncontrolling interests are not directly related to operations.

ii. Total after-tax amount of nonoperating items (in millions):

2013: (\$354.4)

2012: (\$351.3)

iii. Net operating profit after tax (in millions):

2013: \$805.7

2012: \$867.4

m.

i. Nonoperating Assets

Deferred tax assets: Tax related assets are nonoperational.

Properties: Properties are not directly operational.

Goodwill and other intangibles: Intangible assets are non operational.

Notes Receivable: Not derived from core operations.

Other assets: Items are not likely to be operational.

Nonoperating Liabilities

Deferred tax liabilities: The deferral of taxes is not related to operations.

Long Term Debt including current portion: Making loans to customers is not a core operation.

Unrecognized Tax Benefits: Taxes are nonoperational.

Pension and postretirement benefits: Not related to central operations.

Derivative hedging instruments: Hedging instruments are nonoperational.

Other Liabilities: Unlikely to be operational.

Discontinued Operations: Resulted directly from the discontinuation of operations.

ii. Net Operating Assets (in millions):

2013: \$883.7

2012: \$1048.3

n.

Return on Net Operating Assets:

2013: 64.20%

2012: 42.26%

The return increased between the two years.

0.

Operating Profit Margin:

2013: 13.43%

2012: 15.45%

Net Operating Asset Turnover:

2013: 6.79

2012: 5.36

The return on net operating assets increased in 2013 because the company was able to turn it's operating assets over an additional 1.43 times.

p.

Return on Net Operating Assets using Persistent Income:

2013: 82.15%

Return on net operating assets is higher when using only predicted persistent income in the calculation. The RNOA calculated with persistent income is a better indicator of future profitability, because it eliminates uncertain future sources of income.

ACCY 420 CASE 3 SOLUTION

Golden Enterprises, Inc.

Statement of Cash Flows

Prepared by Jane Case
October 7 2015

I. Concepts

- **a.** The statement of cash flows shows the exact amount of money a company has received and spent over a certain period of time, with the inflows and outflows broken up into three categories. The income statement shows total revenues and expenses over a certain period, and includes a good deal of non-cash accounting such as depreciation and amortization.
- b. The two methods of preparing the statement of cash flows are the direct method and the indirect method. Golden Enterprises, like most companies, uses the indirect method. The indirect method is the most popular because it provides the most detailed and relevant information for the users of the financial statements.
- c. The three sections of the statement of cash flows are operating, investing, and financing.
- **d.** The changes in balance sheet accounts are the building blocks for determining cash flows. Many balance sheet accounts reflect accruals, and the statement of cash flows reconciles those accruals to actual flows of cash. Assets have an inverse relationship with cash flows, meaning, when assets increase during a period, cash flow decreases. Conversely, liabilities have a directly proportional relationship to cash flows, meaning, when liabilities increase during the period, cash flow also increases.
- **e.** Cash equivalents are highly liquid assets that are readily convertible into cash. Examples of cash equivalents include marketable securities, commercial paper, and short-term government bonds.
- **f.** The indirect statement of cash flows begins with net income in the operating section because adjustments must be made to reconcile accrual basis net income with actual cash flows.

II. Process

 ${\bf g.}\,\,2013$ indirect statement of cash flows for Golden Enterprises, Inc.

Golden Enterprises, Inc. Statement of Cash Flows For Fiscal Year ended May 31, 2013	
RECONCILIATION OF NET INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES	
Net Income	\$ 1,134,037.00
Adjustments to reconcile net income to net cash provided by operating activies	
Depreciation	\$ 3,538,740.00
Deferred income taxes	-\$ 185,939.00
Gain on sale of property and equipment	-\$ 61,040.00
Change in receivables - net	\$ 106,367.00
Change in inventories	\$ 200,985.00
Change in prepaid expenses	\$ 200,137.00
Change in cash surrendur value of insurance	\$ 62,906.00
Change in other assets	-\$ 191,298.00
Change in accounts payable	-\$ 1,216,399.00
Change in accrued expenses	\$ 954 <i>,</i> 938.00
Change in salary continuation plan	-\$ 49,774.00
Change in accrued income taxes	\$ 113,369.00
Net cash provided by operating activities	\$ 4,607,029.00
CASH FLOWS FROM INVESTING ACTIVITIES	
Purchase of property, plant, and equipment	-\$ 4,149,678.00
Proceeds from sale of property, plant, and equipment	\$ 74,514.00
Net cash used in investing activities	-\$ 4,075,164.00
CASH FLOWS FROM FINANCING ACTIVITIES	
Debt proceeds	\$38,361,199.00
Debt repayments	-\$ 38,287,529.00
Change in checks outstandig in excess of bank balances	-\$ 267,501.00
Purchases of treasury shares	-\$ 6 <i>,</i> 860.00
Cash dividends paid	-\$ 1,467,879.00
Net cash (used in) provided by financing activities	-\$ 1,668,570.00
NET DECREASE IN CASH AND CASH EQUIVALENTS	-\$ 1,136,705.00
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	\$ 1,893,816.00
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$ 757,111.00

III. Analysis

- **h.** Depreciation expense does not generate any cash for Golden Enterprises; it is a non-cash account, used to proportionally allocate the cost of an asset over the course it's useful life.
- i. Overall, Golden Enterprises, Inc. was less profitable and had greater difficulty generating cash in 2013 than in 2012. Since 2012, operating income decreased and interest expense increased, resulting in 2013 net income being only 51.27% of what it was in 2012. Cash provided by operating activities, which was the only positive influx of cash of the three categories, decreased in 2013, as did total cash at the end of the year. Earnings per share were also reduced in 2013 by nearly half, going from \$0.19 to \$0.10.
- **j.** Overall property plant and equipment, as well as other assets, have increased, indicating that productive capacity has expanded or at least maintained over the past few years.
- **k.** At the end of the fiscal year 2013, Golden Enterprises does not have the cash on hand necessary to make this magnitude of property, plant, and equipment purchases. The most likely sources of financing for this project are the issuance of substantial long-term debt. Financing could also potentially be supplemented by the issuance of stock, for example, reissuing the treasury stock purchased during 2013.

IV. Supplementary Balance Sheet T-accounts

Cash and Cas	h Equivalents
\$1,893,816.00	
	\$1,136,705.00
\$757,111.00	

Accounts receivable, net	Inven	tories	Prepaid e	xpenses
\$10,566,073.00	\$5,156,798.00		\$1,754,874.00	
\$106,376.0	00	\$200,985.00		\$200,137.00
\$10,459,706.00	\$4,955,813.00		\$1,554,737.00	

		Property, plant, a	and equipment,		
Accrued incon	ne taxes, net	gro	ss	Accumulated	depreciation
\$59,894.00		\$89,285,723.00			\$62,788,133.00
	\$113,369.00	\$4,149,678.00			\$3,538,740.00
	\$53,475.00		\$412,958.00	\$399,484.00	
		\$93,022,443.00			\$65,927,389.00
Cash resurrend	ır value of life			Checks outstand	ing in excess of
insura	ince	Other A	Assets	bank ba	lances
\$758,667.00	_	\$1,450,732.00			\$1,710,417.00
	\$62,906.00	\$191,298.00		\$267,502.00	
\$695,761.00		\$1,642,030.00			\$1,442,915.00
Accounts	payable	Other accrue	d expenses	Salary contin	uation plan
'	\$6,025,465.00		\$4,472,079.00		\$1,279,233.00
\$1,216,399.00			\$954,938.00	\$49,774.00	
	\$4,809,066.00		\$5,427,017.00		\$1,229,459.00

IV. Supplementary Balance Sheet T-accounts (Cont.)

Notes payable and long-term

debt, total	Deferred inco	me taxes, net	Commo	n stock
\$7,358,681.00		\$2,894,123.00		\$9,219,195.00
\$73,671.00	\$185,939.00			\$9,219,195.00
\$7,432,352.00		\$2,708,184.00		
Additional paid-in capital	Datained		_	
Additional palu-in capital	Ketaineu	earnings	Treasury	shares
\$6,497,954.00	Retained	\$19,607,056.00	\$10,925,759.00	
<u> </u>	\$333,842.00			

ACCY 420 CASE 4 SOLUTION

Pearson plc

Accounts Receivable

Prepared by Jane Case
October 28 2015

I. Concepts

a.

An account receivable is a current asset reported on the balance sheet. It represents revenue that has been earned, but not yet received, that the company expects to receive within the current period. Accounts receivable are also known as "receivables," "unearned revenue," and are informally abbreviated as "AR."

b.

Accounts receivable are current assets and therefore short-term, while notes receivable are long-term.

c.

A contra account is associated with a regular account, has a normal balance opposite that of its companion account, and is a direct reduction of that regular account. The two contra accounts associated with Pearson's trade receivables account are provision for bad and doubtful debts and provision for sales returns. The provision for bad and doubtful debts sets up an allowance for debts that the company doubts they will actually receive, and the provision for sales returns allows for the possibility that not all sales will be final; some will inevitably be returned. Pearson most likely estimates these amounts based on their own historical data, as well as data from other similar firms doing business at a similar volume.

d.

The percentage-of-sales method for estimating uncollectible accounts relates the amount of the allowance to a certain percentage of total sales revenue. To determine the final account balance for this method, managers need to know the total sales and the current balance of the provision account.

The aging-of-accounts method is one in which the probability of non-collection, and therefore bad debt estimation, increases the longer a receivable is outstanding. The reasoning behind this is that the longer a receivable goes without being collected, the less likely a company is to receive it at all. To estimate the correct balance for this account, the company needs to separate its receivables by length of time outstanding and determine the probability that they will never be collected based on that length of time.

The aging-of-accounts method is most likely the more accurate of the two methods, as there is generally a relevant correlation between the length of time a debt is outstanding and the likelihood that it will be paid.

e.

A company does not always know which customers specifically will be unable to pay, although they can be reasonably certain that *someone* will be unable to pay. Therefore, they must use data to reasonably estimate an amount for doubtful receivables in order to be covered in the event of non-collection.

II. Process

f.

i. The debit of 5 results from differing exchange rates between currencies from the time the sale was made to the time the cash was collected. The credit of 26 represents the estimation of new bad debt expense and increases the allowance. The debit of 20 results from actual bad debts written off during the year. The credit of 3 is from acquiring the bad debts of a company that we've purchased.

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

ii. Income Statement Movements:

Account Classification	Account	Dr.	Cr.
Income Statement	Bad and Doubtful Debts Expense	£26,000,000.00	
Balance Sheet	Provision for Bad and Doubtful Debts		£26,000,000.00

Amount Utilized:

Account Classification	Account	Dr.	Cr.
Balance Sheet	Provision for Bad and Doubtful Debts	£20,000,000.00	
Balance Sheet	Trade Receivables		£20,000,000.00

iii. The provision for bad and doubtful debts expense is considered an operating expense on the income statement.

g.

i.

Provision for Sales Returns		
	372	
	53	
71		
	354	

ii. Estimated Sales Returns:

Account Classification	Account	Dr.	Cr.
Income Statement	Sales Returns and Allowances	£53,000,000.00	
Balance Sheet	Provision for Sales Returns		£53,000,000.00

Actual Returns:

Account Classification	Account	Dr.	Cr.
Balance Sheet	Provision for Sales Returns	£71,000,000.00	
Balance Sheet	Trade Receivables		£71,000,000.00

iii. Estimated sales returns are a reduction of gross sales, leading to net sales.

h.

T-Account for gross trade receivables:

Gross Trade Receivables		
1,474		
	20	
5,624		
	443	
	5216	
1,474		

Journal Entries:

Account	Dr.	Cr.
Provision for Bad and Doubtful		
Accounts	20	
Gross Trade Receivables		20
Gross Trade Receivables	5,624	
Sales		5,624
Provision for Sales Returns	443	
Gross Trade Receivables	110	443
Cash	5,216	
Gross Trade Receivables		5,216

III. Analysis

i.

The trade receivables balance reported in note 22 should be adequate to cover these estimated uncollectible amounts.

	Trade		Accounts
	Receivables	Estimated %	estimated
	Balance	uncollectible	uncollectible
Within due date	1,096	2%	21.92
Within due date	1,070	270	21.72
Up to 3 months past due date	228	4%	9.12
3 to 6 months past due date	51	25%	12.75
6 to 9 months past due date	20	50%	10
9 to 12 months past due date	4	60%	2.4
more than 12 months past due			
date	20	90%	18
Total	1,419	•	74.19

j.

The average collection period has significantly shortened between 2008 and 2009, possibly because the company has altered its collection policies to make payments due sooner.

	2009	2008
Credit sales, net	5,624	4,811
Average gross trade receivables	1,474	1,474
Accounts receivable turnover	3.82	3.26
Average collection period	95.66	111.83

k.

Average collection period can be shortened when companies strictly enforce their collection policies. Another way to shorten average collection period is to set up direct deposit banking for customers, so companies don't have to wait for payments from customers to be mailed in.

ACCY 420 CASE 5 SOLUTION

Graphic Apparel

Accounting for Inventory and Current Ratio Analysis

Prepared by Jane Case
November 04 2015

I. Current State of Graphic Apparel

1.

a.

Nicki is the new owner of GAC.

b.

The IRS has always been a user, but this year the bank has become a user of GAC's financial statements since they took out the loan.

c.

The loan is secured through the company's assets.

2.

a.

Nicki has secured \$10,000 in custom sales by the 2014 year end. \$7,500 has been collected in cash. The other \$2,500 has been recorded as accounts receivable because Nicki broke protocol and didn't require payment in advance from her own sporting teams.

b.

Many of the long-standing, reliable customers have been replaced by new start-up companies that are not very well managed. They appear to have difficulty complying with the GAC sales and payment terms. The new customers' doubt as to whether they can pay on time gives rise to the possibility that the net realizable value on those sales may need to be decreased.

c.

Nicki is known for her bold and edgy design styles, and as a result has lost a lot of GAC's more conservative customer base.

d.

This year, there was a leak in the warehouse roof that caused water damage to some of the shirts. In the name of edginess, Nicki still delivered the shirts to customers, hoping the water damage would be accepted as part of the trendy new design. However, some of the shirts have already been returned, and there may be more problems reported in the future.

II. Revenue Recognition

3.

The revenue principle states that revenue should not be recognized until it has been earned.

4.

Currently, GAC recognizes revenue when they receive cash. This method is generally only considered appropriate for long-term custom orders, which are paid for in advance.

5.

For custom orders, the point of sale happens before the sellable object has been completed. The sale is made, and then the custom merchandise is created and delivered.

6.

The best method for recognizing revenue from custom orders is to wait until the revenue has been earned, that is, until the shirts have been made and delivered. Recognizing revenue for the sale of a product that is not yet finished does not comply with GAAP. GAC should not recognize revenue until its obligation associated with that revenue has been fulfilled.

7.

Switching to this GAAP compatible method would create an unearned revenue account, which would be a current liability on GAC's balance sheet. These increased current liabilities would increase the denominator when calculating current ratio, and therefore decrease the ratio.

8.

According to GAAP, accounts receivable must be reported at their net realizable value, meaning the maximum amount the company believes it will actually collect.

III. Accounting for Bad Debts

9.

GAC currently accounts for bad debts using the direct write-off method, whereby bad debts are not accounted for until it is realized that they will not be collected. This method violates the GAAP matching principle, because it often recognizes expense that is related to a previous accounting period. The direct write-off method would only be appropriate for a company that was not required to file financial statements in accordance with GAAP.

10.

As of this year, GAC is required to report its finances in accordance with GAAP, so it can no longer use the direct write-off method to account for bad debts. The number of days to collect receivables increased from 33.28 in 2013 to 45.64 in 2014. This change is most likely a result of the newer customers not being as reliable with their payments.

11.

GAC should be using the allowance method to account for its bad debts, whereby bad debts are estimated at the beginning of the period, and all of the bad debt expense is taken up front. This method complies with the matching principle, as the expense is recognized in the same period in which the bad debts will occur.

12.

In order to comply with GAAP, GAC should be using the allowance method to account for bad debts.

13.

Switching to the allowance method would result in an extra expense on the income statement, bad debt expense, and the allowance account would reduce current assets on the balance sheet. This reduction of current assets would decrease the company's current ratio.

IV. Accounting for Sales Returns

14.

GAC currently reports sales returns only after they have occurred, using no allowance account for sales returns. This method is not appropriate for a company operating under GAAP.

15.

In 2013, the company had no returns, however, they did have sales returns in 2014. Also, the impact of having sold the water-damaged shirts has not yet been fully realized, and more returns are likely in the future.

16.

In circumstances where sales returns are expected, GAAP recommends estimating the amount of the probable returns and setting up an allowance account to provide for those returns once they are realized.

17.

GAC should definitely consider this alternative, as they expect to see returns on the new designs. Sales returns are material to key users of the financial statements because they are a direct reduction of sales revenue. Without accounting for returns, revenue will be overstated.

18.

The allowance method of accounting for sales returns is the best method.

19.

The allowance would be a reduction of accounts receivable and therefore reduce current assets and, by extension, reduce the current ratio.

V. Accounting for Inventory

20.

GAAP requires inventory to be reported at lower of cost or market.

21.

GAC has already been reporting its inventories at lower of cost or market, which is the GAAP recommended method.

22.

This approach should still be used for the current year and for future years. The number of days to sell inventory has increased from 40.56 in 2013 to 96.16 in 2014.

23.

GAC will most likely have to mark down the water-damaged inventory below its cost, as the net realizable value should be decreased to reflect the damage. The 2014 gross profit percentage is 48.32%, indicating that the cost of goods sold is approximately half of the selling price of the goods.

24.

GAC should continue to report its graphic shirt inventory at the lower of cost or market.

25.

Reducing the book value of the damaged inventory will decrease GAC's current assets on the balance sheet, and therefore reduce the current ratio.

VI. Analysis and Recommendations

26.

After all of the proposed changes are made, GAC's current ratio will decrease from 1.35 to 0.68, thus violating the terms of the loan agreement.

27.

Nicki would need to increase current assets by \$16,678 in order to get the current ratio back up to a minimum of one.

28.

Nicki should seek investors for the company to increase her cash and current assets. She should also consider selling her merchandise online, as well as offering incentives to customers who pay promptly.

ACCY 420 CASE 6 SOLUTION

Planes and Garbage

Effect of estimated useful lives of depreciable assets on earnings

Prepared by Jane Case
November 18 2015

Part I: Airline Depreciation Comparison

1.

	Northwest	Delta	United
Book Value January 1, 2015	\$75,000,000.00	\$75,000,000.00	\$75,000,000.00
Residual	\$3,750,000.00	\$3,750,000.00	\$3,750,000.00
Depreciable Amount	\$71,250,000.00	\$71,250,000.00	\$71,250,000.00
Useful Life in Years	15	20	28
Annual Depreciation	\$4,750,000.00	\$3,562,500.00	\$2,544,642.86
Accumulated Deprecation			
December 31, 2008	\$19,000,000.00	\$14,250,000.00	\$10,178,571.43
Book Value December 31, 2008	\$56,000,000.00	\$60,750,000.00	\$64,821,428.57
Sale Price I	\$55,000,000.00	\$60,000,000.00	\$65,000,000.00
Gain (Loss) on Sale I	-\$1,000,000.00	-\$750,000.00	\$178,571.43
Sale Price II	\$60,000,000.00	\$60,000,000.00	\$60,000,000.00
Gain (Loss) on Sale II	\$4,000,000.00	-\$750,000.00	-\$4,821,428.57

2.

Northwest, Delta, and United are all depreciating the exact same type of equipment, however, they are using different useful lives in order to determine annual depreciation expense. One possible reason for the different estimates is that Northwest (who is using the shortest life) plans to replace its plane sooner than the other two. Adversely, United (who is using the longest life) may intend to use the plane until it can no longer be safely operated. Another possibility is that Northwest wants to use a more conservative estimate because they dislike the possibility that the plane could stop being usable before it is fully depreciated.

3.

The first set of sale prices is more realistic because each price closely corresponds to the book value of the purchased asset at the time of the sale. This implies that the sale price is a close reflection on the specific airline's current valuation of the plane being sold.

Part II: Waste Management, Inc. Fraud Analysis

1.

From 1992-1996, the CEO and other executives of Waste Management, Inc. were fraudulently reporting the company's earnings and other financial performance measures. Financial reports were altered to match ideal predetermined income targets. In total, the company's profits were overstated by \$1.7 billion, and shareholders and other investors lost more than \$6 billion once the fraud was uncovered.

2.

Management extended the estimated useful lives of trucks, increased the salvage values of the trucks without supporting justification, and made other unsupported alterations to depreciation estimates. All of these deceitful changes significantly decreased depreciation expense, thereby increasing net income. In short, the longer the company used the trucks, the more they claimed the trucks were worth.

3.

The participating executives fraudulently managed earnings in order to pocket large performance-based bonuses, improve their retirement benefits, and maintain their powerful positions.

4.

Arthur Andersen either knowingly or recklessly issued "clean" opinions on materially falsified audit reports for Waste Management Inc. for the years 1992-1996. In the settlement, Andersen agreed to an antifraud injunction and civil penalty of \$7 million and agreed to be censured for improper professional conduct under the SEC's rules of practice. Additionally, three Arthur Andersen partners agreed to pay civil penalties and were barred from practicing before the SEC as accountants for a minimum of three years, after which they could request reinstatement. One of these partners was barred for a minimum of five years. A fourth partner agreed to a bar from practicing for one year. Andersen did abide by

the settlement and pay the \$7 million. However, one of the four disciplined partners ironically later became the head of Arthur Andersen Worldwide's Risk Management Group.

ACCY 420 CASE 7 SOLUTION

Construct

Liabilities and Contingencies

Prepared by Jane Case
December 09 2015

1. GAAP:

Construct should record a liability for environmental liabilities only if it is probable (greater than 75 percent chance) that a liability has been incurred and if the amount of the liability can be reasonably estimated.

IFRS:

Construct should record a provision if there is a present obligation from the past, a required outflow of resources to fulfill the obligation is probable, and the amount is reliably estimable. The amount recognized should be the closest estimate possible to the amount required.

2. GAPP:

Construct should not record a liability because no amount can be reasonably estimated.

IFRS:

Construct should not record a liability because no amount can be reasonably estimated.

3. GAPP:

Construct should not record a liability in this case. The probability that the EPA will actually assets the penalties is only 60 percent, and this percentage does not qualify as probable.

IFRS:

Construct should record a liability for \$250,000 in this case, as the EPA actually assessing the penalties is more likely than not to occur. A "probable" event under IFRS requires a greater than 50 percent chance of occurrence.

4. GAPP:

Construct should not record a liability for the potential remediation effort at this point, as the cost cannot be reasonably estimated.

IFRS:

Construct should not record a liability for the potential remediation effort at this point, as the cost cannot be reasonably estimated.

5. **GAPP**:

Construct should record an environmental remediation liability for \$1.5 million.

IFRS:

Construct should record an environmental remediation liability for \$1.5 million.

6. **GAPP**:

Construct should record a contingent asset of \$1,000,000.

IFRS:

Construct should not record any contingent asset because contingent assets are not recognized under IFRS.

ACCY 420 CASE 8 SOLUTION

Rite Aid Corporation

Long-Term Debt

Prepared by Jane Case February 03 2016

I. Concepts

a.

- i. Rite Aid's secured debt is all backed by some form of collateral to protect the lender in the case of non-repayment by Rite Aid. Unsecured debt, conversely, is not secured by any collateral. Rite Aid distinguishes between the two types of debt in the notes so that investors and other users can clearly see the different levels of risk and security associated with the company's various loans.
- **ii.** A debt that is "guaranteed" is a debt that is going to be repaid to the lender regardless of whether or not the borrower defaults on the loan. Another company "guarantees" the debt by promising to pay it in the event that the original borrower does not. Rite Aid guarantees the unsecured debt of its subsidiary companies.
- **iii.** "Senior" refers to the credit facility and debt of Rite Aid the parent corporation, as opposed to its various subsidiaries. "Fixed-rate" refers to the rate of borrowing on a loan being fixed, or non-changing over the life of the loan. "Convertible" refers to debt that can be converted into shares of the company's common stock at the option of the note holder.
- **iv.** Rite Aid most likely has many types of debt with varying interest rates because they are borrowing from multiple entities and have different goals and plans associated with different notes and loans. Some of the notes, for example, are convertible into common stock, and this is not a viable option for 100% of the company's long-term debt.

II. Process

b.

Rite Aid's total debt at the end of fiscal year 2009 is \$6,370,899, the current portion is \$51,502, and the lease financing obligations are \$133,764.

c.

i. The face value of the 7.5% secured notes due March 2017 is \$500,000. This is clear because there is no mention of a premium or discount on the note, and the carrying value remains constant each year at \$500,000

ii.

To record issuance of	f the notes		
Cash		\$500,000.00	
	Long Term Notes Payable		\$500,000
To record annual inte	erest expense		
Interest Expense		\$37,500.00	
	Cash		\$37,500.00
To record the maturi	ty of the note		
Notes Payable		\$500,000.00	
	Cash		\$500,000

d.

- **i.** The face value of the 9.375% notes is \$410,000, and the carrying value is \$405,951. These two amounts differ from one another because this debt was issued at a discount.
- ii. Rite Aid paid \$38,437.50 on these notes during fiscal year 2009
- iii. Interest expense on these notes for fiscal year 2009 was \$39,142.50

iv.

To record interest exp	ense		
Interest Expense		\$39,142.50	
	Cash		\$38,437.50
	Discount on Notes Payable		\$705.00

v. The effective interest rate is 9.66%

e.

i.

To record issuance of the notes		
Cash	\$402,620.00	
Discount on Notes Payable	\$7 <i>,</i> 380.00	
Notes Payable		\$410,000.00

ii.

Periods	7
Cash Pmt	39975
PV	402620
FV	410000
Effective Interest Rate	10.12%

iii.

			Bond Discount	
Date	Interest Payment	Interest Expense	Amortization	Net Book Value
30-Jun-09				\$402,620.00
30-Jun-10	\$39,975.00	\$40,750.00	\$775.00	\$403,395.00
30-Jun-11	\$39,975.00	\$40,828.44	\$853.44	\$404,248.44
30-Jun-12	\$39,975.00	\$40,914.82	\$939.82	\$405,188.26
30-Jun-13	\$39,975.00	\$41,009.94	\$1,034.94	\$406,223.20
30-Jun-14	\$39,975.00	\$41,114.69	\$1,139.69	\$407,362.89
30-Jun-15	\$39,975.00	\$41,230.04	\$1,255.04	\$408,617.93
30-Jun-16	\$39,975.00	\$41,357.07	\$1,382.07	\$410,000.00

iv.

To accrue interest expense		
Interest Expense	\$27,166.67	
Discount on BP		\$516.67
Interest Payable		\$26,650.00

 ${f v.}$ The book value of the notes at February 27, 2010 is \$403,136.67 (\$402,620.00 + \$516.67)

vi.

			Bond Discount		Straight-Line
Date	Interest Payment	Interest Expense	Amortization	Net Book Value	Interest Rate
30-Jun-09				\$402,620.00	
30-Jun-10	\$39,975.00	\$41,029.29	\$1,054.29	\$403,674.29	10.1906%
30-Jun-11	\$39,975.00	\$41,029.29	\$1,054.29	\$404,728.58	10.1640%
30-Jun-12	\$39,975.00	\$41,029.29	\$1,054.29	\$405,782.87	10.1375%
30-Jun-13	\$39,975.00	\$41,029.29	\$1,054.29	\$406,837.16	10.1111%
30-Jun-14	\$39,975.00	\$41,029.29	\$1,054.29	\$407,891.45	10.0849%
30-Jun-15	\$39,975.00	\$41,029.29	\$1,054.29	\$408,945.74	10.0589%
30-Jun-16	\$39,975.00	\$41,029.26	\$1,054.26	\$410,000.00	10.0329%

vii. The interest expense for each year never differs by a material amount between the two methods, which is how rite aid justifies using the straight-line method of amortization.

f.

i.

To record repurch	ase of the notes		
Notes Payable		\$810,000.00	
	Cash		\$797,769.00
	Discount on Notes Payable		\$8,481.00
	Gain on Repurchase		\$3,750.00

- **ii.** Rite Aid did not have to pay the face value of the notes upon the repurchase because the notes had not yet reached maturity.
- **iii.** The market rate of interest at the time of the repurchase is higher than the coupon rate and effective rate on the repurchased bonds, making the repurchase a good decision for Rite Aid.

g.

Firms issue convertible bonds in order to delay the dilution of their common stock and EPS, and often are able to issue convertible bonds at lower coupon rates. Investors purchase convertible debt in order to have the option of having common stock in the company at a later date.

III. Analysis

h.

i.

Ratio	Definition	Industry Average	Rite Aid FY '09	Rite Aid FY '08
	Total liabilities/Total			
C	· · · · · · · · · · · · · · · · · · ·	42.020/	120.700/	114 410/
Common-size debt	assets	43.83%	120.79%	114.41%
Common-size	Interest expense/Net			
interest expense	sales	0.35%	7.56%	6.79%
	Total Long-term			
Debt to assets	debt/Total assets	14.41%	76.84%	69.67%
Dept to assets	<u>'</u>	14.41/0	70.84%	09.07/0
	Total long-term			
Long-term debt to	debt/Total			
equity	shareholders' equity	0.26	-3.70	-4.84
Proportion of long-	Long-term debt due in			
term debt due in	one year/Total long-			
one year	term debt	6.11%	0.83%	0.70%
	(Pretax			
	income+interest			
Times-interest-	expense)/Interest			
earned	expense	33.44x	0.069	-5.10

- ii. Rite Aid is significantly worse off than the industry average in every category
- **iii.** Based on their financial ratio analysis, there is considerable doubt about Rite Aid's ability to meet its long-term commitments.

i.

For fiscal years 2008 and 2009, Rite Aid operated at a large net loss, had an overall stockholders' deficit and limited cash flow, and extreme debt. While revenues are considerable, business conditions would have to be extremely favorable in order for Rite Aid to recover from its insolvent financial position. I would give Rite Aid a rating of CCC.

ACCY 420 CASE 9 SOLUTION

Merck & Co., Inc. and GlaxoSmithKline plc

Shareholders' Equity

Prepared by Jane Case February 17, 2016

I. Concepts

٦	١	

- i. Merck is authorized to issue 5,400,000,000 common shares.
- ii. Merck has issued 2,983,508,675 as of December 31, 2007.
- iii. The par value of the shares is \$00.01, which when multiplied by 2,983,508,675 issued common shares leads to the \$29.8 million reported on the balance sheet.
- iv. There are 811,005,791 treasury shares as of December 31, 2007.
- v. The number of common shares outstanding as of December 31, 2007 is the total issued shares (2,983,508,675) minus the treasury shares (811,005,791). There are 2,172,502,884 common shares issued and outstanding as of December 31, 2007.
- vi. The total market capitalization of Merck on December 31, 2007 is calculated as 2,172,502,884 shares outstanding multiplied by the \$57.61 price per share, which is \$125,157,891,147.24

b.

- i. GlaxoSmithKline is authorized to issue 10,000,000,000 ordinary shares.
- ii. There are 6,012,587,026 ordinary shares issued as of December 31, 2007.
- iii. There are 5,373,862,962 ordinary shares in free issue as of December 31, 2007.
- iv. There are 504,194,158 shares held in treasury as of December 31, 2007.

v. Share capital is the total reported dollar value of your ordinary shares on the books at par value, and the share premium account is the additional market value of the shares over the par value. These accounts are called "common stock" and "additional paid in capital" respectively for a US GAAP company.

c.

Companies pay dividends to provide shareholders with a return on their investment, and to attract additional investors to the company. Paying dividends also makes a company appear financially secure. When a company pays dividends, the stock price generally tends to drop starting on the ex dividend date because the present value of all of that company's expected future dividends has now decreased.

d.

Companies repurchase their own shares and hold them in treasury for a few different reasons. Reducing the amount of shares outstanding causes earnings per share to increase, which looks good on financial statements and is attractive to future investors. Another reason that companies purchase treasury shares is to hold them until the market price of the shares increases and reissue them at that time. Also, a company can increase its stake in itself by repurchasing its own shares in order to prevent a takeover by another company.

II. Process

e.

To Record Dividend Activity for 20	07 - Merck	
Dividends Declared	\$3,310,700,000.00	
Cash		\$3,307,300,000.00

Dividends Payable

\$3,307,300,000.00 \$3,400,000.00

f.

i.

To Record Dividend Activity for 2007 - GS	To	Record	Dividend	Activity	for 2007	' - GSK
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Dividends Declared £ 2,793,000,000.00

Cash £ 2,793,000,000.00

ii. Because GSK operates under IFRS, they appropriately record dividends only when they are paid, and they do not typically pay dividends until two quarters later than the time from which they arose. In order to reconcile dividends declared with the dividends recorded in the statement of cash flows, one must look at the cash dividends from the third and fourth quarters of 2006 and the first and second quarters of 2007. The reconciliation (in millions) is 671+785+670+667 = \$2,793.

g.

- i. Merck accounts for its treasury stock at cost, rather than at par value, providing users of the financial statements with an accurate depiction of the market value of those shares at the time of the repurchase.
- ii. Merck repurchased 26.5 million shares during 2007.
- iii. In total, Merck paid \$1,427,700,000 to repurchase 26.5 million shares, which is an average price of \$53.95 per share. Purchasing treasury shares is a financing activity found in the statement of cash flows.
- iv. Treasury stock cannot be disclosed as an asset because it is not classified as an asset. A company cannot record an interest in itself as an asset; the holding and reissuing of treasury shares is a financing activity and a method of raising capital. Treasury stock is classified as a contra-equity account, reducing the total balance of the common stock account.

h.

- i. GSK repurchased 285,034,000 shares on the open market during 2007. 269,000,000 of these shares were held in treasury and 16,000,000 of these shares were cancelled.
- ii. GSK paid an average of £13.09 for each repurchased share during 2007.

iii. Movements in equity must be recorded under US GAAP in the Statement of Stockholders' Equity.

To Record Purchase of Treasury Shares -GSK

Retained Earnings

£ 3,750,000,000.00

Cash

£ 3,750,000,000.00

III. Analysis

i.

	Merck		GSK
	2007	2006	2007
Dividends Paid	\$3,307,300,000.00	\$3,322,600,000.00	£2,793,000,000.00
Shares Outstanding	2172502884	2167785445	5373862962
Net Income	\$3,275,400,000.00	\$4,433,800,000.00	£6,134,000,000.00
Total Assets	\$48,350,700,000.00	\$44,569,800,000.00	£31,003,000,000.00
Operating Cash Flows	\$6,999,200,000.00	\$6,765,200,000.00	£6,161,000,000.00
Year-end Stock Price	\$57.61	\$41.94	£97.39
Dividends Per Share	\$1.52	\$1.53	£0.52
Dividend Yield	2.64%	3.65%	0.53%
Divided Payout	1.01	0.75	0.46
Dividends to Total Assets	7%	7%	9%
Dividends to Operating Cash			
Flows	47%	49%	45%

Merck's dividend related ratios remained fairly constant from 2006 to 2007, however, both dividends per share and dividend yield decreased slightly, while dividend payout increased. Dividends to total assets remained constant

For the year 2007, GSK's dividends per share and dividend yield are both lower than Merck's. However, dividends to total assets are better at GSK than at Merck. The dividends to operating cash flows are comparable between the two companies, with Merck's being slightly more favorable.

ACCY 420 CASE 10 SOLUTION

State Street Corporation

Marketable Securities

Prepared by Jane Case
March 2, 2016

I. Concepts

a.

- i. In general, trading securities are short-term investments in both debt and equity that a firm intends to sell within one year.
- ii. The company would debit Cash for the amount received and credit either Interest Revenue or Dividend Revenue.

To record dividend/interest revenue from trading securities

Cash \$1.00

Dividend/Interest Revenue

\$1.00

iii. The company would debit the Investment in Trading Securities and credit an Unrealized Gain – Trading Securities for the amount of the increase.

To record an increase in the fair market value of trading securities

Investments - Trading Securities

\$1.00

Unrealized Gain - Trading Securities

\$1.00

b.

- i. Essentially, available for sale securities are equity investments that don't fit into either the trading or held-to-maturity classification. They are securities for which the company has no direct intentions to sell within a short period of time. Gains or losses are recorded in equity when the securities change in fair value between periods.
- ii. The company would debit Cash and Credit either Interest Revenue or Dividend Revenue

To record dividend/interest revenue from available for sale securities

Cash \$1.00

Dividend/Interest Revenue \$1.00

iii. The company would debit the Investments in Available for Sale Securities and credit Unrealized Holding Gain/Loss – Other Comprehensive Income

To record an increase in the fair market value of available for sale securities

Investments - Available for Sale

\$1.00

Unrealized Gain/Loss - OCI

\$1.00

c.

- i. Held to Maturity securities are investments in debt only (because equity investments have no maturity date) that the company intends to hold until their eventual maturity.
- ii. There would be no journal entry to record the change in fair value for held to maturity securities.

II. Process

d.

i. The balance in the Trading Account Assets account is \$637,000,000 as of December 31, 2012. This amount is also the market value, since trading securities are always on the books at fair value.

ii.

To adjust Trading Account Assets to Fair Market Value

Trading Account Assets

\$85,000,000.00

Unrealized Holding Gain - Trading Account Assets

\$85,000,000.00

e.

i. The balance in the Investment Securities Held to Maturity account is \$11,397,000,000 as of December 31, 2012.

ii. The fair market value of Investment Securities Held to Maturity as of December 31, 2012 is \$11,661,000,000.

iii. The amortized cost of the Held to Maturity securities is \$11,379,000,000. "Amortized cost" represents the carrying value of the bonds, which are amortized from their

original cost over the course of their life via the effective interest method. The

amortized cost would be lower than the original cost of the securities.

iv. The fair market value of the held to maturity securities is higher than their amortized

cost, and there are net unrealized gains on the securities, meaning that the securities

have increased in value since the time of their purchase. The increase in value of the securities means that interest rates must also have risen since the time of the purchase.

f.

i. The balance in the Investment securities available for sale account as of December 31,

 $2012\ is\ \$109,\!682,\!000,\!000,$ which represents their fair value at that time.

ii. As of December 31, 2012, there are \$2,001,000,000 in unrealized gains and \$882,000,000 of unrealized losses on the available for sale securities, netting out to

\$1,119,000,000 of unrealized gains.

iii. There are \$55,000,000 of net realized gains from the sale of available for sale securities

in 2012. This amount will appear in the statement of comprehensive income as an increase to total comprehensive income. The gains will not specifically impact the

company's statement of cash flows, however, the cash proceeds from the sales will appear as an increase to cash flows in the investing activities section.

g.

i.

To record the purchase of available for sale securities

Investment Securiies Avaialble for Sale

\$60,812,000,000.00

Cash

\$60,812,000,000.00

ii.

To record the sale of available for sale securities

Cash \$5,399,000,000.00 Unrealized Holding Gains - OCI \$67,000,000.00

Net Realized Holding Gains \$55,000,000.00 Investment Securities Available for Sale \$5,411,000,000.00

iii. The original cost of the available for sale securities sold in 2012 is their book value of \$5,411,000,000 plus their net unrealized holding gains of \$67,000,000, which is \$5,478,000,000.

ACCY 420 CASE 11 SOLUTION

Groupon

Revenue Recognition

Prepared by Jane Case
March 25, 2016

1.

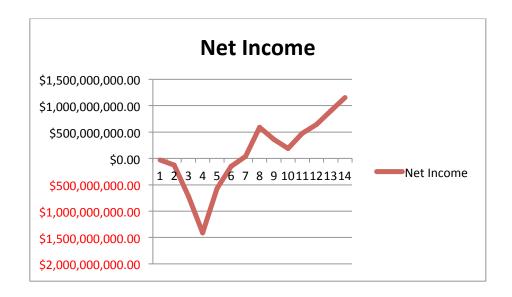
Groupon's business model revolves around selling coupons for other retailers' product and services once a significant number of customers have expressed interest, and then paying a portion of the proceeds to the actual retailers once customers have redeemed the coupons. While Walmart's business model also concerns low-cost sales of a wide variety of products, the main difference between the two lies in the fact that Groupon is not selling its own products and services, but rather facilitating the sale for others. The Amazon business model is one of the most complex currently in existence, bringing together elements from both the models of Groupon and Walmart. Amazon's exclusively online retail model is a combination of selling their own self-manufactured products as well as selling the products of many other retailers and even individuals.

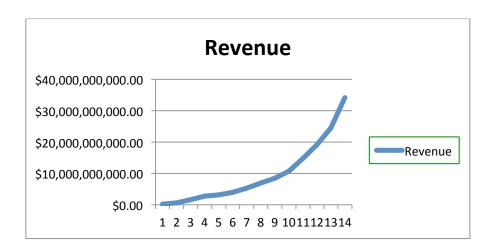
Despite the differences in their business models, Groupon, Walmart, and Amazon are faced with many common business risks. The latest 10-K of all three companies cite intense competition and the strains of expansion as relevant risks, while Groupon specifically mentions difficulty of maintaining revenue growth and constantly adapting business model. In the last decade, the internet has completely revolutionized the retail business, which has created a great deal of uncertainty for companies and inhibited their ability to estimate future performance, making accurate financial reporting and predicting more difficult than ever.

2.

For new companies in the technological age of business, there is neither previous operating history nor available data from comparable business in the industry to rely on when making predictions and valuation models. In situations like these, it is nearly impossible to predict how long it will take a company to earn a positive net income. In the case of Amazon, it took them seven years to earn their first profit, however, their stock price skyrocketed during these years of net loss due to their constantly increasing revenue. Below are presented three graphics representing Amazon's annual net income, annual revenue, and annual yearend adjusted stock price for the years 1997 (year 1) to 2010 (year 14).

2. Contd.







3.

Between 2009 and 2010, Groupon's gross margin percentage improved under both the gross and net methods of recognition. The asset turnover ratio decreased in 2010, however, this is largely due to the fact that total assets increased by a factor of more than 25 from 2009 to 2010, while revenue did not increase at an equal rate.

Groupon Common Size Income Statement						
Account	2009 Gross	2009 Net	2010 Gross	2010 Net		
Revenue	100%	100%	100%	100%		
Cost of Sales	64%	30%	61%	10%		
Gross Margin	36%	70%	39%	90%		
Marketing Expense	15%	34%	37%	91%		
Gen and Admin Expense	25%	44%	33%	68%		
Other Expenses			28%	65%		
Net Loss	-4%	-8%	-59%	-134%		
Asset Turnover Ratio	2.032		1.87			

4.

a.

In the original S-1, Groupon reported \$713.4 Million in revenues for 2010, and in the amended S-1, Groupon reported \$312.9 Million in revenues for 2010. The difference is caused by the switch to using the net method of recognizing revenue, that is, only recognizing the portion that does not get sent to the actual retailers of the goods and services.

b.

Groupon most likely preferred reporting under the gross method, as the change drastically reduced their overall revenue intake.

c.

Groupon believed themselves to be the primary obligor in the transaction, thus justifying their use of the gross method of recording revenue in accordance with ASC 605-45-45.

d.

Groupon's argument identifying themselves as the primary obligor of the transactions they facilitate was weak, due to the fact that they are not actually selling or in control of the underlying goods or services.

5.

a.

US GAAP allows the recognition of revenue when right of return exists only if companies are able to reasonable estimate sales returns. The company must recognize probable returns by adding to an allowance account for the likely amount of returns each time revenue is recognized for returnable goods or services. Groupon previously believed itself able to reasonably estimate sales returns, however, their constant entrance into new and unpredictable markets has made this estimation increasingly difficult.

b.

Because their return policy is extremely open ended, even going so far as to promise to look at refunds on a case-by-case basis, and because they have shown themselves to be unable to predict huge and sudden increases in returns, I do not agree with Groupon's current method of accounting.

c.

Groupon might have considered either making its refund policy stricter, or they could stop recognizing revenue before products and services have been redeemed by their customers, instead choosing to defer it. This would have decreased revenue in all years for Groupon, thus negatively affecting many analytical ratios on which stockholders rely, however, it may also have spared them from the late 2011 returns disaster for which they were woefully unprepared.

6.

Groupon's statement of cash flows is difficult to decipher given that no specific increases of decreases to operating cash flow are listed, however, it is possible that the adjustments for the effects of non-cash accounts lead to Groupon's operating cash flows remaining unchanged after this drastic restatement. For example, the increase of accounts payable causes operating cash flow to increase.

ACCY 420 CASE 12 SOLUTION

ZAGG Inc.

Deferred Income Taxes

Prepared by Jane Case
April 13 2016

I. Concepts

a.

Book income, also known as financial income, is the income a company reports before calculating income tax expense. Book income often differs from taxable income due to permanent or temporary differences between the two. These differences are caused by income and expenses that a company is required to report but that for some reason are not taxable or deductible. ZAAG's book income for fiscal year 2012 is \$23,898,000.

b.

- i. A permanent tax difference is caused by an income or an expense that will never be taxable or deductible in any period. For example, if a corporation pays a \$10,000 fine, they will record the expense, however, this expense is not tax deductible. Therefore, there will be a \$10,000 permanent difference between book income and taxable income for the period.
- ii. A temporary tax difference is caused by income that has been received (at which time it is recognized for tax purposes) but not yet earned or recognized for financial purposes. For example, if a company received a \$10,000 rent payment for the months of December 2015 and January 2016, all \$10,000 would be recognized for tax purposes, however, only \$5,000 would be recognized as income in 2015 for financial purposes.
- **iii.** The statutory tax rate is the rate imposed by law or by statute.
- **iv.** The effective tax rate is the percentage of a company's income they actually pay in taxes after all credits and deductions are taken into account.

c.

Companies report deferred income taxes as part of their total income tax expense in order to give users of the financial statements a more accurate picture of the company's overall financial position. Deferred income taxes will be paid in subsequent periods, and companies account for this fact when they become aware of it.

d.

A deferred tax asset is an amount arising from a temporary difference that reduces the amount of income tax expense a company will have in a future period. For example, if a company books warranty expense for a product at the time of the sale, it is not allowed to record the expense for tax purposes until the warranty work is actually performed. Thus, it will have a future tax benefit or deferred tax asset.

A deferred tax liability is an amount arising from a temporary difference that causes tax expense to be higher in a future period, or deferred to a later period. For example, if a company uses straight-line depreciation for financial purposes, but uses accelerated depreciation for tax purposes, their expenses in the early years (for tax purposes) will be higher, and thus tax expense will be lower. However, as time goes on, their expenses (for tax purposes) will be lower, and therefore their tax expense will be higher in future periods. In effect, the company is delaying the payment of income taxes.

e.

A deferred income tax valuation allowance is used to offset deferred tax assets in cases when the company believes it is likely they will not be able to realize the full benefit from the DTA. The valuation allowance should be recorded if there is more than 50 percent probability that some portion of the asset will not be realized.

II. Process

f.

i.

To record income tax provision for fiscal year 2012				
Income Tax Expense	9,39	3.00		
Deferred Tax Asset	8,29	3.00		
	Income Taxes Payable	17,686.00		

- **ii.** ZAAG has (in thousands) \$14,302 in total deferred tax assets for 2012, minus \$6,300 in deferred tax assets from 2011, yielding \$8,002 in net deferred tax assets for 2012. Total deferred tax liabilities for 2012 are \$794, and accounting for the \$1,086 in deferred tax liabilities in 2011 yields a net deferred tax asset of \$292. Netting together the deferred tax assets and liabilities for 2012 yields the \$8,294 of net deferred tax assets recorded in 2012 (attributing the slight difference to rounding.)
- **iii.** ZAGG's 2012 effective tax rate is calculated by dividing the income tax expense by the income before tax, or \$9,393/\$23,898, which equals 39.30%. The effective tax rate is higher than the statutory rate of 35% because the statutory amount of tax expense, \$8,364, is increased by non-deductible expenses, a return to provision adjustment, and an increase in the valuation allowance.
- **iv.** \$6,912 of the deferred tax assets is reported in the current assets section, and the remaining \$6,596 is reported in the long-term assets.

g.

- **i.** As of December 31, 2012, the company has recognized more depreciation expense for tax purposes than for book purposes. It is clear that ZAGG is using accelerated depreciation for tax expense because the temporary difference has resulted in a deferred tax liability.
- **ii.** The cumulative difference in depreciation expense between the two systems as of December 31, 2012 can be estimated by dividing the deferred tax liability of \$794 by the statutory tax rate of 38%, yielding \$2,089.
- **iii.** The reported property and equipment net of accumulated depreciation for 2012 is \$4,862, however, had ZAGG been using the accelerated tax method of depreciation, it would be further depreciated by \$2,089. Had tax depreciation been used throughout the assets' lives, the net property and equipment would be \$2,773.

h.

- i. During the year ended December 31, 2012, ZAGG has recorded more bad debt expense on the books than it has for tax purposes. It is clear that ZAGG has recorded more expense on the books because the temporary difference resulted in a deferred tax asset. ZAGG records bad debt expense when the allowance for doubtful accounts is set up, however, for tax purposes, bad debt expense cannot be deducted until it has been recognized through the non-collection of debt.
- **ii.** The difference in bad debt expense between the book and tax system for the year ended December 31, 2012 can be estimated by dividing the change in the deferred tax asset relating to the allowance for doubtful accounts of \$229 by the statutory tax rate of 38%, yielding \$603.
- i. The valuation allowance has a balance of \$713 as of December 31, 2012. ZAGG recorded this valuation against the deferred tax asset generated by losses on its equity method investment in HzO after determining that it is more likely than not that the amount will not be realizable.

III. Analysis

j.

For the year ended December 31, 2012, ZAGG has deferred tax assets of \$13,508. Dividing this amount by the old tax rate of 35% shows that this DTA is based on future deductible amounts of \$38,594. If that future deductible amount is multiplied by the new tax rate of 30%, the result of \$11,578 shows the amount that the deferred tax asset needs to be. Therefore, the deferred tax asset account needs to be reduced by \$1,903.

To record adjustment to deferred tax asset as a result of changing tax rate			
Income Tax Expense		1,903	
	Deferred Tax Asset	1,903	

ACCY 420 CASE 13 SOLUTION

Johnson & Johnson

Retirement Obligations

Prepared by Jane Case
April 20 2016

I. Concepts

a.

- i. A defined benefit plan, as the name implies, defines the specific benefit that will be payable to the employee upon retirement. The benefit is based on a formula accounting for the employees' salary increases and remaining years of service. Employers assume the risk for defined benefit plans because they alone are responsible for ensuring that the benefit obligations are met. For a defined contribution plan, the employer makes contributions each year based on the formula outlined in the plan. The accounting for defined contribution plans is much more simple and straightforward. Johnson & Johnson uses both defined contribution and defined benefit plans.
- **ii.** Retirement plan obligations are liabilities because they represent what is owed to employees upon their retirement.
- **iii.** In order to account for retirement plan obligations, assumptions must be made regarding the frequency and amount of employee pay increases, and assumptions must be made regarding the employees' remaining years of service.

b.

Pension service costs represent the present value of projected retirement benefits earned by retired employees in the current period. It is typically the largest component of pension expense in any given year.

Interest cost represents the interest accrued on the beginning of the year balance of the projected benefit obligation.

Actuarial gains and losses arise from the difference between the actual return on plan assets and the expected return on plan assets.

Benefits paid to retirees are the payments maid to plan beneficiaries. Benefits are paid out of the plan assets.

c.

Actual return on pension investments is made up of the dividends, capital gains, and interest earned from pension plan assets. They must be reconciled to expected return on plan assets for accounting purposes.

Company contributions to the plan are investments made by employers in various funds. The return on these investments is intended to meet the plan benefits. The contributions are perpetually reviewed by an actuary to ensure that the pension fund will meet its future payment obligations.

Benefits paid to retirees are paid out of the plan assets, and represent the actual payments retired employees receive each year.

d.

Annual pension expense is computed using the expected return on plan assets, which is determined by multiplying the fair value of the plan assets at the beginning of the year by the estimated rate of return for the year. This expected return reduces pension expense because the higher the return, the less the employer needs to contribute. The plan assets, however, are increased each year by the return on plan assets that actually occurred during the year, regardless of what the estimate was. When budgeting for the year, it is necessary to calculate the expected return on plan assets, however, only the actual return can be included in the plan assets.

e.

The primary difference between the company's retirement plans and its other benefit plans is that the retirement plans have defined benefits and are funded in advance. According to Johnson and Johnson, "The Company does not fund retiree health care benefits in advance and has the right to modify these plans in the future."

II. Process

f.

i. Johnson & Johnson reported pension expense of \$646 (all dollar amounts are in millions) on its 2007 income statement.

ii.

To record interest and service cost portions of pension expense for 2007				
Pension Expense	1253			
Cash		1253		

g.

- i. Johnson & Johnson's retirement plan obligation is \$12,002 as of December 31, 2007. This value represents the amount projected to be owed to employees through the duration of their retirement. The value is relatively reliable, however, it relies on several assumptions such as the remaining lives of the employees and the timing and amount of pay raises during their remaining employment. Additionally, the number will change as the number of employees changes.
- ii. The pension-related interest cost for the year 2007 is \$656. The projected benefit obligation at the beginning of the year was \$11,660, meaning that the average interest rate used to calculate pension-related interest cost is 5.63 percent. This interest rate seems reasonable because it is similar to the rate used by other comparable companies in the industry. For example, Merck & Co. had a pension plan discount rate of 6.5 percent as of December 31, 2007.
- **iii.** Johnson & Johnson's benefits paid from plan assets during 2007 were \$481. The benefits are paid in cash. Both the retirement plan obligation and the plan assets are reduced by the full amount of benefits paid for the year.

h.

i. Johnson & Johnson's has \$10,469 of plan assets as of December 31 2007. This represents the fair value of the plan assets at the end of the year.

- **ii.** In 2006, expected return on plan assets was \$701, and actual return on plan assets was \$966. In 2007, expected return on plan assets was \$809, and actual return on plan assets was \$743. The differences are most likely a result of changing economic factors. Johnson & Johnson expected the return to be lower in 2007 than in 2006, but the actual return was even lower than what they had anticipated. The difference between the two actual returns is significant, as it amounts to more than two hundred million dollars and causes the company to have to make greater contributions to the plan in order to meet the benefit obligation. Because the actual return is the one out of which benefits get paid, it would better reflect the economics of the company's pension expense.
- **iii.** The plan participant contributions were \$47 in 2006 and \$62 in 2007, and the company contributions were \$259 in 2006 and \$317 in 2007.
- **iv.** Johnson & Johnson's plan assets for their U.S. and international retirement plans consist of both equity and debt securities, with the majority of the assets (67-79%) being investments in equity securities.

i.

At the end of 2006, the plan was underfunded by \$2,122. At the end of 2007, the plan was underfunded by \$1,533. The funding status of the pension plan is included in the liabilities section of the balance sheet, under "Employee related obligations."