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## A Comprehensive Analysis of Corporate Financial Information Through Integrated Case Studies

Tanner West

*University of Mississippi. Sally McDonnell Barksdale Honors College*

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# **A Comprehensive Analysis of Corporate Financial Information Through Integrated Case Studies**

**By  
Tanner Henderson West**

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 2017

Approved By

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Advisor: Dr. Victoria Dickinson

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Reader: Dean Mark Wilder

## **Abstract**

**TANNER WEST: A Comprehensive Analysis of Corporate Financial Information  
Through Integrated Case Studies  
(Under the direction of Dr. Victoria Dickinson)**

This report is an analysis of thirteen case studies concerning various topics in accounting. The purpose of this report is to analyze, explain, and evaluate specific concepts in accounting through the thirteen case studies. These case studies were prepared over the course of the 2015-2016 academic year through the ACCY 420 honors course. Accounting concepts covered throughout the cases include: pensions, tax research, financial reporting, and long-term liabilities. Each case study includes the executive summary, the questions responses, and additional calculations. Some case studies are about real world companies while others involve fictional companies and accounting scenarios. The ultimate goal of this report is to explain and discuss specific accounting concepts through real and fictitious scenarios in a manner that anyone could reasonably understand.

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**Case One**  
**Glenwood Heating, Inc. & Eads Heater, Inc. -Financial**  
**Analyses**

## **Executive Summary**

The goal of this financial analysis is to help the user/reader decide which firm to invest in based on a fair and honest judgment of the 20X1 fiscal year financial statements and information. This report uses the following financial tools to help make judgments about the firms:

- Balance Sheet
- Statement of Retained Earnings
- Income Statement
- Statement of Cash Flows
- Comparative Ratio Analysis

*Appendices, worksheets, and calculations are included in the back of the report.*

This report discusses the financial statements and managerial decisions of Glenwood Heating, Inc. and Eads Heater, Inc. Both firms began in the same year and are within the same industry and region. These two firms have made the same accounting and managerial decisions except for the following:

- Estimation of Allowance for Bad Debts
- Inventory System
- Depreciation of Long-Term Assets
- Operating vs. Financing Leases

This report recommends investing in Eads Heater, Inc. and discusses reasons for investment on three different levels:

- Financial outlook- effect of accounting and managerial decisions
- Strategy- stability of eight year lease
- Future considerations- what to consider in the coming years

The report explains why Eads Heater, Inc. seems to underperform in some regards while excelling in others. It also looks at the future outlook of the firm based on predetermined decisions. Ultimately, this will help the user/reader see that Eads Heater, Inc. is the most stable firm with the highest long-term profitability.

## **Financial Outlook**

### *Income Statement*

Eads Heater, Inc. total expenses (not including income tax expense) are \$17,836 more than those of Glenwood Heating, Inc. This can be attributed to three differences:

- Estimation of bad debts
- Depreciation of long-term assets
- Added interest expense from payment of leased equipment

Eads Heaters also uses LIFO instead of FIFO causing an \$11,800 increase in Cost of Goods Sold (COGS).

These factors are responsible for the lower net income seen in the income statement of Eads Heater.

### *Statement of Cash Flows*

Eads Heater, Inc. has more cash for the following reasons:

- Higher depreciation expense
- Lower accounts receivable
- Lower inventory
- Lease payable

These all stem from previously mentioned accounting and managerial decisions made by Eads Heater, Inc.

Investors should expect to see net income and profitability increase while cash flow will decrease in future periods as a result of the financed lease agreement. However, “cash is king”.

### *Financial Ratios*

Eads Heater, Inc. appears to be less liquid because of its LIFO inventory valuation as well as its estimation of bad estimates.

The firm appears to be less profitable because of a lower net income as result of previously mentioned reasons.

Eads Heater will always have a higher debt ratio as a result of its leased equipment depreciation and its subsequent payment schedule\*.

Times interest earned will increase as interest expense decreases as a result of paying off the leased equipment. *See Appendix 1-3*

### **Strategy**

The leased equipment is the single greatest distinguishing financial factor that separates the two firms. By agreeing to an eight year lease agreement, Eads Heater has the following advantages:

- Secured source of equipment at a known cost
- Value for yearly payment of leased equipment i.e. appears at long-term asset in balance sheet
- Increased long-term profitability
- Initial higher cash flows

The most important of these is the stability that comes with knowing expected costs of equipment over the next eight years.

This outweighs the following disadvantages of the leasing the equipment:

- Lower solvency
- Initial lower profitability
- Lack of mobility within lease

### **Future Considerations**

The investor should consider the following when considering Eads Heater, Inc. for investment:

- The firm will become more profitable throughout the life of the lease.
- LIFO inventory valuations negatively affects net income and positively affects cash flows.
- Overestimation of bad debt makes the firm seem less liquid, and it also understates net income and overstates cash flows.
- Double-declining depreciation negatively affects net income and positively affects cash flows.



*In conclusion, Eads Heater, Inc. would make a better investment because it offers more stability and sustainable net income. It does, however, make the firm less solvent and more difficult to take advantage of other business opportunities. Even with this consideration, the certainty of the future of the firm outweighs unrealized opportunities.*

## Financial Ratio Comparisons

**Figure 1-1**

	Glenwood Heating, Inc.	Eads Heater, Inc.
<b>Liquidity Ratios</b>		
Current Ratio	3.0445	2.4554
Acid-test Ratio	1.8616	1.6383
Accounts receivable turnover	4.0495	4.2201
Days to collect receivables	90.1	86.5
Inventory turnover	2.8185	3.7020
Days to sell inventory	129.5	98.6
Operating cycle	219.6	185.1
<b>Profitability Ratios</b>		
Gross profit margin	55.58%	52.62%
Profit margin	23.27%	17.70%
Return on assets (ROA)	14.43%	10.02%
Return on owners' equity (ROE)	40.40%	34.01%
Earnings per share (EPS)	28.9819	22.0359
<b>Long-Term Solvency Ratios</b>		
Debt ratio	64.28%	70.54%
Times interest earned	5.4722	3.6855

*See Appendix 1-1 for calculations*

*See Balance Sheet to understand Current Ratio and Acid-test Ratio*

## Income Statement Comparisons

**Figure 1-2**

Glenwood Heating, Inc. Income Statement For Year End Dec. 31, 20X1			Eads Heater, Inc. Income Statement For Year End Dec. 31, 20X1		
Sale Revenue		\$398,500	Sale Revenue		\$398,500
Cost of Goods Sold		<u>\$177,000</u>	Cost of Goods Sold		<u>\$188,800</u>
Gross Profit		\$221,500	Gross Profit		\$209,700
Operating Expenses			Operating Expenses		
	Bad Debt Expense	\$ 994		Bad Debt Expense	\$ 4,970
	Depreciation expense	\$19,000		Depreciation expense	\$41,500
	Rent Expense	\$16,000		Other Operating Expenses	\$34,200
	Other Operating Expenses	\$34,200			<u>\$ 80,670</u>
Income From Operations		<u>\$ 70,194</u>	Income From Operations		<u>\$129,030</u>
Other Expenses and Losses		\$151,306	Other Expenses and Losses		
	Interest Expense	<u>\$ 27,650</u>		Interest Expense	<u>\$ 35,010</u>
Income from continuing ops. before income tax		\$123,656	Income from continuing ops. before income tax		\$ 94,020
Income Tax		<u>\$ 30,914</u>	Income Tax		<u>\$ 23,505</u>
Net Income		<u>\$ 92,742</u>	Net Income		<u>\$ 70,515</u>

**Retained Earnings Comparisons**  
**Figure 1-3**

<b>Glenwood Heating, Inc.</b>		<b>Eads Heater, Inc.</b>	
<b>Statement of Retained Earnings</b>		<b>Statement of Retained Earnings</b>	
<b>For Year End Dec. 31, 20X1</b>		<b>For Year End Dec. 31, 20X1</b>	
Beg. Retained Earnings, Jan. 1	\$ -	Beg. Retained Earnings, Jan. 1	\$ -
Net Income	\$ 92,742	Net Income	\$ 70,515
	\$ 92,742		\$ 70,515
Less: Dividends	\$ 23,200	Less: Dividends	\$ 23,200
End Retained Earnings, Dec. 31	\$ 69,542	End Retained Earnings, Dec. 31	\$ 47,315

**Balance Sheets Comparisons**  
**Figure 1-4**

<b>Glenwood Heating, Inc.</b>		<b>Eads Heater, Inc.</b>	
<b>Balance Sheet</b>		<b>Balance Sheet</b>	
<b>For Year End Dec. 31, 20X1</b>		<b>For Year End Dec. 31, 20X1</b>	
<b>Assets</b>		<b>Assets</b>	
<b>Current Assets</b>		<b>Current Assets</b>	
Cash	\$ 426	Cash	\$ 7,835
Accounts Receivable	\$ 99,400	Accounts Receivable	\$ 99,400
Less: Allowance for Doubtful Accounts	\$ 994	Less: Allowance for Doubtful Accounts	\$ 4,970
	\$ 98,406		\$ 94,430
Inventory	\$ 62,800	Inventory	\$ 51,000
Total Currents Assets	\$161,632	Total Currents Assets	\$153,265
<b>Long-Term Assets</b>		<b>Long-Term Assets</b>	
Land	\$ 70,000	Land	\$ 70,000
Building	\$350,000	Building	\$350,000
Less: Acc. Depreciation, Building	\$ 10,000	Less: Acc. Depreciation, Building	\$ 10,000
	\$340,000		\$340,000
Equipment	\$ 80,000	Equipment	\$ 80,000
Less: Acc. Depreciation, Equipment	\$ 9,000	Less: Acc. Depreciation, Equipment	\$ 20,000
	\$ 71,000		\$ 60,000
Total Long-Term Assets	\$481,000	Leased Equipment	\$ 92,000
Total Assets	\$642,632	Less: Acc. Depreciation, Leased Equip.	\$ 11,500
<b>Liabilities and Stockholders' Equity</b>			\$ 80,500
<b>Current Liabilities</b>		Total Long-Term Assets	\$550,500
Accounts Payable	\$ 26,440	Total Assets	\$703,765
Interest Payable	\$ 6,650	<b>Liabilities and Stockholders' Equity</b>	
Current Maturities of Notes Payable	\$ 20,000	<b>Current Liabilities</b>	
Total Current Liabilities	\$ 53,090	Accounts Payable	\$ 26,440
<b>Long-Term Liabilities</b>		Interest Payable	\$ 6,650
Notes Payable	\$360,000	Current Maturities of Notes Payable	\$ 20,000
Total Liabilities	\$413,090	Current Maturities of Lease Payable	\$ 9,330
<b>Stockholders' Equity</b>		Total Current Liabilities	\$ 62,420
Common Stock	\$160,000	<b>Long-Term Liabilities</b>	
Retained Earnings	\$ 69,542	Notes Payable	\$360,000
Total Stockholders' Equity	\$229,542	Lease Payable	\$ 74,030
Total Liabilities and Stockholders' Equity	\$642,632	Total Liabilities	\$496,450
		<b>Stockholders' Equity</b>	
		Common Stock	\$160,000
		Retained Earnings	\$ 47,315
		Total Stockholders' Equity	\$207,315
		Total Liabilities and Stockholders' Equity	\$703,765

*Current Maturities of Notes Payable and Lease Payable are seen as current liabilities with each firm. This affects current and acid-test ratio.*

**Cash Flow Comparisons**  
**Figure 1-5**

Glenwood Heating, Inc. Statement of Cash Flows For Year End Dec. 31, 20X1		Eads Heater, Inc. Statement of Cash Flows For Year End Dec. 31, 20X1	
<b>Cash Flows from operating activities</b>		<b>Cash Flows from operating activities</b>	
Net Income	\$ 92,742	Net Income	\$ 70,515
Adjustments to reconcile net income to net cash provided by operating activities:		Adjustments to reconcile net income to net cash provided by operating:	
Depreciation Expense	\$ 19,000	Depreciation Expense	\$ 41,500
Increase in Acct. Receivable (net)	\$ (98,406)	Increase in Acct. Receivable (net)	\$ (94,430)
Increase in Inventory	\$ (62,800)	Increase in Inventory	\$ (51,000)
Increase in Acct. Payable	\$ 26,440	Increase in Acct. Payable	\$ 26,440
Increase in Interest Payable	\$ 6,650	Increase in Interest Payable	\$ 6,650
Net Cash used by operating activities	\$ (16,374)	Net Cash used by operating activities	\$ (325)
<b>Cash Flows from investing activities</b>		<b>Cash Flows from investing activities</b>	
Purchase of Land	\$ (70,000)	Purchase of Land	\$ (70,000)
Purchase of Building	\$ (350,000)	Purchase of Building	\$ (350,000)
Purchase of Equipment	\$ (80,000)	Purchase of Equipment	\$ (80,000)
Net Cash Used by investing activities	\$ (500,000)	Payment of Leased Equipment	\$ (92,000)
<b>Cash Flow from financing activities</b>		Net Cash Used by investing activities	\$ (592,000)
Sale of Common Stock	\$ 160,000	<b>Cash Flow from financing activities</b>	
Increase in Notes Payable	\$ 380,000	Sale of Common Stock	\$ 160,000
Payment of Dividends	\$ (23,200)	Increase in Lease Payable	\$ 83,360
Net Cash provided by financing activities	\$ 516,800	Increase in Notes Payable	\$ 380,000
Cash, Dec. 31, 20X1	\$ 426	Payment of Dividends	\$ (23,200)
		Net Cash provided by financing activities	\$ 600,160
		Cash, Dec. 31, 20X1	\$ 7,835

## Appendix 1-1

### Ratio Calculations Glenwood Heating, Inc.

#### Liquidity Ratios

Current Ratio	$\frac{161,632}{53,090} = 3.0445$
Acid-test Ratio	$\frac{426 + 98,406}{53,090} = 1.8616$
Accounts receivable turnover	$\frac{398,500}{98,406} = 4.0495$
Days to collect receivables	$\frac{365}{4.0495} = 90.1$
Inventory turnover	$\frac{177,000}{62,800} = 2.8185$
Days to sell inventory	$\frac{365}{2.8185} = 129.5$
Operating cycle	$90.1 + 129.5 = 219.6$

#### Profitability Ratios

Gross profit margin	$\frac{398,500 - 177,000}{398,500} = 55.58\%$
Profit margin	$\frac{92,742}{398,500} = 23.27\%$
Return on assets (ROA)	$\frac{92,742}{642,632} = 14.43\%$
ROE	$\frac{92,742}{229,542} = 40.4\%$
Earnings per share (EPS)	$\frac{92,742}{3,200} = 28.9819$

#### Long-Term Solvency Ratios

Debt ratio	$\frac{413,090}{642,632} = 64.28\%$
Times interest earned	$\frac{151,306}{27,650} = 5.4722$

### Eads Heater, Inc.

$\frac{153,265}{62,420} = 2.4554$
$\frac{7,835 + 94,430}{62,420} = 1.6383$
$\frac{398,500}{94,430} = 4.2201$
$\frac{4,2201}{365} = 86.5$
$\frac{188,800}{51,000} = 3.7020$
$\frac{365}{3.7020} = 98.6$
$86.5 + 98.6 = 185.1$

$\frac{398,500 - 188,800}{398,500} = 52.62\%$
$\frac{70,515}{398,500} = 17.70\%$
$\frac{70,515}{703,765} = 10.02\%$
$\frac{70,515}{207,315} = 34.01\%$
$\frac{70,515}{3,200} = 22.0359$

## Appendix 1-2

### Glenwood Heating, Inc. Fiscal Year Transactions

Transaction #	Cash	Allow. Bad Debts	Inventory	Land	Building	Acc. Depr. - building	Equipment	Acc. Depr. - Equip.	A/P	Int. Pay.	Note Pay.	Stock	Dividends	Sales	COGS	Bad Debt Exp.	Depr. Exp.	Int. Exp.	Other Op. Exp.	Rent Exp.
1.) Common Stock	\$ 160,000											\$160,000								
2.) Notes Payable	\$ 400,000										\$400,000									
3.) Land & Building	\$(420,000)			\$70,000	\$350,000															
4.) Equipment	\$(80,000)						\$80,000													
5.) Inv. Purchase			\$ 239,800						\$ 239,800											
6.) Sales Revenue		\$ 398,500												\$398,500						
7.) A/R Collected	\$ 299,100	\$(299,100)																		
8.) A/P Paid	\$(213,360)								\$(213,360)											
9.) Notes Payment	\$(41,000)										\$ (20,000)							\$21,000		
10.) Other Expenses	\$(34,200)																		\$34,200	
11.) Dividends	\$(23,200)												\$23,200							
12.) Int. Pay Accrual										\$6,650								\$ 6,650		
13.) Bad Debts		\$994															\$994			
14.) COGS Valuation			\$(177,000)												\$177,000					
15.) Depreciation						\$10,000		\$9,000									\$19,000			
16.) Rent Paid	\$(16,000)																			\$16,000
17.) Income Tax	\$(30,914)																			
Totals	\$ 426	\$ 99,400	\$994	\$ 62,800	\$70,000	\$350,000	\$10,000	\$80,000	\$9,000	\$ 26,440	\$6,650	\$380,000	\$160,000	\$23,200	\$398,500	\$177,000	\$994	\$19,000	\$27,650	\$34,200

## Eads Heater, Inc. Fiscal Year Transactions

Transaction #	Cash	A/R	Allow Bad Debts	Inventory	Land	Building	Acc. Depr. - building	Equipment	Acc. Depr. - Equip.	Leased Equipment	Acc. Depr. - Leased Equip.	A/P	Int. Pay.	Note Pay.	Lease Pay.	Stock	Dividends	Sales	COGS	Bad Debt Exp.	Depr. Exp.	Int. Exp.	Other Op. Exp.
1.) Common Stock	\$ 160,000															\$160,000							
2.) Notes Payable	\$ 400,000											\$400,000											
3.) Land & Building	\$ (420,000)				\$70,000	\$350,000																	
4.) Equipment	\$ (80,000)							\$80,000															
5.) Inv. Purchase				\$ 239,800								\$ 239,800											
6.) Sales Revenue		\$ 398,500																\$398,500					
7.) A/R Collected	\$ 299,100	\$ (299,100)																					
8.) A/P Paid	\$ (213,360)											\$ (213,360)											
9.) Notes Payment	\$ (41,000)												\$ (20,000)									\$21,000	
10.) Other Expenses	\$ (34,200)																						\$34,200
11.) Dividends	\$ (23,200)																\$23,200						
12.) Int. Pay Accrual												\$6,650										\$ 6,650	
13.) Bad Debts			\$4,970																		\$4,970		
14.) COGS Valuation				\$ (188,800)															\$188,800				
15.) Depreciation							\$10,000		\$20,000													\$30,000	
16.) Lease Agreement	\$ (16,000)									\$92,000	\$11,500				\$83,360							\$11,500	
17.) Income Tax	\$ (23,505)																						
<b>Totals</b>	<b>\$ 7,835</b>	<b>\$ 99,400</b>	<b>\$4,970</b>	<b>\$ 51,000</b>	<b>\$70,000</b>	<b>\$350,000</b>	<b>\$10,000</b>	<b>\$80,000</b>	<b>\$20,000</b>	<b>\$92,000</b>	<b>\$11,500</b>	<b>\$ 26,440</b>	<b>\$6,650</b>	<b>\$380,000</b>	<b>\$83,360</b>	<b>\$160,000</b>	<b>\$23,200</b>	<b>\$398,500</b>	<b>\$188,800</b>	<b>\$4,970</b>	<b>\$41,500</b>	<b>\$27,650</b>	<b>\$34,200</b>

## Appendix 1-3

### Eads Heater, Inc. Leased Equipment Payment Schedule

Year	Beginning Value	Interest	Payment	Principal	Ending Value	Depreciation	Total Expense
20X1	\$ 92,000	\$7,360	\$ 16,000	\$ 8,640	\$ 83,360	\$ 11,500	\$ 18,860
20X2	\$ 83,360	\$6,669	\$ 16,000	\$ 9,331	\$ 74,029	\$ 11,500	\$ 18,169
20X3	\$ 74,029	\$5,922	\$ 16,000	\$10,078	\$ 63,951	\$ 11,500	\$ 17,422
20X4	\$ 63,951	\$5,116	\$ 16,000	\$10,884	\$ 53,067	\$ 11,500	\$ 16,616
20X5	\$ 53,067	\$4,245	\$ 16,000	\$11,755	\$ 41,313	\$ 11,500	\$ 15,745
20X6	\$ 41,313	\$3,305	\$ 16,000	\$12,695	\$ 28,618	\$ 11,500	\$ 14,805
20X7	\$ 28,618	\$2,289	\$ 16,000	\$13,711	\$ 14,907	\$ 11,500	\$ 13,789
20X8	\$ 14,907	\$1,193	\$ 16,000	\$14,807	\$ 100	\$ 11,500	\$ 12,693
			<b>\$128,000</b>	<b>\$91,900</b>			<b>\$ 128,100</b>

**Case Two**  
**Molson Coors Brewing Company Analysis- Profitability**

## **Executive Summary**

The goal of this analysis is to look at financial concepts that might help investors make an assessment of the Molson Coors Brewing Company's profitability based on given financial statements and computational performance ratios. This report will specifically address the following:

- Basic income statement analysis
- Income based on persistence of existing income statement accounts
- Operating profit vs. non-operating profit
- Net operating assets
- Return on net operating assets and other performance ratios

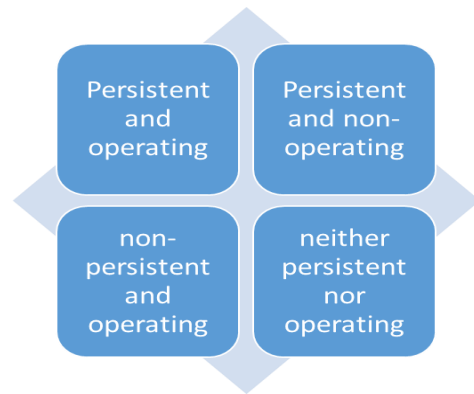
*All supporting data and case study answers can be found at the end of the report.*

The report makes every effort to show investors how they can better compare this company to other companies and to itself over time. In addition, the data analysis looks at how operations can generate future expected cash flows for investors and how operating income can be the life blood and provide sustainable growth for the firm.

## **General remarks and recommendations**

When looking at a firm's financial statements, it can be difficult for investors to differentiate between the financing decisions and the actual operational success of the firm, particularly with a multinational firm like Molson Coors. To further examine this, one can focus on two things primarily: persistence and operational significance. When looking on the income statement a line item will either fall into one of four categories demonstrated below (Figure 2-1):

**Figure 2-1**



In this sense, persistence refers to the line item’s consistency and effect on net income over multiple periods. For example, revenue is a persistent item because it will always appear on the income statement at steady, predictable rates, meanwhile, a loss from an extraordinary special item cannot be reasonably predicted and perceived as “persistent” by the user.

When determining whether an item is operating or not, one must look at whether the item affects the day-to-day operations of the firm. In other words, is the item on the income statement as a result of some primary, operations-based income (expense)?

This mentality helps investors understand what the company will look like in the future, and how they can compare the firm to others like it with similar operations. By distinguishing operating from non-operating, one can get a better sense of the firm’s true earnings per share, asset turnover, and general profitability. Cash flows from operations is what builds equity and should be what investors focus on.

One important distinction to notice in the analysis is that all the calculations, including net operating profit and persistent income, do not include “Special items, net”. This line item appears to be neither persistent nor operating because it includes extraordinary items



that do not occur with frequency or consistency, and arguably, none of the sub-items listed in note 8 seem to be directly related to continuing operations. The firm does not consider the item to be a part of core operations, yet it is still part of operating expenses. This could be seen as a lack of faithful representation on the part of the firm.

Lastly, investors can gain clearest insight into the firm's profitability based on its "RNOA" or return on net operating assets. By dividing net operating profit margin by net operating asset, investors can get a better picture of the firm's ability to produce given current on-hand assets required for operations without financing. This is a rawer indicator of the company's performance than ROA or RNOA with persistent net income.

**Answers-**

- A. revenues, operating expenses, other operating expenses/revenues, income tax, income from discontinued operations, income from non-controlling interests
- B. FASB considers parts and subsections of financial statements to be more informative for users than the whole. So, GAAP does not allow firms to report summary accounts by themselves i.e. (total assets, nets assets, total equity, etc.)
- C. Persistent income shows what factors determine current income and what users can expect from the firm in subsequent periods. It helps users and serves as the enhancing quality of comparability.
- D. Comprehensive income is the change in equity from non-owner sources.

It is different from net income because it includes unrealized holding gains/losses on securities, certain pension adjustments, and certain foreign currency translation gains/losses.

- E. In this case, net sales is sales minus the excise tax on the principal product, beer. Beer carries an excise tax because it serves as a sin tax. Molson Coors reports these separately to comply with GAAP and show the subsections of the overall classification of “Net Sales”.
- F. The firm includes the following: infrequent or unusual items, impairment or asset abandonment-related losses, restructuring charges and other atypical employee-related costs, and fees on termination of significant operating agreements and gains (losses) on disposal of investments
- ii. They believe these special items represent charges that are not part of the core operations. However, they do believe that they may be recurring. I think that this is a fair classification. I find concern in that the overall “special items, net” is considered to be part of operating expenses. For example, I am not sure that some of the unusual or infrequent items can be considered as part of operating income (loss). I am not sure how they can be part of operating expenses, yet still not contribute (detract) from core operations.
- G. “Other income (expense), net” refers to unusual gains/losses from non-operating assets, foreign transactions, and currencies purchases among other items. Those unusual gains/losses are part of non-operating expenses (income). While “Special items, net” refers to employee-related charges, asset impairments or abandonments, unusual or infrequent items, and termination fees. These are classified as part of operating expenses, yet somehow they are not considered to be part of “core operations”.

H. i. Comprehensive income= \$760.2M

Net Income= \$567.3M

Comprehensive Income attributable to Molson Coors is \$192.9M more than Net Income.

ii. The statement of comprehensive income includes all income (loss) classifications from non-owner sources including foreign currency translations, unrealized gains/losses, reclassification of derivatives, pensions, amortization of net prior service costs, and ownership shares of unconsolidated subsidiaries' CI. They are all non-owner sources and are not included on the income statement.

I. Non-persistent income statement items:

- Special items, net- recurring with varying amounts
- Income (loss) from discontinued operations- cannot reasonably expect for this item to recur
- Other income (expense), net- year-to-year amounts vary drastically

J. i. Current effective tax rate- 12.83%

ii. Persistent effective tax rate- ~13% based on company's foreign operations and the existing effective tax rate.

K. \$721,770,000 = estimated persistent income

**Figure 2-2**

Persistent Income Calculation (in Millions)		
	2013	2012
Sales	\$ 5,999.60	\$ 5,615.00
Excise Taxes	<u>\$(1,793.50)</u>	<u>\$(1,698.50)</u>
Net Sales	\$ 4,206.10	\$ 3,916.50
COGS	<u>\$(2,545.60)</u>	<u>\$(2,352.50)</u>
Gross Profit	\$ 1,660.50	\$ 1,564.00
MKTG, Gen & Admin. Expense	<u>\$(1,193.80)</u>	<u>\$(1,126.10)</u>
Equity Income in MillerCoors	\$ 539.00	\$ 510.90
Operating Income (loss)	\$ 1,005.70	\$ 948.80
Other Income (expense), net		
Interest expense	\$ (183.80)	\$ (196.30)
Interest income	\$ 13.70	\$ 11.30
total other income (expense), net	<u>\$ (170.10)</u>	<u>\$ (90.30)</u>
Income (loss) from cont. ops before IT	\$ 835.60	\$ 673.50
Income tax benefit (expense)	<u>\$ (108.63)</u>	<u>\$ (87.56)</u>
Net Income (loss) including noncontrolling interests	\$ 726.97	\$ 585.95
Less: Net income (loss) attributable to noncontrolling interests	<u>\$ (5.20)</u>	<u>\$ 3.90</u>
Net income (loss) attributable to M.C. Brewing company	<u>\$ 721.77</u>	<u>\$ 589.85</u>

L. i. Non-operating income statement items:

- **“Special items, net”**- items within classification are not related to core operations
- **“Total other income (expense), net”**- Interest is not part of operating activities and the other incomes (expenses) are related to gains/losses not related to operations
- **“Income (loss) from discontinued operations, net of tax”**- This relates to items that are no longer part of the operating process.
- **“Net Income (loss) from non-controlling interests”**- This relates to net assets from subsidiaries and is not attributable to operating incomes (expense)

II. & III.

**Figure 2-3**

Income (loss) from non-operating items (in Millions)		
	2013	2012
Special Items, Net	\$ (200.00)	\$ (81.40)
Total other income (expense), net	<u>\$ (151.20)</u>	<u>\$ (275.30)</u>
Total non-operating items BIT	\$ (351.20)	\$ (356.70)
Plus: total tax benefit	<u>\$ 42.14</u>	<u>\$ 42.80</u>
	\$ (309.06)	\$ (313.90)
Income (loss) from discount. Ops., net of tax	\$ 2.00	\$ 1.50
Net Income (loss) from non-controlling interests	<u>\$ (5.20)</u>	<u>\$ 3.90</u>
<b>Total non-operating items, net of tax</b>	<b><u>\$ (312.26)</u></b>	<b><u>\$ (308.50)</u></b>
Net Income	\$ 567.30	\$ 443.00
Non-operating items, net of tax	<u>\$ (312.26)</u>	<u>\$ (308.50)</u>
<b>Net Operating Profit After Tax</b>	<b><u>\$ 255.04</u></b>	<b><u>\$ 134.50</u></b>

M. i. non-operating assets and liabilities:

- **Deferred tax assets**- are not related to operating activities of the firm
- **Contra-asset accounts** (do not relate to real-world operations)
  - Depreciation
  - Allowance for doubtful accounts
  - Allowance for obsolete supplies
- **Goodwill**- does not relate to operating activities and is not comparable between firms
- **Other Intangibles, net**- does not relate to operating activities
- **Investment in MillerCoors**- not part of parent firm's operating activities; financing issue
- **Long-Term Notes Receivable**- do not contribute to current operating activities
- **Derivative hedging instruments**- relates to securities and therefore does not affect the firm's operating activities
- **Deferred tax liabilities**- do not directly relate to operating activities of the firm.
- **Discontinued operations**- does not relate to current operations
- **Pension and postretirement benefits**- This is an obligation to non-operating expenses and is not associated with operating activities
- **Unrecognized tax benefits**- not related to operating activities
- **LT Debt**- not related to operations

ii.

**Figure 2-4**

Net Operating Assets (In Millions)		
	2013	2012
<b>Operating Assets</b>		
Cash & Cash Equivalents	\$ 442.30	\$ 624.00
Accts. & Notes Receivable:		
Trade	\$ 586.40	\$ 621.70
Affiliates	\$ 30.80	\$ 52.20
Current notes receivable & other	\$ 125.50	\$ 94.50
Total Inventories	\$ 205.30	\$ 213.90
Maintenance and operating supplies	\$ 36.40	\$ 35.50
other current assets	\$ 82.10	\$ 89.20
Properties	\$3,428.80	\$3,220.50
Other assets	\$ 260.10	\$ 196.90
<b>Total Operating Assets</b>	<b>\$5,197.70</b>	<b>\$5,148.40</b>
<b>Operating Liabilities</b>		
Accounts Payable & others	\$1,336.40	\$ 186.90
Current LT debt & short-term borrowings	\$ 586.90	\$1,245.60
other liabilities	\$ 92.70	\$ 81.80
<b>Total Operating Liabilities</b>	<b>\$2,016.00</b>	<b>\$1,514.30</b>
<b>Net Operating Assets</b>	<b>\$3,181.70</b>	<b>\$3,634.10</b>

N.

**Figure 2-5**

Return on net operating assets (RNOA) (In Millions)		
	2013	2012
Net Operating profit after tax	\$ 255.04	\$ 134.50
Net operating assets	\$ 3,181.70	\$3,634.10
RNOA	8.02%	3.70%

O. Net operating asset turnover increased significantly, and this explains the overall increase in RNOA.

**Figure 2-6**

Operating Ratios			
	2013	2012	Percent Change
Operating profit margin	0.0425	0.0224	89.6%
Multiply: Net operating asset turnover	<u>1.8857</u>	<u>1.5451</u>	22.0%
RNOA	8.02%	3.70%	116.8%

P. The RNOA calculation is a better indicator because it focuses on whether a line item is operating or not, and it also focuses the firm's ability to make a return on their given operating assets whereas persistent income only focuses whether the line items will be recurring or not.

**Figure 2-7**

	2013	2012
RNOA with Persistent income	22.69%	16.23%
RNOA with NOPAT	8.02%	3.70%

**Case Three**  
**Golden Enterprises, Inc. - Statement of Cash Flows**

## **Executive Summary**

GAAP requires firms to release the statement of cash flows in their annual 10-K. The statement of cash flows is different from the income statement because it gives a better representation of the company's current financial standing relative to its cash-on-hand.

There are two methods for reporting the statement of cash flows. The direct method totals net cash receipts and payments throughout the fiscal year. This method is most often used with cash basis accounting systems where firms simply keep record of what was paid and what was received. On the other hand, the indirect method examines all the activities of the firm and adjusts for accounts created based on an accrual basis accounting system. In accrual basis accounting, the firm matches revenues with expenses within the period. This accounting basis is the most common especially among large publicly traded firms.

The rest of this analysis provides clear instructions on how Golden Enterprises, Inc., a snack products manufacturer in Birmingham, Alabama, figured its end of year cash and cash equivalents for FY2013. It also offers information about the implications of their cash flow statement as it relates to profitability and net income. The analysis also better explains the indirect method cash flow statement used by Golden Enterprises, Inc. *Supporting documents and data can be found in Appendices 3-1 to 3-3.*

Golden Enterprises uses the indirect method and has an accrual basis accounting system. The indirect method is composed of three parts:

### **1. Cash provided (used) by operating activities-**

*This reconciles net income to noncash items such as depreciation expense and gain on sale of PPE. It also reconciles net income to changes in balance sheet accounts which reflect changes in available cash-on-hand. Current assets (except*



*cash and cash equivalents), cash surrender value of insurance, and “other assets” are part of the accounts used to reconcile net income to cash. Liability items used include: accounts payable, accrued expenses, salary continuation plan, and accrued income taxes. These changes in balance sheet accounts and the other noncash items, when reconciled with net income, produce cash provided (used) by operating activities. See Appendix 3-3 for explanation on how to reconcile the changes in balance sheet accounts.*

**2. Cash used (provided) by investing activities-**

*This includes all purchases of and proceeds from the sale of property, plant, and equipment. Note: This does not include gain (loss) on sale of PPE. The net result of purchases and proceeds produces cash used (provided) by investing activities.*

**3. Cash used (provided) by financing activities-**

*This relates to all long-term debt and equity accounts. The long-term debt includes long-term notes payable, line of credit outstanding, and the current portion of the long-term debt. The equity accounts are those that directly affect cash-on-hand such as cash dividends paid and treasury stocks. In the case of Golden Enterprises, the change in checks outstanding in excess of bank balances is included in this section as it relates to financing decisions even though it is considered a cash equivalent. This net total of these figures gives the cash used (provided) by financing activities.*

These three figures are then totaled which produces “net decrease (increase) in cash and cash equivalents”. Then, the beginning cash and cash equivalents must be added to

provide the current year's cash-on-hand. *Appendix 3-2 includes the company's entire statement of cash flows.*

This end of the year figure helps financial statement users make decisions that are related to the immediate liquidity and short-term solvency of the company.

### **APPENDIX 3-1**

- a. The statement of cash flows provides relevant information about the cash receipts and cash payments of an enterprise during a period. The income statement provides a long-term measure of a company's success or failure, while the statement of cash flows provides a detail summary of current cash inflows and outflows.
- b. Direct and indirect are the two methods for preparing the statement of cash flows. Golden Enterprise uses the indirect method. This is obvious based on two facts:  
1.) the prior year's cash flow statement 2.) their use of accrual basis accounting
- c. Operating, Investing, and Financing sections
- d. **Cash provided by operating activities** adjusts for net income by adding back noncash accounts such as depreciation expense, deferred income taxes, and gain/loss on sale of PPE. Additionally, it adds or subtracts corresponding changes in the following accounts which will adjust net income to actual cash inflows/outflows: accounts receivable, inventories, prepaid expenses, other assets, accounts payable, accrued expenses, and accrued income taxes.

**Cash used by investing activities** incorporates purchases and sales of PPE.

**Cash used by financing activities** looks at long-term liabilities, treasury stock, and dividends.

- e. In this case, cash equivalents are the checks outstanding in excess of bank balances.
- f. Not all of the accounts on the income statement are related to accrued or deferred revenues and expenses. Some of the revenues and expenses are matched with cash paid in and out of the firm during that corresponding period. Net income is included because it does contain those revenues and expenses that are matched by their cash flows for the period. The rest of the operating activities section is about adjusting for those revenues and expenses on the income statement that are not related to cash flows.
- g. 1. In the T-accounts below the source of the values is shown. Note: Gain on sale of PPE comes from the difference between cost of the PPE sold and the accumulated depreciation related to that PPE.

$$399,484 - 338,444 = 61,040$$

PPE	
\$ 89,285,723	\$ 74,514
<u>\$ 4,149,678</u>	\$ 338,444
<u>\$ 93,022,443</u>	

Acc. Depr.- PPE	
\$ 399,484	\$ 62,788,133
	<u>\$ 3,538,740</u>
	<u>\$ 65,927,389</u>

Depreciation Expense-	<b>\$3,538,740</b>
Capital expenditures-	<b>\$ (4,149,678)</b>
Cash proceeds from sale of PPE-	<b>\$74,514</b>
Gain on sale of PPE-	<b>\$ (61,040)</b>

2.

N/P & LT Debt, total	
\$ 38,287,529	\$ 7,358,681
	<u>\$ 38,361,200</u>
	<u>\$ 7,432,352</u>

Check Outstanding IEBB	
\$ 267,502	\$ 1,710,417
	<u>\$ 1,442,915</u>

3.

Accrued Income Taxes	
\$ 59,894	\$ 6,419
	<u>\$ 53,475</u>

Deferred Income Taxes	
\$ 185,939	\$ 2,894,123
	<u>\$ 2,708,184</u>

Salary Cont. Plan	
\$ 49,774	\$ 1,279,233
	<u>\$ 1,229,459</u>

4. See Appendix 3-2

5. See Appendix 3-2

### Analysis

h. No, depreciation is an estimate that helps users recognize the devaluing of a long-term asset as an expense over the course of its lifetime, but it does not represent cash inflows or outflows.

i.

	2013	2012	% Δ
Net Income	\$1,134,037	\$2,207,623	-48.6%
Cash provided by operating activities	\$4,607,029	\$5,747,290	-19.8%
Total net cash	\$ 757,111	\$1,893,816	-60.0%

Net income was halved between 2012 and 2013, while operating cash only decreased by 20%. The difference between net income and cash from operating activities can be mostly explained once depreciation expense is added back. Also, there is a significant decrease in accounts payable which reduces cash from operating activities. All in all, it appears that the firm is bleeding cash from operating and income tax expenses. However, it does seem that it is managing cash flows exceedingly better than its profitability and net income. The results of this data will become clearer in the next one to two years as the consistency of the firm becomes more apparent.

- j. Golden Enterprises has increased its productive capacity by consistently increasing fixed assets over the course of three years. However, this slight increase in capacity is not representative of the overall operational efficiency of the company. In fact, the firm is losing cash dramatically principally from increased sales, general, and administrative expenses which could indicate a lack of efficiency within operations.
- k. They do not currently have sufficient cash flows to fund a 20% increase in capital expenditures. Possible sources for financing include increasing cash from operating activities, debt financing, and issuing treasury stocks. All three of these options offers reasonable solutions for increasing productive capacity, however increasing cash from operating activities is the most solvent and sustainable of the three options.

## **APPENDIX 3-2**

<b>Golden Enterprises, Inc. and Subsidiary Consolidated Statements of Cash Flows For Fiscal Year Ended May 31, 2013</b>	
<b>Cash Flows from Operating Activities</b>	
Net cash provided by operating activities	\$ 4,607,029
<b>Cash Flows from Investing Activities</b>	
Purchase of PPE	\$ (4,149,678)
Proceeds from sale of PPE	\$ 74,514
Net cash used by investing activities	\$(4,075,164)
<b>Cash Flows from Financing Activities</b>	
Debt proceeds	\$ 38,361,199
Debt repayments	\$(38,287,529)
Δ in checks outstanding IEBB	\$ (267,501)
Purchase of treasury shares	\$ (6,860)
Cash dividends paid	\$ (1,467,879)
Net cash provided by financing activities	\$(1,668,570)
Net decrease in Cash & Cash EQ.	\$(1,136,705)
Cash & Cash EQ @ BEG. of FY	\$ 1,893,816
Cash & Cash EQ @ END of FY	\$ 757,111

<b>Reconciliation of net income to operating net cash</b>	
Net Income	\$ 1,134,037
Adjustment to reconcile net income:	
Depreciation	\$ 3,538,740
Deferred income taxes	\$ (185,939)
Gain on sale of PPE	\$ (61,040)
Δ in receivables-net	\$ 106,367
Δ in inventory	\$ 200,985
Δ in prepaid expenses	\$ 200,137
Δ in cash surrender value of insurance	\$ 62,906
Δ in other assets-other	\$ (191,298)
Δ in A/P	\$ (1,216,399)
Δ in accrued expenses	\$ 954,938
Δ in salary continuation plan	\$ (49,774)
Δ in accrued income taxes	\$ 113,369
Net cash provided by operating activities	\$ 4,607,029

## **APPENDIX 3-4**

<b>Understanding Reconciliations to Net Income</b>		
between year end balances-	Decreases	Increases
Δ in receivables-net	add	subtract
Δ in inventory	add	subtract
Δ in prepaid expenses	add	subtract
Δ in cash surrender value of insurance	add	subtract
Δ in other assets-other	add	subtract
Δ in A/P	subtract	add
Δ in accrued expenses	subtract	add
Δ in salary continuation plan	subtract	add
Δ in accrued income taxes	subtract	add
Deferred income taxes	subtract	add
Depreciation	Stated as is	
Gain on sale of PPE	Stated as is	

This is the method by which cash from operating activities is reconciled to net income.

By doing this, the firm is adjusting net income for accounts that affect cash but are not included in the income statement.

**Case Four**  
**Pearson, plc – Accounts Receivable**

## **Executive Summary**

This report follows a step-by-step analysis of the “trade receivables” account for fiscal year 2009 of Pearson, plc, a publisher and education materials provider.

Initially, it is important to establish an understanding of accounts receivable and its effect on the financial statements. The report also discusses the effects of allowances (provisions) for bad and doubtful debts and sales returns. Items A-E discusses these accounts and different methods for estimating bad debts and sales returns.

Next, in Items F-H the report focuses on Pearson’s financials and the associated t-accounts and journal entries for trade receivables, provisions for bad and doubtful debts, and provisions for sales returns. *Note that in Item G-ii the adjusting entry for provision for sales returns includes a debt to Sales.* This is not usual practice because typically the adjustment includes a debt to “sales returns & allowances” which is a contra-equity account. We see that in Note 22 it says that “Sales” is reported net of the estimate and that there is no contra-equity account.

In Items I-K, there is an analysis and judgment of the quality of the firm’s estimates and its collection performance compared with another firm within the same industry. By looking at the receivables’ bad debts relative to their past due status, we can make a better estimate of what receivables are likely uncollectible. In Items J & K, there is an analysis of the Pearson’s accounts receivable turnover and average collection period. These two performance analyses tell us the firm’s credit sales to accounts receivable ratio and the average number of days it takes for them to collect on a credit sale. Based on these items, there can be judgment on their performance year-to-year, and Item K



continues this by comparing Pearson's average collection period to McGraw Hill's, a leading competitor.

All in all, through this report, we can see an obvious underlying importance to how firms handle receivables and how that can affect the bottom line. From a financial reporting standpoint, there is a precedent to reliably and faithfully represent estimates that will give users a better view of what cash the firm expects to actually collect on.

- a. An account receivable is an oral promise from the purchaser to pay for the goods and services sold. Trade and nontrade receivables are other names for accounts receivable.
- b. A note receivable is a written promissory note to pay a certain amount by a given date.
- c. A contra account reduces the face value of its related asset account. The trade receivables' contra accounts serve as provisions for "bad and doubtful debts" and "anticipated future sales returns". The bad and doubtful accounts is an allowance estimate that relates to accounts receivables that go unpaid, and it reduces the overall trade receivables value. Anticipated future sales returns is an allowance account estimate that accounts for reduction in trade receivables due to customers returning sales items. These accounts allow users to see the net realizable value of trade receivables.
- d. Percentage-of-sales procedure- The adjustment for bad debt expense is figured as a percentage of net credit sales on account for that period. Managers need to know net credit sales in order to get the bad debt expense. To get the final account balance for

allowance for doubtful accounts, one has to add the estimated bad debt expense to the beginning account balance.

Aging-of-accounts procedure- The ending balance for the allowance for doubtful accounts is found by first organizing receivables based on the time until they're due. From there, estimated percentages are applied to the coordinating subtotals which, when totaled, gives the ending balance for allowance for doubtful accounts. To get the actual adjusting entry made to bad debt expense, one must subtract the beginning balance for the allowance from the just computed ending balance.

Aging-of-accounts procedure would be a better estimate of the bad debt expense because it accounts for uncollectable receivables based on prior data and a more detailed analysis.

- e. By having a stricter credit policy, managers risk the loss of sales.
- f.
  - i.

**Figure 4-1**

Provision for bad and doubtful debts		
Beg. Balance		£ 72,000,000
Exchange Differences	£ 5,000,000	
Income Statement Movements		£ 26,000,000
Utilised	£ 20,000,000	
Acquisition through business combination		£ 3,000,000
		£ 76,000,000

**A. Exchange differences-** reports the change in exchange rates between point of sale and point of collection.

**B. Income statement movements-** relates to the adjusting entry for estimated bad and doubtful debts at the end of the period.

**C. Utilised-** represents the actual write-offs for trade receivables when they are deemed uncollectable.

**D. Acquisition through business combination-** represents the acquisition of another firm and the acquired firm's provisions for bad and doubtful accounts.

ii.

**Figure 4-2**

Bad and doubtful expenses	£26,000,000	
Provision for bad and doubtful accounts		£26,000,000
Provision for bad and doubtful accounts	£20,000,000	
Trade receivables		£20,000,000

**Bad and doubtful accounts expense-** Income Statement

**Trade receivables-** Balance Sheet

**Provision for bad and doubtful accounts expense-** Balance Sheet

iii. It is included as a contra asset account under trade receivables as a "Less:"

g.

i.

**Figure 4-3**

Provision for sales returns	
	£372,000,000
	£425,000,000
£443,000,000	
	<u>£354,000,000</u>

ii.

**Figure 4-4**

Sales	£425,000,000	
Provision for sales returns		£425,000,000
Provision for sales returns	£443,000,000	
Trade receivables		£443,000,000

**Sales-** Income Statement

**Provision for sales returns-** Balance Sheet

**Trade receivables-** Balance Sheet

iii. Sales

h.

**Figures 4-5 & 4-6**

Gross Trade Receivables	
£ 1,474,000,000	
£ 5,624,000,000	
	£ 5,216,000,000
	£ 443,000,000
	£ 20,000,000
<u>£ 1,419,000,000</u>	

Trade receivables	£ 5,624,000,000	
	Sales	£ 5,624,000,000
Cash	£ 5,216,000,000	
	Trade receivables	£ 5,216,000,000

**ANALYSIS**

i.

**Figure 4-7**

	Trade receivables balance	Estimated uncollectible	Accounts estimated uncollectible
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	<u>£ 20,000,000</u>	90%	<u>£ 18,000,000</u>
Total	<u>£ 1,419,000,000</u>		<u>£ 74,190,000</u>

The auditor would be comfortable that the given provision is adequate as it is only £1,810,000 more than the above estimate. The difference between the provision and the above estimate .12% of trade receivables. The difference is ultimately immaterial.

j.

**Figure 4-8**

	2009	2008
Credit Sales, Net	£ 5,624,000,000	£ 4,811,000,000
Average gross trades receivables	£ 1,446,500,000	£ 1,282,500,000
accounts receivables turnover	3.888	3.751
average collection period	93.878	97.300

Pearson appears to be maintaining both their turnover rate and number of collection days from 2008 to 2009. It appears that they are collecting more rapidly

and more efficiently in 2009 compared to 2008. The difference seems to be immaterial, but one possible reason could be that sales returns and bad debts were better estimated for 2008 than for 2009.

k. Pearson does seem to be underperforming compared to their competitor. One immediate solution that would allow Pearson to reduce time to collect would be to tighten its credit policy and restrict credit sales to more credit-worthy and reliable customers. However, this often results in reduced sales revenue with time and limits market expansion. Other possible solutions include:

- Charging interest on accounts to incentivize customers to pay their balance more quickly
- Offering cash discounts to customers that pay off their balances sooner
- Issuing additional charges to customers that delay payment far past due date

**Case Five**  
**Graphic Apparel Corporation – Inventory**

## **Executive Summary**

Graphic Apparel Corporation (GAC) is a small t-shirt screen printing company and is owned by a young college student, Nicki. This report will address some of the concerns Nicki has for the company by looking at its financial statements and correcting misstatements that might jeopardize the GAC's loan agreement with the local bank. Additionally, the report will offer guidance and suggestions for Nicki on how she can better report financial information and comply with her current loan agreement covenant. Currently, the company is required to maintain a current ratio of 1.0x per the loan agreement covenant.

During fiscal year 2014, there were three significant events and transactions that will be relevant to this report.

1. GAC edited the graphic shirt design and repositioned with new, "edgier" retail customers. \$3,000 in customer accounts, however, will likely be uncollectable as a result.
2. Nicki secured \$10,000 in sales orders in customer shirt orders. \$7,500 were part of cash sales and the remaining \$2,500 was part of an informal order placed by her own sports team.
3. Half of the plain shirts purchased in 2014 had water damage caused by a leak in the warehouse roof. Nicki repaired many of the shirts through laundering, however the remaining portion is being used to make the 2014 graphic shirts. She has sold some of this "refurbished" shirts, and as of the end of the fiscal year, \$15,000 in retail sales worth of these water damaged shirts remains in GAC's customers' stores.

The report will focus on these three main events and will address three main topics regarding GAAP compliance and financial reporting concerns.

1. Revenue recognition
2. Net realizable value of accounts receivable
3. Inventory valuation

In summary, below is a comprehensive table that demonstrates the impact of the report's adjustments on GAC's financial statements, ultimately leading to a new current ratio of 0.9051x. Also, at the end of the report is an appendix (Appendix 5-1) with additional calculations and other relevant information.

**Figure 5-1**

Corrections/Events	Current Assets	Net A/R	Inventory	Curr. Liabilities	Unearned Rev.	Curr. Ratio	Net Income
Beginning Balance	\$ 61,000	\$ 32,500	\$24,500	\$ 45,180	\$ -		
<b>Transaction: \$10,000 Sales Orders</b>							
\$7,500 sales to Unearned revenue				\$ 7,500	\$ 7,500	Decrease	Decrease
\$2,500 A/R to no entry	\$ (2,500)	\$ (2,500)				Decrease	Decrease
<b>Event: Changed customer base</b>							
\$3,000 entry bad debt expense	\$ (3,000)	\$ (3,000)				Decrease	Decrease
<b>Transaction: Sale of damaged shirts</b>							
\$15,000 reverse sale of damaged shirts	\$ (15,000)	\$ (15,000)				Decrease	Decrease
\$7,752 reverse COGS and inventory	\$ 7,752		\$ 7,752			Increase	Increase
\$571 loss due to decline in inventory	\$ (571)		\$ (571)			Decrease	Decrease
Ending Balance	\$ 47,681	\$ 12,000	\$31,681	\$ 52,680	\$ 7,500		

1. Nikki took over the company, she altered the look of their graphic tees, she secured \$10,000 in customer sales orders, there was a leak that caused water damage for half the inventory, and GAC transitioned from equity to debt financing.
  - A. Nikki
  - B. Bank and IRS
  - C. The bank is GAC's newest user because GAC has debt financing through the bank. The bank requires GAC to maintain a 1.0 current ratio.



2. A. Custom graphic t-shirts business is a seasonal fashion merchandising business.  
GAC has had some challenge in FY2014 (see 1A.), but they have unusually high customer sales order and are taking the step in the right direction to expand their presence within the community.  
  
B. Most sales come from retailers, however they are growing their direct customer sales. Additionally, Nikki changed the custom graphic tee design, and it caused them to have to shift retailer customer base from traditional retailers to “edgier” customers.  
  
C. It forced them to change their customer base.  
  
D. There was a leak in the warehouse roof, and it caused inventory water damage.
3. The revenue principle, according to GAAP, says that firms cannot recognize revenue until the “performance obligation” has been fulfilled.
4. GAC recognizes revenue from customer orders when the customer makes the payment. This form of revenue recognition is only appropriate in the following scenarios:
  - Construction projects
  - Completion of production on certain agricultural products and extractive materials
  - Cash collection of installment sales
5. When the performance obligation is completed, and the product is transferred to the customer.
6. According to GAAP, the best method for recognition is to acknowledge sales once the firm has completed the obligation for the sale i.e. once the shirts order is delivered. The best argument for this is a situation in which the sale was

recognized at the point of payment, the order was delivered, but there was a sale return, and sales had to be lowered.

7. It would reduce revenue, and the current ratio would be affected because there would be an increase in current liabilities from the “unearned revenue” account.

*See Appendix 5-1 & Figure 5-1*

8. Net realizable value
9. Direct write-off method. This is not acceptable because GAAP requires firms to reasonably estimate uncollectible accounts receivable and report A/R based on this estimate.
10. Because GAC has switched customer bases, they have experienced new challenges making it difficult for many of their new retail customers to meet their stringent payment deadlines.

	2014	2013
A/R turnover	7.577	10.968
Days to collect	48.1731	33.27941

11. The allowance method would be a better alternative because it allows the firm to create a contra asset account based on an estimate of bad debts.
12. GAC should use the allowance method so that they can more reliably report accounts receivable at net realizable value.
13. This alternative method would decrease the asset account “accounts receivable”. This also decreases the current ratio because current assets is decreased. *See Appendix 5-1 & Figure 5-1*
14. GAC reports sales returns in the month in which they occur. This is acceptable when sales returns cannot be reasonably estimated or when estimated sales returns are immaterial.

15. In 2014, half of the plain shirts inventory was damaged by the water leak in the warehouse. The damaged shirts were to produce graphic tees for 2014 that were sold to retailers. Nikki estimates that \$15,000 of her product remains unsold in her retail customers' stores at year end 2014.
16. GAAP recommends estimating sales returns based using a contra asset account for accounts receivables. This more reliably reports the net realizable value of their accounts receivable account.
17. No, GAC should not use this alternative method in this instance. It is the correct method, however, the scenario of the water damaged sold shirts falls under ASC 605-15-25 which says that firms should not recognize the sale at all if sales returns are likely but cannot be estimated. For this reason, they should not recognize the sale of this damaged inventory at all, until after the returns date has passed.
18. Estimating sales returns in the form of a contra asset account is categorically the better method for reporting sales returns when relevant.
19. This method reduces "accounts receivables" which decreases the current ratio because current assets is lower.
20. GAAP requires inventory to be measured at "lower of cost and market". Additionally, if sales are likely to be returns, but returns cannot be reasonably estimated, then the firm should not recognize revenue and should retain the goods until return period has passed (ASC 605-15-25).
21. GAC has been measuring inventory at cost alone. This is appropriate when market price is consistently above or the same as cost.

22. They have sold water damaged inventory, and this inventory's market value is less than cost. They also have recognized the sale of these damaged products, even though sales returns are likely but not estimable. As a result, they should value the damaged goods at inventory and not recognize revenue on sale until after the returns deadline. Days to sell inventory as more than doubled as a result of overvaluation of inventory. Inventory should appropriately be reported at market price.
23. GAC will likely have to markdown the selling price for the damaged shirts below cost. When inventory is returned or unsold during the season, it is sold to discount retail stores at half the original selling price. Meanwhile, GAC's gross profit percentage is around 48%, therefore if unsold or returned, the graphic shirts will likely be sold to a discount retail store at below costs. The assumption is that this marked down value of the damaged shirts represents the net realizable value of this inventory.
24. They should report all damaged goods in inventory including those that were "sold" to retailers at market value or net realizable value.
25. There will be a net increase of equity, as cost of goods sold is reduced because the sale will not be recognized until return period has passed. There is a net decrease in current assets because accounts receivable is decreased more than inventory is increased. This results in a decrease of the current ratio. *See Appendix 5-1 & Figure 5-1*

26. All changes included and adjusted for, the current ratio will decrease from 1.3502x to 0.9051x. This means that GAC is in violation of their loan agreement by not maintaining a current ratio of 1x.
27. In order to be in compliance with the loan covenant, she would need to raise at least \$4,999 in additional equity.
28. Nikki has three options at this point:
- 1. Provide the equity financing using her own funds.**
    - Would be ideal, but unlikely based on her current personal situation
  - 2. Approach her current bank or another bank and ask for additional debt financing.**
    - Also unlikely. The bank will more than likely point to the fact that she cannot seem to manage the current debt financing she already has.
  - 3. Begin to sell non-essential property, plant, and equipment.**
    - Could be detrimental to the long-term profitability of the company if she is forced to sell off needed equipment.

#### Appendix 5-1

	2014	2014 (Corrected)
<b>Current Assets:</b>		
Cash and Cash equivalents	\$ 4,000	\$ 4,000
Net Accounts Receivable <sup>1</sup>	\$32,500	\$ 12,000
Inventory	\$24,500	\$ 31,681
Total Current Assets	\$61,000	\$ 47,681
<b>Current Liabilities:</b>		
Accounts Payable	\$36,100	\$ 36,100
Unearned Revenue	\$ -	\$ 7,500
Accrued Liabilities	\$ 8,680	\$ 8,680
Taxes Payable	\$ 400	\$ 400
Total Current Liabilities	\$45,180	\$ 52,680
Current Ratio	1.3502	0.9051
Current Excess (Deficit)	\$15,820	\$ (4,999)

Corrected A/R: <sup>1</sup>	
Accounts Receivable	\$ 15,000
Less: Allowance for Bad Debts	\$ (3,000)
Net accounts receivable	\$ 12,000

LCM Assumption	
<b>Damaged Goods Inventory</b>	
Graphic Shirts Ending Inventory	\$ 9,800
Graphic Shirts from sales	\$ 7,752
Replacement Costs	\$17,552
Mark Down Retail Value (Half of Sales) (NRV)	\$16,981
Loss on Damaged Inventory (Replacement- Mark Down)	\$ 571

**Case Six**  
**Planes and Garbage – Depreciation and Fraud**

## **Executive Summary**

This two part report looks at the role of depreciation in various financial statements and how a firm might use depreciation to mislead stockholders and investors.

The first part looks three different airlines and how they evaluate the useful life and salvage values of their respective flight equipment. In number one of Part I, the chart provided shows the book values of each airliners equipment, the estimated salvage values, and their respective useful lives based on an averaged estimation.

Part two looks at Waste Management and Arthur Andersen and their respective roles in the material misstatements of Waste Management's financial statements between 1992 and 1996.

### **PART I:**

1.

**Figure 6-1**

	Northwest	Delta	United
Book value	\$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	20.0	27.5
Annual Depreciation	\$ 4,913,793	\$ 3,562,500	\$ 2,590,909
Acc. Depreciation to 2008	\$19,655,172	\$14,250,000	\$10,363,636
Book value @ 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. Possible reasons for using different useful lives:

- a. They may have differing repair and maintenance policies.
- b. They also may have different managerial styles regarding tax implications, financial reporting, and safety standards for their flight equipment.

3. Sale price set I is more realistic because it puts the sales price closer to current book value of the flight equipment for each company.

PART II:

1. Waste management was accused of falsifying financial reports and misleading investors. Additionally, two members of management were accused of dumping overinflated stock onto unsuspecting investors. Investors lost over six billion dollars due to the Company's misstatements. Under new management, Waste Management made the largest restatement of financial reports in history, showing that profits were overstated by \$1.7 billion.
2. They extended the useful lives of assets and made unsupported increases to the salvage values of their garbage trucks. This decreased depreciation expense, thereby increased current earnings. Additionally, they intentionally failed to write down or impair the value of landfills and inappropriately capitalized various expenses.
3. The defendants involved in the summarized SEC complaint received a combined total of \$36,199,370 in ill-gotten gains in the form of bonuses, retirement benefits, trading, and charitable giving. As a reward for "meeting" earnings projections, many high level executives at the firm were given accelerated retirement packages and generous bonuses. Dean Buntrock, CEO and founder, was particularly brazened and profited greatly from the sale of inflated stocks just a week before their accounting misstatements went public.
4. Arthur Anderson's (AA) audit reports of Waste Management's financial statements were materially false and misleading. They acknowledged the firm's misstatements of net income but failed to enforce restatements and allowed the



Company to report these misstated financial statements. As a result, the SEC brought enforcement actions and administrative proceedings against AA and four of its partners. AA settled a civil injunctive action and the related administrative proceedings for a historic \$7 million. Three partners paid civil penalties regarding their involvement in the fraud and were barred from practicing or appearing before the SEC as accountants. One had the right to request reinstatement after five years, but the other two partners could request reinstatement after three years. The fourth partner was barred from practice with a request for reinstatement after one year. They complied with these settlements but have since been involved in other scandals and frauds; they no longer have an audit practice as a result.

**Case Seven**  
**Construct – Environmental Liabilities**

## **Executive Summary**

This analysis looks at a construction materials manufacturer (Construct) and the financial reporting of an acquired property that resulted in an environmental liability. In 2007, Construct purchased a manufacturing facility based in New York City from BigMix, Inc., a concrete manufacturer. Shortly after, BigMix went bankrupt, and Construct was notified that the EPA was launching an investigation into the newly acquired facility concerning water contamination. The EPA named Construct as a responsible party (PRP) in 2010 and issued a unilateral administrative order to them requiring them to do a remedial investigation and feasibility study (RI/FS). Ultimately, Construct became liable for more than \$1.5 million related to a remediation plan.

Through this report, an examination of GAAP and IFRS accounting standards helps firms identify when they should appropriately report a loss contingency and, more specifically, an environmental liability. Principally, both GAAP and IFRS state that a loss contingency should not be reported unless it is both estimable and probable. Per GAAP in the case of an environmental liability, a firm should recognize the liability at the point that a remedial action is started (i.e. an investigation or planning stage), and if the costs associated with the liability are both estimable and likely. The report, in discussing what costs should be reported according to FASB and IASB, looks principally at ASC 410-30 and IAS 37.

### **1. In 2007, at the time of the purchase, should Construct record a liability for environmental liabilities? If so, how much?**

Per ASC 450-20-25-2, Construct should not have recorded a liability at the time of purchase. In terms of IFRS, IAS 37.10 dictates that a contingent liability is also

“a possible obligation depending on whether some uncertain future event occurs, or”. Since Construct included an indemnification provision in the purchase price, it should have disclosed the possible future contingent liability [IAS 37.86].

**2. In 2008, should the company record any liability due to BigMix filing for Chapter 11? If so, how much?**

BigMix’s financial position does not affect Construct’s status regarding, at the time, a non-existent environmental liability [ASC 450-20-25-3] [IAS 37.10].

**3. In 2009, should the company record any liability for the potential environmental liability? If so, how much?**

According to GAAP, two things happened here that creates a liability of \$250,000 beginning in 2009: 1. Remedial action was started by the EPA and Construct’s contracted environmental agency. [ASC 410-30-25-3] 2. There is a reasonable estimate and probability of minimum costs that the firm could face. [ASC 410-30-25-10] IFRS says the liability of \$250,000 should be reported per IAS 37.15 and IAS 37.40.

**4. In 2010, should the company record any liability for the potential environmental remediation? If so, how much?**

Per GAAP, Construct should recognize \$400,000 as an environmental liability, even though they cannot predict the total costs of the remediation effort [ASC 410-30-25-11]. Additionally, the fact that the EPA issued a unilateral administrative order means that there must be an “imminent and substantial endangerment” at the site, meaning additional liabilities and losses is more than

likely [ASC 410-30-25-15b]. IFRS says that the \$400,000 should be recorded as part of the environmental liability [IAS 37.72 Appendix C, Examples 2B]

**5. In 2011, should the company record any additional liability for the potential environmental remediation?**

GAAP says that the \$1.5M implementation costs should be recognized as an environmental liability for two reasons: 1. The RI/FS formulated a reasonably estimated remediation cost associated with the site [ASC 410-30-25-15d]. 2. The firm should be prepared to make adjustments to their estimates as uncertainties are cleared up [ASC 410-30-25-13]. IFRS defends GAAP in this regard, and according to IAS 37.40, Construct should recognize the \$1.5M implementation costs in addition to the other previously recognized liabilities.

**6. In 2012, should the company record any gain contingency/contingent asset for the potential settlement?**

GAAP uses conservatism in this instance and only allows firms to report a gain contingency in the form of a disclosure. However, it warns that firms should take care not to be misleading with the disclosure [ASC 450-30-50]. In this case, Construct could disclose the gain contingency for \$1M. IFRS states that when income is “virtually certain”, then the gain or “related asset” may be recognized [IAS 37.31-35]. A 75% chance of income should not be considered virtually certain, therefore the \$1M lawsuit should only be disclosed at the time of issuance.

**Case Eight**  
**Rite Aid Corporation – Long Term Debt**

## **Executive Summary**

In this analysis, one can begin to dissect Rite Aid's long term debt and the impact their debt will have on the overall financial solvency of the company. Initially, the analysis looks at what kind of debt Rite Aid has and the different terms and conditions that come with each type of debt. Next, the analysis looks at a few specific notes and their impact on the financial statement from a yearly, transactional level.

Upon examination of those notes, there is a comparison of the effective interest rate method vs. the straight line method. Each of the two methods affect how interest expense and discount/premium amortization is recognized over the life of the note and how that impacts the firm's presentation of long term debt.

The analysis also looks at how the firm might repurchase notes and how they would account for that on a transactional level. Lastly, the analysis breaks up the firm's long term debt based on solvency ratios.

Through that analysis, it is evident that Rite Aid is heavily reliant on debt financing and because of their continued operating losses they could see imminent instability as their debt matures. In addition, they are far less solvent than others in the industry based on the industry average.

With that assessment and the basis of Standard & Poor's credit rating descriptions, Rite Aid most likely has a credit rating of "BB".

*Please note: All calculations and numerical values are in terms of thousands with the exception of ratios and percentages.*

- a. i. Secured debt is backed by the pledge of collateral, while unsecured debt is not backed by collateral. Additionally, unsecured debt has a higher interest rate because it is riskier than secured debt. Rite aid has both of these types of debt.
- ii. The parent company, Rite Aid Corporation, guarantees the debt of the subsidiary, Rite Aid stores, with the parent company's assets.
- iii. Senior debt has higher priority of repayment in the event of the firm declaring bankruptcy. The term "fixed-rate" refers to the interest, in that it does not float or change during the life of the bond. Convertible notes/bonds is a type of debt that can be exchanged for equity or, more specifically, stock in the firm.
- iv. Different types of debt with different interest rates could be attributed to Rite Aids relations with the creditor of the debt, or it could also have to do with the economic or financial situation of the company or economy at the time the debt was issued.
- b. Rite Aid has \$6,370,899 in total debt. \$51,502 of the debt is current maturities due within one year. Current maturities + Long-term debt, less current maturities + Lease financing obligations, less current maturities= total debt
- c. i. The face value is \$500,000, and this is seen by the fact that the balance remains unchanged year-to-year. Additionally, there is no mention of it being issued at either a discount or premium.

ii. Cash	\$500,000	
Bonds Payable	\$500,000	
iii. Interest Expense	\$37,500 <sub>(1)</sub>	
Cash		\$37,500
iv. Bonds Payable	\$500,000	
Cash		\$500,000

(1)  $37,500 = 500,000 * 7.5\%$



d. i. The face value is \$410,000, and the carrying value is \$405,951. The difference is the unamortized discount (\$4,049), which is amortized over the course of the debt until the unamortized discount is equal to 0.

ii. The total interest paid in fiscal 2009 is \$38,438<sub>(1)</sub>.

iii. The total interest expense in fiscal 2009 is \$39,143<sub>(2)</sub>.

iv. Interest Expense                      \$39,143  
             Discount on B/P                      \$705<sub>(3)</sub>  
             Cash                      \$38,438  
 v. 9.64 %<sub>(4)</sub>

(1) \$38,434 = \$410,000 \* 9.375%

(2) \$39,143 = Interest paid (38,438) + Discount on B/P (705)

(3) \$705 = (\$4,049/ 69mths) \* 12

(4) 9.64% = \$39,143 / \$405,951

e. i. Cash                      \$402,620<sub>(1)</sub>  
             Discount on N/P                      \$7,380<sub>(2)</sub>  
             Notes Payable                      \$410,000

ii. 10.1212 %<sub>(3)</sub>

iii.

**Figure 8-1**

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

iv. Interest Expense                      \$27,167<sub>(4)</sub>  
             Discounts on N/P                      \$517<sub>(5)</sub>  
             Interests Payable                      \$26,650<sub>(6)</sub>  
 v. net book value at February 27, 2010= \$403,137= \$402,620+\$517

vi.

**Figure 8-2**

Date	Interest Payment	Interest Expense	Bond Discount Amortization	Net Book Value of Debt	Effective Interest Rate
6/30/2009	\$ -	\$ -	\$ -	\$ 402,620	
6/30/2010	\$ 39,975	\$ 41,029	\$ 1,054	\$ 403,674	10.19%
6/30/2011	\$ 39,975	\$ 41,029	\$ 1,054	\$ 404,729	10.16%
6/30/2012	\$ 39,975	\$ 41,029	\$ 1,054	\$ 405,783	10.14%
6/30/2013	\$ 39,975	\$ 41,029	\$ 1,054	\$ 406,837	10.11%
6/30/2014	\$ 39,975	\$ 41,029	\$ 1,054	\$ 407,891	10.08%
6/30/2015	\$ 39,975	\$ 41,029	\$ 1,054	\$ 408,946	10.06%
6/30/2016	\$ 39,975	\$ 41,029	\$ 1,054	\$ 410,000	10.03%

vi.

**Figure 8-3**

Date	Effective Interest Rate	Straight-line Method	Difference
6/30/2009	\$ -	\$ -	\$ -
6/30/2010	\$ 40,750	\$ 41,029	\$ (279)
6/30/2011	\$ 40,828	\$ 41,029	\$ (201)
6/30/2012	\$ 40,915	\$ 41,029	\$ (114)
6/30/2013	\$ 41,010	\$ 41,029	\$ (19)
6/30/2014	\$ 41,115	\$ 41,029	\$ 85
6/30/2015	\$ 41,230	\$ 41,029	\$ 201
6/30/2016	\$ 41,357	\$ 41,029	\$ 328

The straight line method initially results in a greater interest expense until half way through, and then the trend is reversed, with the effective interest method yielding higher interest expense. Relative to the total amount of interest expense in fiscal year 2010 (\$515,763), these distinctions in methodology are immaterial.

- (1)  $\$402,620 = 98.2\% * \$410,000$
- (2)  $\$7,380 = \$410,000 - \$402,620$
- (3) used "RATE" function in excel with inputs of nper = 7, pmt = -39975, pv = 402620, and fv = -410000
- (4)  $\$27,167 = (\$402,620 * 10.1212\%) * (8/12)$
- (5)  $\$517 = \$27,167 - \$26,650$
- (6)  $\$26,650 = (\$410,000 * 9.75\%) * (8/12)$

**f. i. Notes \$810,000**

Cash	\$797,769
Discount	\$8,481
Gain	\$3,750

ii. There was obviously a change in either the risk of Rite Aid or the market's interest rates between issuance of the notes and the point of repurchase.

iii. This means that current interest rates are above both the effective interest rate and the coupon rate of the notes. This effectively makes the bonds less appealing,

meaning that the coupon could buy them back for less than their current carrying value.

g. Notes Payable	xx	
Discount		xx
Common Stock (par)		xx
Add PIC		xx

Firms issue convertible notes as an alternative to just paying back the bondholder with cash. This will decrease liabilities and increase equity.

h. i.

**Figure 8-4**

Ratio	Industry Average	Rite Aid FY 2009	Rite Aid FY 2008
Common-size debt	43.83%	82.79%	87.41%
common-size interest expense	0.35%	2.01%	1.82%
debt to assets	14.41%	79.14%	72.20%
long-term debt to equity	0.26	-3.80681	-5.0112
proportion of long-term debt due in one year	6.11%	0.81%	0.68%
Times-interest-earned(Interest coverage)	33.44x	0.0695	-4.4076

Based on above table, Rite Aid should get a credit rating of “BB”. This rating indicates that they are less vulnerable in the near future but face major uncertainties as more of their long term debt comes to maturity.

ii. Rite Aid is more heavily reliant on debt financing than its competitors. In addition, Rite Aid is leveraging their assets with long term debt at nearly twice the percentage points of the industry average.

iii. Based on Standard and Poor’s credit rating opinions, Rite Aid seems to be functional and less vulnerable in the short term, but based on industry averages, Rite Aid should have more currently maturing long-term debt; as Rite Aid

continues to operate at a loss, they will approach maturity of this long-term and will be a more risk based on my assessment. This financial situation, for my assessment, gives them a credit rating of “BB”.

**Case Nine**  
**Merck & Co., Inc. and GlaxoSmithKline plc-**  
**Shareholders' Equity**

## **Executive Summary**

The below report looks in depth at three essential concepts related to Merck, an American pharmaceutical firm, and GlaxoSmithKline, a British firm:

1. Differences between U.S. GAAP and IFRS reporting in regards to dividends and stockholders' equity
2. Differences in financial information between the two firms and across multiple years.
3. Understanding how firms' make decisions relating to the equity side of the balance sheet in regards to dividends, treasury stock, and common stock issuance.

Through an analysis of Merck and Glaxo's financing activities and equity standing, there are two facts that can be surmised:

1. Merck pays out more cash dividends than Glaxo relative to operating cash flows, net income, and stock price in any given year.
2. Glaxo has a higher stock price and more shares outstanding than Merck.

Based on the above information, it seems that Glaxo relies less on cash dividends to draw in investors, but instead, it can be assumed that it builds shareholders' trust by showing growth and innovation. Meanwhile, Merck offers more cash dividends relative to its operating performance as a way of building shareholder trust.

The analyses in these report offers insight into the inner workings of Glaxo and Merck, as well as how they draw in investors and what their strategic goals are.

## **CONCEPTS**

- a.
  - i. 5.4 billion shares have been authorized to issue by Merck.
  - ii. 2,983,508,675 shares have been issued as of 2007.

- iii. \$1 per share is the par value of the shares issued as of 2007.
  - iv. 811,005,791 common share are held in treasury in 2007.
  - v. 2,172,502,884 (shares issued less treasury stock) common shares are outstanding in 2007.
  - vi. Shares outstanding x stock price = \$125,157,891,147 or the total market capitalization at the end of 2007.
- b.
- i. 10 billion shares are authorized for issuance by GlaxoSmithKline.
  - ii. 6,012,587,026 shares have been issued as of 12/31/2007.
  - iii. 5,373,862,962 shares are in free issue as of 12/31/2007.
  - iv. 504,194,158 shares are held in treasury as of 12/31/2007.
  - v. Share capital represents capital stock or the par value of all contributions from shareholders. Share premium account represents all additionally contributed capital. Merck refers to “share premium account” as “other paid in capital”, while the “share capital” account is referred to as “capital stock”.
- c. Companies pay dividends as a way of assuring stockholders that their profits are real and tangible. It is a way for stockholders to see a real return on investment. Typically, share price is goes down at two different points. It first goes down at the ex-dividend date (the date that determines who is eligible for the dividend) because after that point, new stockholders will be ineligible for the dividend payment. The share price goes down once more after the dividend is paid out because cash flows are reduced by the dividend payment.

- d. Companies repurchase their own shares for various reasons. Typically, companies repurchase shares for three reasons: to prevent a takeover/buyout, to improve earnings per share, or to improve return on equity.

### **PROCESS**

- e. Dividends declared    £3,310,700,000
- |                   |                |
|-------------------|----------------|
| Cash              | £3,307,300,000 |
| Dividends Payable | £3,400,000     |
- f. i. Dividends declared    £2,793,000,000
- |      |                |
|------|----------------|
| Cash | £2,793,000,000 |
|------|----------------|
- ii. The total dividends declared in 2007 (£ 2,905,000,000) is different from dividends in the statement of cash flows (£ 2,793,000,000) because, per IFRS, firms cannot recognize interim dividends until they are actually paid.
- g. i. They use the cost method whereby treasury stock decreases the sum of contributed capital and retained earnings. Additionally, treasury stock is valued at market value as opposed to the par value of the stocks originally at issuance.
- ii. In 2007, Merck repurchased 26.5 million common shares.
- iii. In total, Merck repurchased \$1,429,700,000 worth of common shares during 2007 at an average rate of \$53.95 per share. The repurchasing of common shares is a financing cash flow.
- iv. Treasury stock is not considered an asset and is instead reported as a contra-equity account. Recognizing treasury stock as an asset would violate the economic entity concept of the GAAP conceptual framework.
- h. i. Glaxo repurchased 285,034,000 ordinary shares in 2007.
- ii. The company paid £3,750,000,000 for ordinary shares repurchased at a rate of £13.16 per share.



Retained Earnings	£3,750,000,000	
Cash		£3,750,000,000

i.

	Merck (\$)		Glaxo (£)
(in millions)	2007	2006	2007
Dividends paid	\$ 3,307,300,000	\$ 3,322,600,000	£ 279,300,000
Shares outstanding	2,172,502,884	2,167,785,445	5,373,862,962
Net income	\$ 3,275,400,000	\$ 4,433,800,000	£ 5,310,000,000
Total assets	\$ 48,350,700,000	\$ 44,569,800,000	£ 31,003,000,000
Operating cash flows	\$ 6,999,200,000	\$ 6,765,200,000	£ 6,161,000,000
Year-end stock price	\$ 57.61	\$ 41.94	£ 97.39
Dividends per share	\$ 1.52	\$ 1.53	£ 0.05
Dividends yield (dividends per share to stock price)	2.64%	3.65%	0%
Dividends payout (dividends/net income)	1.0097	0.7494	0.0526
Dividends to total assets	0.0684	0.0745	0.0090
Dividends to operating cash flows	0.4725	0.4911	0.0453

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**Case Ten**  
**State Street Corporation- Marketable Securities**

## **Executive Summary**

This report examines the marketable securities owned and sold by State Street Corporation during fiscal year 2012. Trading, available-for-sale, and held-to-maturity securities are the focus of parts a, b, & c. The main distinction between these securities is in the purpose or motivation of the firm's acquisition of the security.

Trading securities are short-term investments that are expected to give some kind of return and are reported at fair market value, and while similar, available-for-sale securities are different because they are bought with the intention of being sold prior to maturity date. Held-to-maturity securities are the most distinctive because they are debt investments that are reported at cost and are purchased with the intention of being held until the maturity date. The net value of these is adjusted by using valuation accounts that amortize the premium or discount of the security.

The last part of the report focuses on realized and unrealized gains (losses), the buying and selling of securities, and the impact of these transactions on the financial statements. By examining the impact of the gains and losses in these transactions, there is a better understanding of how these securities can affect the overall perception of the financial statements to investors.

All in all, firms' motivations and intentions for buying and selling investment securities can affect the overall financial statements. Trading and AFS securities are adjusted year-to-year to match their fair market value. These adjustments represent unrealized gains or losses that are not reported on the income statement or cash flow statement, but instead, they are represented as accumulated other comprehensive income in the equity section of the balance sheet. Held-to-maturity investment securities are typically bonds that are held

to their maturity date and are reported at their carrying value or the difference between cost and unamortized discount or premium. These distinctions and the firm's intentions can have major impacts on shareholders' returns and managerial decisions.

### **CONCEPTS**

- a.
  - i. Trading securities are short-term equity and debt investments that are reported at fair market value and are expected to give a return.
  - ii. They would debit cash and credit some sort of income statement account which would be reported as revenue on the income statement.
  - iii. The company would record an increase in the value of the trading securities account by debiting that account and crediting an unrealized gain that will appear on a consolidated statement of comprehensive income.
- b.
  - i. Available-for-sale securities are investments reported at fair market value that are purchased with the intent of selling prior to their maturity date.
  - ii. This income would be reported as other income or revenues on the income statement.
  - iii. If the market value of the AFS securities increased, then the company would record a debit to that securities account and a credit to unrealized holding loss that would go to accumulated other comprehensive income.
- c.
  - i. Held-to-maturity securities are debt securities that the company holds until the securities maturity date. The most common type of HTM security is a bond, and they are held at cost, while being adjusted in their net value by amortizing premiums and discounts. Equity maturities may never be classified as held-to-maturity.

- ii. Market value has no bearing on the reported value of HTM securities.

## **PROCESS**

- d. i. \$637,000,000 is the balance in the “trading account assets” account 12/31/2012.

This account is reported at its market value.

ii. Trading account assets	\$85,000,000	
Unrealized holding gain on trading securities		\$85,000,000

- e. i. The year-end balance of this account is \$11,379 million.
- ii. The year-end market value is equal to 11,661 million.
- iii. The amortized costs are \$11,379 million. The amortized costs represent the difference between the purchase price of the security and the premium or discount on the security.
- iv. Market value is higher than the amortized costs because the securities are currently more valuable than they were at the point of purchase. This market value plays no real significance on the value of the securities.
- f. i. \$109,682 million. This represents the fair value of the securities.
- ii. \$1,119 million is the total NET GAIN of the unrealized holding gains and losses on available for sale securities.
- iii. \$55,000,000 net gains on sales of AFS securities were realized in 2012. This would create an increase in the income statement under other revenues. This will also decrease the investing cash flows of the cash flows but an overall increase in cash flows.

g. i. Investments- securities AFS	\$60,812	
Cash		\$60,812
ii. Unrealized gains from investments- securities AFS		\$67
Cash		\$5,399
Investments- securities AFS		\$5,411
Realized gain from sales of AFS securities		\$55

iii. The original cost of the AFS securities sold is \$5,411 million. This is based on the credit made to the “Investments- securities AFS” in part g. ii.

iv.

**Figure 10-1**

Net unrealized gain (loss) on Investment- Securities AFS	
\$ 181	
\$ 67	
	\$ 1,367
	\$ 1,119

Entry to make adjustment:

Investments- securities AFS    \$1,367

Unrealized gains investments- securities AFS                      \$1,367

\$1,367 million represents the amount of unrealized gain adjusted for during

FY2012. This does not affect the statement of cash flows or income statement, but

instead, this adds to the accumulated other comprehensive income on the balance sheet.

*(All values in parts i, ii, and iv are in millions.)*

**Case Eleven**  
**Groupon- Revenue Recognition**

## **Executive Summary**

This analysis of revenue recognition primarily focuses on three things to help the reader establish an understanding of the topic:

1. How to utilize financial statements to make comparisons across companies, time, and even industries.
2. How to better apply the FASB codification system and GAAP to real-world problems.
3. How to break down a business transaction to see how to apply GAAP and rudimentary double entry bookkeeping.

Initially by comparing Wal-Mart, Amazon, and Groupon and their respective business risks, the reader can better understand what kind of company Groupon is in terms of its market development, its business model, and its performance alongside its competitors. Then when looking at how income, revenue, and stock price affects a company over time, the reader will see the vast implications that revenue recognition has on the life of a company and its performance in the capital markets. Lastly, the remainder of the analysis looks at four key topics regarding Groupon's particular issues surrounding revenue recognition:

1. How the company performed using its old revenue recognition model.
2. How moving from the gross method to the net method of revenue recognition can affect overall "perceived" performance.
3. Why companies like Groupon with expansive sales returns policies cannot simply recognize revenue at the point of sale (POS).



4. How it is possible for Groupon's revenue and net income to be reduced drastically upon restatement will having unaffected operating cash flows

Primarily, Groupon made two mistakes regarding its revenue model: 1. it was recognizing revenue based on the premise that it had inventory and credit risk and was the principal actor its customers' purchases. 2. It was recognizing revenue without appropriate reserves for sales returns. These two mistakes and restatements critically affected the stock price of the company causing it to fall from continually from \$20/share to \$4/share within two quarters.

Ultimately, it becomes painfully clear the importance of properly accounting for revenue, assets, and other key accounts that a business has. There are big rewards in a capitalist marketplace; however, companies like Groupon must diligently review their accounting models to ensure that they are appropriately and faithfully reporting their financial standing. This is especially true in the case of a firm like Groupon that has a relatively innovative business model.

### **REQUIREMENTS**

**1. Compare and contrast the business model of Groupon with the business models of Amazon and Wal-Mart. Referring to the risk factors in the MD&A sections of their 10-Ks, compare significant risks and opportunities across these companies. How do these business risks translate to risks in financial reporting?**

Groupon's main risks relate to its strategy, growth, and stability of revenue and operations. Amazon also incurs risks from its growth, revenue, and strategic expansions. However, its focus on risk tend to relate more to its international operations and cyber security. Wal-Mart is the most mature and developed of the three retailers, therefore risks

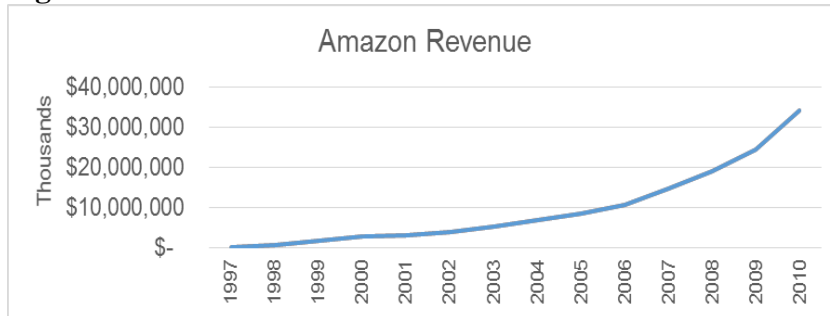
associated with its business strategy tends to relate to “forces outside [its] control”. In regards to financial reporting risks, Groupon states that it continues to struggle with revenue recognition and that the results of how they will account for revenue will continue to change as the company continues its rapid expansion. Amazon primarily focuses on its reliance on internet and technology both in financial reporting and its business model. Its MD&A section also mentioned risks associated with how its equity-method investees will record significant items on the income statement. Lastly, Wal-Mart talks about more risks beyond its scope of control such as foreign currency exchange rates, changes in GAAP, and developments in tax law.

**2. “Revenue and revenue growth are more important than income and income growth for new businesses, especially in the new-age economy.” Do you agree with this statement? Support your opinion by analyzing the relationship between Amazon’s revenue, income, and its stock price from 1997 to 2010.**

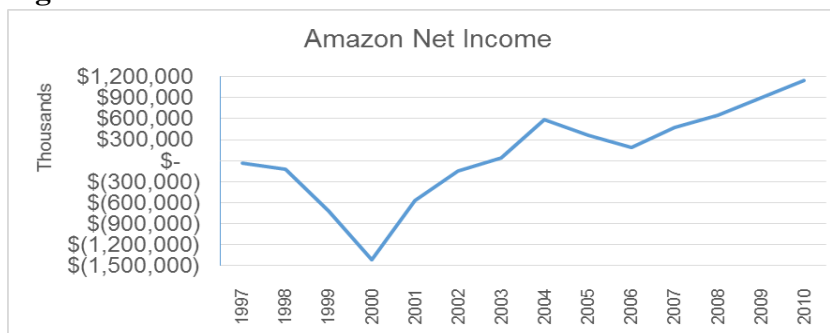
Based on the charts below that reference the revenue, net income, and stock prices of Amazon respectively, the significance of each figure can be seen clearly. For the vast majority of new age tech companies, the given quote is correct, and revenue is the lifeblood of the company’s developmental period. It initially helps companies prove their intrinsic worth, market penetration, and growth projections during the seed funding process. Later, revenue continues to be a good indicator of the direction the company is heading. It is linear and more constant in growth than stock price and net income figures. Net income better reflects management’s efficiency in their ability to provide customers with value added products and services in an effective and economically viable manner. In addition, stock price seem to follow more closely net income than revenue. Net income

and stock price are usually positively correlated, and typically, the market tends to approximate net income with some level of accuracy and precision. *See Figures 11-1, 11-2, & 11-3 for comparative graphs of Amazon's revenue, income, and stock prices.*

**Figure 11-1**



**Figure 11-2**



**Figure 11-3**



**3. Using the data provided in Figure 11-4, prepare common size income statements using revenues and cost-of-goods-sold in the original S-1 and amended S-1. Analyze trends of expenses as a percentage of revenue for 2009 and 2010. Compare and contrast the following ratios:**

**Figure 11-4**

	2009		2010	
	Gross	Net	Gross	Net
Revenue	100.0%	100.0%	100.0%	100.0%
Cost of Sales	64.1%	30.3%	60.8%	10.4%
Gross Margin	35.9%	69.7%	39.2%	89.6%
Marketing Expense	15.1%	33.8%	36.9%	90.9%
G&A Expense	24.7%	44.1%	32.8%	68.2%
Other Expenses	0.0%	0.0%	28.5%	64.9%
Net Loss	-4.4%	-7.5%	-57.9%	-134.3%

Based purely on the gross method that Groupon used in the original S-1, it seems that they improved their gross margin; however, they increased their miscellaneous, administrative, and marketing expenses. This actually pushed them to have a greater loss relative to revenues. However, overall Groupon improved tremendously with over a 2,000% increase in revenue from one year to the next. It also improved cost of sales relative to revenue.

**a. Gross Margin Percentage;**

**Figure 11-5**

	2009		2010	
	Gross	Net	Gross	Net
Revenue	\$30,400,000	\$14,500,000	\$713,400,000	\$312,900,000
Total Assets	\$14,962,000	\$14,962,000	\$381,570,000	\$381,570,000
Asset Turnover	2.0318	0.9691	1.8696	0.8200
Gross Margin Percentage	35.9%	69.7%	39.2%	89.6%

The real success came in terms of gross margin in which Groupon improved the gross margin ratio by almost four percentage points. Through this analysis, it is easy to see how the company improved from one year to the next. Their overall net loss was actually greater relative to revenues, but Groupon is seeing huge growth. If they can stabilize their accounting procedures and administrative costs, Groupon could see huge earnings from this rapidly growing business model.

**b. Asset Turnover Ratio. See Figure 11-5.**

In 2009, Groupon saw a better return on its investment dollar with an asset turnover ratio that was over 2x. In 2010, the company saw this ratio reduced by almost 10%. A likely explanation is that in 2010 Groupon made some major investments in its property, plant, and equipment (PPE) and intangible assets. This could result in an initial discrepancy between total assets relative to revenue growth.

**4. In the months leading up to Groupon's IPO, the SEC posed a number of questions regarding Groupon's choice of accounting principles for revenue recognition. Specifically, the SEC referred to the requirements in FASB's ASC 605-45-45.**

**Figure 11-6**

	2009		2010	
(in Millions)	Gross	Net	Gross	Net
Revenue	\$ 30.4	\$ 14.5	\$ 713.4	\$ 312.9
Cost of Sales	\$ 19.5	\$ 4.4	\$ 433.4	\$ 32.5
Gross Margin	\$ 10.9	\$ 10.1	\$ 280.0	\$ 280.4
Marketing Expense	\$ 4.6	\$ 4.9	\$ 263.2	\$ 284.3
G&A Expense	\$ 7.5	\$ 6.4	\$ 233.9	\$ 213.3
Other Expenses	\$ -	\$ -	\$ 203.2	\$ 203.2
Net Loss	\$ 1.34	\$ 1.09	\$ 413.4	\$ 420.1

**a. Compare the amount of revenue reported in the original and amended S-1s. What caused the difference?**

The company changed its revenue recognition model from the gross to net method. This significantly reduced Groupon's revenue as well as its cost of sales. The amended S-1 was Groupon's answer to SEC's concerns that the company was not faithfully reporting the true substance of its customers' purchases. The change from gross to net resulted in an overall minor reduction in net loss in 2009 and a slightly more substantial increase in loss in 2010.

**b. Which of the two amounts do you think Groupon preferred? Why did they prefer it?**

Obviously based on the correspondence between the SEC and Groupon, the company wanted to use the gross method. They believed that they were the primary obligor in their typical customer transactions, and they also enjoyed greater revenues under the gross method.

**c. In correspondence with the SEC following its initial S-1 filing, how did Groupon justify its method of reporting revenue?**

Initially, Groupon stated it was the primary obligor in the customer transaction because it sold the Groupon voucher to the customer and was liable for the vendors' part in carrying out the obligatory service or sale of good for the customer.

**d. With reference to ASC 605-45-45, which of Groupon's arguments were weak, and why?**

Paragraphs five, nine, twelve, and fourteen of ASC 605-45-45 highlight some indicators of the gross method that Groupon lacks, therefore exposing some of its weaknesses in its argument with the SEC. Paragraphs five, nine, and twelve mainly refers to whether the entity (Groupon) has the right to change the product or service and also whether it has some kind of inventory risk either in general or during the actual shipping process. Groupon lacks all of those characteristics. It cannot alter services/products provided, and the company does not assume an inventory risk related to the vouchers it sells. Paragraph fourteen references to credit risk, and this particularly highlights Groupon's weakness because it mentioned that its role in the customer transaction involved credit risk. Based on paragraph fourteen, the company does not have credit risk because it

collects the full amount of the sale prior to paying the supplier (i.e. the airline, cruise company, etc). Therefore, its argument and basis for using the gross method is materially weak.

**5. Groupon had 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 its website.**

**e. Assess the U.S. GAAP requirement for recognition of revenue when right of return exists, specified in ASC Section 605-15-25, in the context of Groupon’s business model.**

The primary issue that Groupon has for recognize the revenue at point of sale (POS) comes from ASC 605-15-25-1f. This section discusses the need to estimate sales returns if there exists a right of return policy. Paragraph three expands on this by explaining three four scenarios in which estimating a reasonable sales return amount might not be plausible. Groupon’s business model subjects it to three of the four scenarios. The company lacks historical experience of similar types of sales (ASC 605-15-25-3c), there are relatively long periods between POS and time to return (ASC 605-15-25-3b), and there is significant external factors that can affect the viability of fulfillment of Groupon’s suppliers’ obligations (i.e. weather, long-term global economic factors, etc.) (ASC 605-15-25-3a). These are just some of the reasons Groupon’s revenue recognition policy was not complaint with GAAP.

**f. Do you agree with Groupon’s accounting? Why or why not?**

I understand and see why Groupon would decide to account for revenue in the manner that it did. However, my empathy and understanding does not outweigh the magnitude of

this matter. Ultimately, Groupon was mistaken, and to me, it seemed they were trying to rush revenue recognition and apply revenue related to the principal entity rather than the net amount appropriate for an agent (i.e. what Groupon was in their business model).

**g. What could Groupon have done differently, and how would the financial statements have been affected?**

From the beginning, Groupon could have recognized revenue net of fees due to the merchant. They could have delayed revenue recognition until the merchant had supplied the product or service. Alternatively, they could have changed their sales return policy to limit it to a certain time period, or they could have removed the “unconditional” clause from the policy. Obviously, in the first scenario they would have seen reduced revenues and delayed revenue recognition. This could have hurt matching between expenses and revenues. As for the alternative, it is difficult to tell if Groupon would have been as successful without the unconditional “Groupon Promise”. It seems that this sales return policy provided customers with confidence that Groupon would deliver on the deals it offered through the site. This became especially important in 2011 when it began offering more high-dollar vacations, trips, and other services.

**6. Groupon’s restatement of 2011 fourth-quarter financials resulted in a reduction of \$14.3 million of revenues and a decrease of \$30 million of operating income. However, its operating cash flow was unaffected. Explain how this is possible.**

The actual flow of cash never changes throughout any of these restatements. These restatements and changes relate exclusively to the presentation of the income statement and the accrual of revenue.



**Case Twelve**  
**ZAGG, Inc. - Deferred Income Taxes**

## **Executive Summary**

This report dissects with relative detail the impact of ZAGG Inc.'s deferred income taxes on its financial statement. Firstly, the concepts section outlines some of the integral definitions and ideas related to deferred income taxes and their impact on the balance sheet and income statement. Next, the process section examines how one can take a working knowledge of deferred income taxes to extract previously unrepresented information such as net PPE under the tax system's depreciation expense method. Lastly, the report analyzes a hypothetical situation in which the statutory tax rate is changed.

The overarching theme in the report is understanding why the tax and book systems are different and how those differences affect/will affect tax provisions and the overall performance of the firm. The most common and complicated type of difference in reporting systems is a temporary difference. This results typically when the book system is accruing or deferring revenue or expense, while tax is forced to recognize this revenue or expense as incurred. Most importantly to note, this temporary difference should theoretically reverse itself down the road as the asset related to it is sold, or the actual expense or revenue is incurred. This scenario results in a current year deferred tax asset or liability. This asset or liability represents future tax benefits or payments respectively.

The topic of this report has two important implications for all stakeholders involved: 1.) By explaining the basic concepts, it can help investors better see where the profitability of the company actually lies in relation to its current and future tax provisions 2.) It helps management to understand how they can better do tax planning, bookkeeping, and asset structuring. The implication of understanding deferred income taxes leads to direct benefits for both internal and external users.

## **CONCEPTS**

- j. Book income refers to a firm's financial income prior to the deduction of its respective tax provisions. In the case of ZAGG, Inc., the book income is referred to as the "income before provision for income taxes". In 2012, this value came to a total of \$23.9 million. Fundamental differences between the tax code and U.S. GAAP in regards to revenue and expense recognition are what partially creates the distinction between taxable income and book income.
- k.
  - i. Permanent tax differences are differences that arise between financial reporting income and taxable income. These differences will never be reconciled and will not show up in the other type of income in the future. An example of a permanent tax difference would be the interest on municipal bonds that is seen in financial reporting but is not reported as taxable income because it is and will always be tax-exempt.
  - ii. Temporary tax differences are differences in financial and taxable income that will one day be reconcilable to each other in future periods. An example would be bad debt expense which is estimated and placed in an allowance account in financial reporting but is reported on as incurred (cash basis) for tax purposes.
  - iii. For example, the top statutory marginal tax rate for individual taxpayers in the federal tax code is 39.6%.
  - iv. An effective tax rate is equal to taxes paid divided by total income. This rate effectively determines how much of total income is being paid to the government.

- l. Companies report deferred income tax expenses in the current period in order to match better the income tax expense with the income reported in financial statements.
- m. Deferred tax liabilities derive from situations where revenue reported today will result in payment of income taxes tomorrow. An example would be receivables in financial reporting that will arise in future periods on the tax return resulting in future income tax payments. Alternatively, deferred tax assets occur when current expenses or liabilities on the books are not reported for tax purposes until later periods. This temporary difference results in future decreased taxable income, thereby a future decrease in income taxes payable. An example of this would be warranty expense and liability estimated for a sale in the current period for book purposes. This expense is not tax deductible until it is incurred; this temporary difference is represented in the form of a current period deferred tax asset.
- n. A deferred income tax valuation account is a contra account against the balance of the deferred income tax asset account. It is recorded when it is more than likely that the entirety of the current balance of the income tax asset account will not be realized. This valuation account is an estimate that, when netted against the deferred tax asset account, gives the balance of deferred income tax benefits that are likely to be realized in future periods.

### **PROCESS**

- o. 

i. Income Tax Expense	\$9,393,000
Net Deferred Income Tax Asset	\$8,293,000
Income Tax Payable	\$17,686,000
- ii. Between 2012 and 2011 there was a net increase in deferred income tax assets of \$8,002,000 and a net decrease in deferred income tax liabilities of \$294,000

resulting in a net effect of \$8,294,000. This represents the total deferred benefits for the year seen in part f. i. above.

iii. The effective tax rate for ZAGG Inc. is 39.3% (\$9,393,000 divided by \$23,898,000). This rate differs from their statutory rate of 35% because of the adjustments made in table 2 of note 8. This table reconciles the statutory tax provision to those figures that are not accounted for in the statutory rate computation such as state tax, non-deductible expenses, and surcharges.

iv. This net deferred income tax asset balance appears in two parts of the balance sheet. One portion is the current assets portion, and the other is in the non-current assets portion of the balance sheet. These distinctions are made based on the asset or liability related to the difference represented in the deferred asset. If for example, the deferred asset is related to the valuation of bad debt expense, then it would go under the current portion of the balance sheet.

p. i. The tax system has recognized greater expense as of date. This is based on the increased deferred income tax liability from 2011 to 2012. This means that the tax system has greater depreciation expenses year to year than the book system. However, upon capital recovery in the future, this will be reversed resulting in increased taxable amounts for the future.

ii. \$794,000 divided by 35% equals \$2,268,571. This represents the cumulative difference between the book and tax depreciation expense. This figure shows how much greater tax depreciation expense is than book depreciation expense.

iii. There would be \$2,593,429 in the “property and equipment, net” account in fiscal year 2012. This figure is calculated by reducing the previously calculated

PPE figure of \$4,682,000 by \$2,268,571. This represents how much more accumulated depreciation would be netted against the value of the property and equipment account if the tax depreciation method were used.

- q. i. The book system recognized more expenses for doubtful accounts. In the tax system, these expenses are recognized as incurred, while GAAP requires estimates of bad debts to be made for the book system. This temporary difference results in less deductible expense now and more later as actual bad debt expenses are incurred. This means ZAGG's currently has a deferred tax asset to represent this discrepancy.
- ii. The current temporary difference in bad debt expense between the two systems is \$654,286. This figure can be calculated as the difference (\$229,000) between deferred income tax assets related to allowance for doubtful accounts divided by the statutory tax rate of 35%.
- r. The valuation allowance account is equal to \$713,000 at the end of the 2012 fiscal year. By creating the valuation allowance account, the firm is saying that it is likely that they will not realize income from the investment to offset against the losses carried forward from prior years.

### **ANALYSIS**

s. Deferred Income Tax Liability	\$113,429**	
Income Tax Expense	\$2,031,571	
	Deferred Income Tax Asset	\$2,145,000***

\*\*  $\$794,000 - (\$2,268,571 \times .30)$

\*\*\*  $\$15,015,000 - (\$42,900,000 \times .30)$

The ending balance in the Deferred Income Tax Liability account would be

\$680,571, while the total Deferred Income Tax Asset ending balance would be

\$12,870,000 after making the adjustment above.

**Case Thirteen**  
**Johnson & Johnson- Retirement Obligations**

## **Executive Summary**

This report primarily addresses the retirement pension plan of Johnson & Johnson Inc. (J&J). In particular, the overall economic standing of the company is examined through the lenses of pension plans and their impact on J&J. Companies establish a separate, distinct entity to hold the assets and obligations related to the pension plan established for employees at retirement. The fund both accepts contributions, handles investment decisions, and manages benefit payments and obligations. J&J's fund at the end of 2007 had a projected benefits obligation of \$12,002m and a plan assets fair value of \$10,469m. This means that the plan is underfunded by \$1,533m. This underfunded amount is one of the main issues addressed in the latter part of the report.

Establishing an understanding of pension plans can help both companies and plan participants to better plan, and create sound, responsible financial plans for the future. Primarily, this is seen in the report by looking at the significance of the projected benefit obligation. Companies enlist the help of "actuaries" to project what future payments the fund will owe to retiring employees based on many factors including future salaries, life expectancy, etc. This present value of the projected benefits obligation is then used to help the company determine how much it should contribute to the fund. The amount of contributions and overall obligation fluctuates based on interest rates, actual returns on investments, and other factors.

These issues are complex and make pension accounting one of the most difficult to manage. It requires firms to look at the future with intent and care. Pension accounting also requires accountants to further examine what the economic substance of the fund is



and how this fund can be most faithfully represented and reported to stakeholders involved. This is the crux of the issues addressed in the report found below.

*All figures found below are in millions unless otherwise stated.*

## **CONCEPTS**

- a. i. The defined contribution plan is a plan that specifies a certain sum that the employer contributes to the plan. The employee's benefits are not specified in the plan are based many factors including total contributions, length of employee service, and employee's age among other factors. A defined benefit plan establishes the benefits that the employee will receive. The employer's contributions are based on the present value of the employee's future benefits to be received. Johnson & Johnson has various types of benefit plans; however, they primarily disclose in the notes of the financial statements their defined benefit retirement plan.
- ii. The retirement plan obligations are liabilities because employers are liable for contributions to the plan so that it may be fully funded for future employee's benefits.
- iii. Companies must primarily make actuarial assumptions about the future of their employees. These assumptions include mortality rates, employee turnover, interest and earning rates, and future salaries.
- b. Service costs are pension expenses related to the present value of future benefits due to employees. Interest costs represent interest expense related to the liability of the projected benefit obligation. Actuarial gains and losses arise primarily in two distinctive ways: 1.) in the different between actual and expected returns on

plan assets and 2.) In the amortization of the net gain or loss from previous periods. Lastly, benefits paid to retirees is the expenses related to payments to retirees that decreases plan assets and decreases the projected benefit obligations.

- c. Actual return on pension investments represents the return of the pension plan's investment of assets held for future benefit obligations. The company contributions to the plan represent actual increased investment into the plan assets by the company, rather than just a return on the plan's investment. As stated before benefits paid to retirees is the plan's actual payout of benefits to retired employees.
- d. The actual return on plan assets is equal to the fair value change in the beginning and ending balances of plan assets while adjusting for contributions and benefits paid. The "return" associated with pension expense is a credit value used to compute interest expense. It typically decreases the value of pension expense while increasing the value of plan assets. This is the distinction used to compute pension expense on a year-to-year basis.
- e. There are two primary distinctions between the retirement plans and the J&J's other benefit plans: 1.) Most of the retirement plans in the U.S. are funded, while most other benefit plans are not funded. 2.) Other benefit plans do not have contributions from plan participants i.e. future benefactors of the plans. A plan is funded if it has continual contributions from the company, and there is an effort to maintain funding for the present value of plan assets as compared to the present value of projected plan obligations.

## **PROCESS**

- f. i. J&J had \$646 million in pension expense for 2007.
  - ii. Service Costs \$597m
  - Interest Costs 656m
  - PBO 1,253m
- g. i. \$12,002 million is the amount of the end of year retirement plan obligation.

This represents the carrying amount of projected plan benefits due to plan participants. This value includes service and interest costs as well as other changes relative to future benefits owed.

ii. \$656 million is the value of interest costs related to pensions. The average interest rate that J&J must have used is 5.62%. This figure is based on the interest costs divided by the beginning fair value of the projected benefit obligations account. This represents the rate for which the company can settle its pension benefits. Companies and actuaries determine the reasonableness of the rate by looking at the rates of return of fixed income investments that have cash flows that match existing expected benefit payments.

iii. \$481 million in plan assets were paid out to qualifying retirees during the year. This amount was paid out of the benefits fund known as plan assets thereby lowering the plan's obligation and decreasing their plan assets available.

- h. i. \$10,469 million is the amount of plan assets held at the end of 2007. This value is the amount of total contributions, investments (including securities, real estate, etc.), dividends, and interests that is in the fund at the end of the year after adjustments.

ii. 2007-	2006-
Expected return- \$809m	Expected return-\$701m
Actual return- \$743m	Actual return- \$966m

The expected is probably a better indicator of what is actually occurring economically based on the performance of the plan assets' investments over the last two years.

iii. The company and plan participants contributed \$379m in 2007 which is a \$73m increase compared to contributions in 2006. This falls in line with historical trends, an increase in contributions year-to-year.

iv. Equity securities make up almost 80% of U.S. retirement plan assets, while only 67% internationally. The remaining portion of plan assets is composed of debt securities as well as a 1% real estate investment of international retirement plans.

i. J&J is \$1,533m underfunded in 2007 and \$2,122m in 2006. This net underfunded amount appears as gross values under non-current assets and current and non-current liabilities. This results in a total net effect seen above.