

ANALYSIS OF FINANCIAL ACCOUNTING TECHNIQUES AND APPLICATIONS

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ABSTRACT
JOSEPH CLINTON LASCARA: Analysis of Financial Accounting Techniques and Applications

This thesis sets to examine the core accounting principles in financial accounting and apply those principles to companies' financial statements and 10-K's. Starting from simple transactions and adjusting entries, each topic moves through the financial statements and applies them to different companies. The second half examines more advanced accounting topics such as pensions and the buying and selling of securities. Among each section is also a thorough set of figures that highlight specific journal entries, data, or calculations to enhance the understanding of these topics. Each topic was researched through various case examinations relating to a particular area of financial accounting.

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Introduction

The following report contains financial information for two companies, Glenwood Heaters, Inc. and Eads Heaters, Inc. Both companies made similar transactions in their first year of business; however, adjusting entries and different valuation methods affected financial statements and financial ratios for each company. Glenwood used a FIFO inventory valuation, while Eads used LIFO. In addition to this, Eads decided to lease equipment, whereas Glenwood simply rented it. These adjustments, as well as others, caused discrepancies between the two companies, which are analyzed in the following comparison supported by figures and financial statements.

Company Comparison

Glenwood Heaters, Inc. is a better option for investors, due to better financial ratios and a higher profitability. While Eads can sell their inventory quicker and collect their receivables faster, their valuation methods increase their liabilities, thus decreasing profits.

First, looking at each company's liquidity, Glenwood has a higher current ratio of 3.04 (Figure 1-1), indicating that they can pay off their current liabilities of \$33,090 quicker than Eads can. The Acid-test ratio also gives indication that Glenwood has more short-term liquidity and can cover more of their current liabilities.

Eads has a higher Accounts Receivable Turnover ratio, meaning that over the past year their Accounts Receivable is collected in full quicker. This is most likely due to Eads having a lower inventory on the Balance Sheet due to their decision to use LIFO for the inventory valuation. The inventories were \$51,000 for Eads and \$62,800 for Glenwood

(Figure 3-3). The Accounts Receivable Turnover ratio directly correlates to the time it takes to collect receivables, meaning on average, Eads takes about 4 days less to collect their money from customers than Glenwood does.

Going along with this, Eads also turns over their inventory faster, taking around a full month faster than Glenwood. The higher Accounts Receivable Turnover ratio and Inventory Turnover ratio, makes Eads' Operating Cycle around 34 days faster, meaning that they sell their inventory and collect cash from the sales in about 185 days, whereas Glenwood takes about 219 days (Figure 1-1).

Although Eads can sell their inventory and collect quicker, it is still less profitable because they have more liabilities than Glenwood, due not only to inventory valuation, but also their decision to lease the equipment, as opposed to renting it. While the leased equipment does classify as a plant asset, the notes payable increases the liability along with it, making Glenwood the more profitable company.

Glenwood's profitability can also be demonstrated with a few other ratios that make it more appealing to investors, like the Gross Profit Margin. Glenwood has a higher Gross Profit Margin, meaning that after the Cost of Goods Sold is subtracted, Glenwood is making a slightly higher profit than Eads. Also related to this is the Profit Margin, which measures profitability as a ratio of net income to sales. Glenwood's Profit Margin is 23.27 percent, whereas Eads' is at 17.7 percent (Figure 1-1).

As an investor, Glenwood also looks better than Eads because the return on both Assets and Owners' Equity is higher, with a ratio of 14.43 percent and 40.4 percent, respectively, while Eads' is 10.02 percent and 34.01 percent (Figure 1-1). These ratios

mean that Glenwood is generating a higher income based on their investments in their assets and stockholders are earning more after interest is paid to creditors. Common stockholders are also earning almost 1.5 times the return, since both companies have the same number of shares outstanding, but Glenwood's Earnings per Share ratio is 28.98 and Eads' is 22.03 (Figure 1-1).

Lastly, the debt ratio is another indicator to creditors about the company's leverage and borrowing power, and is calculated by taking Total Liabilities over Total Assets. This ratio means that the lower the debt ratio, the more assets a company has or the less liabilities it has, both of which are things to look for about a company's profitability. Glenwood's ratio is lower than Eads' (64.28 percent and 70.54 percent, respectively).

Financial Ratio Comparison		
	Glenwood	Eads
Current Ratio	3.04	2.46
Acid-test Ratio	1.86	1.64
Acc. Receivable Turnover	4.05	4.22
Days to Collect Receivable	90.13	86.49
Inventory Turnover	2.82	3.70
Days to Sell Inventory	129.50	98.60
Operating Cycle	219.64	185.09
Gross Profit Margin	55.58%	52.62%
Profit Margin	23.27%	17.70%
Return on Assets	14.43%	10.02%
Return on Owners' Equity	40.40%	34.01%
Earnings per Share	\$28.98	\$22.04
Debt Ratio	64.28%	70.54%
Times Interest Earned	5.47	3.69

Figure 1-1 Financial Ratio Comparison

Supporting Calculations		
	Glenwood	Eads
Current Ratio	\$161,632/\$53,090	\$153,625/\$61,730
Acid-test Ratio	$(\$31,340 + \$99,400 - \$30,914) / \$53,090$	$(\$7,835 + \$94,430) / \$61,730$
Acc. Receivable Turnover	\$398,500/\$99,400	\$398,500/\$94,430
Days to Collect Receivable	365/ART	365/ART
Inventory Turnover	\$177,000/\$62,800	\$188,800/\$51,000
Days to Sell Inventory	365/Inv. Turnover	365/Inv. Turnover
Operating Cycle	90.12+129.43	86.49+185.14
Gross Profit Margin	$(\$398,500 - \$177,000) / \$398,500$	$(\$398,500 - \$188,800) / \$398,500$
Profit Margin	\$92,742/\$398,500	\$70,515/\$398,500
Return on Assets	\$92,742/\$642,632	\$70,515/\$703,765
Return on Owners' Equity	\$92,742/\$229,542	\$70,515/\$207,315
Earnings per Share	\$92,742/3200	\$70,515/3200
Debt Ratio	\$413,090/\$642,632	\$496,450/\$703,765
Times Interest Earned	\$151,306/\$27,650	\$129,030/\$35,010

Figure 1-2 Financial Ratio Supporting Calculations

Glenwood Heaters, Inc Classified Balance Sheet For the Year Ended December 31, 20X1			
ASSETS			
Current Assets			
Cash		\$	426.00
Accounts Receivable	\$ 99,400.00		
Less A.D.A	\$ 994.00		98,406.00
Inventories - FIFO			62,800.00
Total Current Assets			161,632.00
Property, Plant, and Equipment			
Land		\$	70,000.00
Building	\$ 350,000.00		
Less Acc. Depr.	\$ 10,000.00		340,000.00
Equipment	\$ 80,000.00		
Less Acc. Depr.	\$ 9,000.00		71,000.00
Total Property, Plant, and Equipment			481,000.00
TOTAL ASSETS			\$ 642,632.00
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current Liabilities			
Accounts Payable		\$	26,440.00
Interest Payable		\$	6,650.00
Current Maturities of Notes Payable		\$	20,000.00
Total Current Liabilities			53,090.00
Long-term Liabilities			
Notes Payable		\$	360,000.00
Total Liabilities			413,090.00
Stockholders' Equity			
Capital Stock 3,200 shares		\$	160,000.00
Retained Earnings		\$	69,542.00
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY			\$ 642,632.00

Figure 1-3 Glenwood Balance Sheet

Eads Heater, Inc. Classified Balance Sheet For the Year Ended December 31, 20X1			
ASSETS			
Current Assets			
Cash		\$	7,835.00
Accounts Receivable	\$ 99,400.00		
Less A.D.A	\$ 4,970.00		94,430.00
Inventories - LIFO			\$ 51,000.00
Total Current Assets			\$ 153,265.00
Property, Plant, and Equipment			
Land			\$ 70,000.00
Building	\$ 350,000.00		
Less Acc. Depr.	\$ 10,000.00		340,000.00
Equipment	\$ 80,000.00		
Less Acc. Depr.	\$ 20,000.00		60,000.00
Leased Equipment	\$ 92,000.00		
Less Acc. Depr.	\$ 11,500.00		80,500.00
Total Property, Plant, and Equipment			\$ 550,500.00
TOTAL ASSETS			\$ 703,765.00
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current Liabilities			
Accounts Payable		\$	26,440.00
Interest Payable		\$	6,650.00
Current Maturities of Notes Payable		\$	20,000.00
Current Maturities of Lease Payable		\$	8,640.00
Total Current Liabilities			\$ 61,730.00
Long-term Liabilities			
Lease Payable		\$	74,720.00
Notes Payable		\$	360,000.00
Total Long-term Liabilities			\$ 434,720.00
Total Liabilities			\$ 496,450.00
Stockholders' Equity			
Capital Stock 3,200 shares		\$	160,000.00
Retained Earnings		\$	47,315.00
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY			\$ 703,765.00

Figure 1-4 Eads Balance Sheet

Glenwood Heaters, Inc. Income Statement For the Year Ended December 31, 20X1				Eads Heater, Inc. Income Statement For the Year Ended December 31, 20X1			
Sales Revenue		\$398,500.00		Sales Revenue		\$398,500.00	
Cost of Goods Sold		<u>\$177,000.00</u>		Cost of Goods Sold		<u>\$188,800.00</u>	
Gross Profit		\$221,500.00		Gross Profit		\$209,700.00	
Other Operating Expenses		<u>\$ 34,200.00</u>		Other Operating Expenses		<u>\$ 34,200.00</u>	
Income from Operations		\$187,300.00		Income from Operations		\$175,500.00	
Operating Expenses				Operating Expenses			
Bad Debt Expense	\$ 994.00			Bad Debt Expense	\$ 4,970.00		
Depreciation Expe	\$19,000.00			Depreciation Expe	\$41,500.00		
Rent Expense	<u>\$16,000.00</u>	<u>\$ 63,644.00</u>		Rent Expense	<u>\$ 46,470.00</u>		
Other Expenses				Other Expenses			
Interest Expense	\$27,650.00			Interest Expense	\$35,010.00		
Operating Income before Income Tax		\$123,656.00		Operating Income before Income Tax		\$ 94,020.00	
Income Tax		<u>\$ 30,914.00</u>		Income Tax		<u>\$ 23,505.00</u>	
Net Income		<u>\$ 92,742.00</u>		Net Income		<u>\$ 70,515.00</u>	

Figure 1-5 Comparative Income Statements

Glenwood Heaters, Inc. Statement of Retained Earnings For the Year Ended December 31, 20X1				Eads Heater, Inc. Statement of Retained Earnings For the Year Ended December 31, 20X1			
Retained Earnings, 20X0		\$ -		Retained Earnings, 20X0		\$ -	
Add: Net Income		<u>\$ 92,742.00</u>		Add: Net Income		<u>\$ 70,515.00</u>	
		\$ 92,742.00				\$ 70,515.00	
Less: Dividends		<u>\$ 23,200.00</u>		Less: Dividends		<u>\$23,200.00</u>	
Retained Earnings, December 31, 20X1		<u>\$ 69,542.00</u>		Retained Earnings, December 31, 20X1		<u>\$47,315.00</u>	

Figure 1-6 Comparative Statements of Retained Earnings

Glenwood Heaters, Inc. Statement of Cash Flows For the Year Ended December 31, 20X1		Eads Heater, Inc. Statement of Cash Flows For the Year Ended December 31, 20X1	
Cash Flows from Operating Activities		Cash Flows from Operating Activities	
Net Income	\$ 92,742.00	Net Income	\$ 70,515.00
Adjustments to reconcile net income to net cash provided by operating activities		Adjustments to reconcile net income to net cash provided by operating activities	
Depreciation Expense	\$ 19,000.00	Depreciation Expense	\$ 41,500.00
Increase in Acc. Receivable	\$ (98,406.00)	Increase in Acc. Receivable	\$ (94,430.00)
Increase in Inventory	\$ (62,800.00)	Increase in Inventory	\$ (51,000.00)
Increase in Acc. Payable	\$ 26,440.00	Increase in Acc. Payable	\$ 26,440.00
Increase in Interest Payable	\$ 6,650.00	Increase in Interest Payable	\$ 6,650.00
	<u>\$ (109,116.00)</u>		<u>\$ (70,840.00)</u>
Net Cash used by Operating Activities	\$ (16,374.00)	Net Cash used by Operating Activities	\$ (325.00)
Cash Flows from Investing Activities		Cash Flows from Investing Activities	
Purchase of Land	\$ (70,000.00)	Purchase of Land	\$ (70,000.00)
Purchase of Building	\$ (350,000.00)	Purchase of Building	\$ (350,000.00)
Purchase of Equipment	\$ (80,000.00)	Purchase of Equipment	\$ (80,000.00)
Leased Equipment		Leased Equipment	\$ (92,000.00)
Net Cash used by Investing Activities	\$ (500,000.00)	Net Cash used by Investing Activities	\$ (592,000.00)
Cash Flow from Financing Activities		Cash Flow from Financing Activities	
Sale of Common Stock	\$ 160,000.00	Sale of Common Stock	\$ 160,000.00
Increase in Notes payable	\$ 380,000.00	Increase in Notes payable	\$ 380,000.00
Payment of Dividends	\$ (23,200.00)	Payment of Dividends	\$ (23,200.00)
Increase in Leased Payable		Increase in Leased Payable	\$ 83,360.00
Net Cash provided by Financing Activities	<u>\$ 516,800.00</u>	Net Cash provided by Financing Activities	<u>\$ 600,160.00</u>
Cash, Dec. 31, 20X1	<u>\$ 426.00</u>	Cash, Dec. 31, 20X1	<u>\$ 7,835.00</u>

Figure 1-7 Comparative Statements of Cash Flows

Introduction

Molson Coors financial statements include many extra items not considered part of their core operations. Some of these are mentioned in the footnotes; however, this analysis considers even more factors: persistence, relevance to core operations, and net operating assets.

Background

Classified income statements increase the functionality and usefulness to investors since more details are needed to make decisions. If notes were not disclosed in Molson Coors' reports, there would be no way to tell which items were considered operating, and which ones were nonoperating. Another key to analysis is the persistent income – which is favored since cash flows are more reliable when income is steadier, and it also increases yearly comparability.

Sales

Molson Coors reports both sales and net sales on their income statement because a heavy excise tax is placed on “sin” items, as well as other sales discounts and returns and allowances. The excise tax constitutes more than 25 percent of sales, therefore not reporting this until the end would mislead investors because sales would look overstated.

Special Items

Molson Coors makes notes at the end explaining what they classified as special items. These included the following

- Employee related charges
- Impairments or asset abandonment charges
- Unusual or infrequent items
- Termination fees
- Other gains and losses on disposal of investments

They are justified in classifying these on a separate line since they are not part of their core operations (brewing/selling beer) and mostly relate to natural disasters in Europe and Canada, as well as “restructuring activities.” The restructuring activities part is concerning to investors since they laid off over 910 employees in 2012 and 2013 in an effort to focus on the long term and cut costs. However, they classified the severance included with the lay-offs as a special item, which is acceptable under GAAP because it was both unpredictable and nonrecurring.

Comprehensive Income

Comprehensive is different from net income in the sense that it includes all changes in equity (or net assets) during a period, and it recognizes unrealized gains and losses. Comprehensive Income in 2013 was \$760.2 million and net income was \$567.3 million. The difference between these numbers is that there were foreign currency losses and pension adjustments, as well as ownership share of unconsolidated subsidiaries’ other comprehensive income. This is related because all of these gains or losses had to do with business operations, which aren’t necessarily core operations, but still came from employee benefits or foreign transactions while conducting normal business.

Persistent Income

The following items are considered to be non-persistent:

- Special items – very different from the previous years and is not consistent, will most likely appear again, however, the amount is volatile and unpredictable

- Other Income – increased by over \$100 million and could be due to selling baseball teams or other tax deferrals
- Income from Discontinued Operations – these items will most likely not recur again since they are from operations no longer in process

With the previous items not taken into consideration, the following is the calculated

2013 Persistent Income Statement (Figure 2-1). Figures are in millions of dollars.

Molson Coors 2013 Persistent Income Statement (Figures in millions)	
Sales	\$ 5,999.60
Excise Taxes	\$(1,793.50)
Net Sales	\$ 4,206.10
Cost of Goods Sold	\$(2,545.60)
Gross Profit	\$ 1,660.50
Marketing, General, and Admin. Expenses	\$(1,193.80)
Equity income in MillerCoors	\$ 539.00
Operating income (loss)	\$ 1,005.70
Other income (expense), net	
Interest Expense	\$ (183.80)
Interest Income	\$ 13.70
Total other income (expense), net	\$ (170.10)
Income (loss) from continuing operations before income taxes	\$ 835.60
Income tax benefit (expense)	\$ (107.21)
Net Income (loss) from continuing operations	\$ 728.39
Less: Net (income) loss attributable to noncontrolling interests	\$ (5.20)
Net Persistent Income attributable to Molson Coors Brewing Compan	<u>\$ 723.19</u>

Figure 2-1 2013 Persistent Income Statement

Effective Tax Rate

The effective tax rate in 2013 was 12.83 percent. This is the calculation:

$$\text{Effective Tax Rate} = \frac{\$84 \text{ million}}{\$654.5 \text{ million}} = 12.83\%$$

A tax rate that can be expected to persist for the company would be around 10 percent to 15 percent because the effective tax rates in 2011 and 2013 were very similar.

This is much lower than the government statutory rate in the U.S. due to foreign operations in countries with a lower tax rate. As stated in the notes, Molson Coors elected to defer liabilities in 2012, which is why the effective tax rate is 14 percent higher than the other two years.

RNOA and Operating Items

The following items are considered nonoperating due to not being attributable to income or expenses arising from the core competencies of the company.

- Interest – interest accrued on notes payable
- Gains – unrealized gain on derivative instruments (investments)
- Losses – loss on currency exchange from foreign transactions

Figure 2-2 lists Nonoperating Items and their after-tax effects.

NONOPERATING ITEMS	2013 After Tax		2012 After Tax	
Interest Income	\$ 13.70	\$ 12.06	\$ 11.30	\$ 9.94
Net Income attributable to non-controlling interests	\$ (5.20)	\$ (5.20)	\$ 3.90	\$ 3.90
Other Income (expense), net	\$ 18.90	\$ 16.63	\$ (90.30)	\$ (79.46)
Interest Expense	\$(183.80)	\$(183.80)	\$(196.30)	\$(196.30)
Income from Discontinued Operations	\$ 2.00	\$ 2.00	\$ 1.50	\$ 1.50
		\$(158.31)		\$(260.42)

Figure 2-2 Nonoperating Items and After-Tax Effects

Figure 2-3 lists the Net Operating Profit after Tax, which was calculated by taking net income before the effect of the after-tax amount on nonoperating income.

NOPAT	\$2,013.0	\$2,012.0
Net Operating Income	\$567.3	\$443.0
Less: Nonoperating After-Tax Items	\$158.3	\$270.4
Net Operating Profit	\$725.6	\$713.4

Figure 2-3 Net Operating Profit after Tax

In order to calculate the Return on Net Operating Assets, nonoperating assets and balance sheet items must be identified and totaled. The nonoperating assets are as follows:

- Deferred tax assets
- Goodwill
- Derivative hedging instruments
- Deferred tax liabilities
- Discontinued operations

Figure 2-4 is the calculation of each of these nonoperating assets for 2012 and 2013.

NONOPERATING ASSETS		2013	2012
Total Assets		\$15,580.10	\$16,212.20
a.	Deferred tax assets	\$50.40	\$39.20
b.	Goodwill	\$2,418.70	\$2,453.10
c.	Derivative hedging instrume	\$73.90	\$6.00
d.	Deferred tax liabilities	\$911.40	\$948.50
e.	Discontinued operations	\$17.30	\$20.00
Net Nonoperating Assets		\$14,113.60	\$14,694.40

Figure 2-4 Nonoperating Assets

RNOA is calculated by $RNOA = \frac{NOPAT}{Sales} \times \frac{Sales}{Average\ Net\ Operating\ Assets}$. Figure 2-5 shows the calculations using the net operating assets, excluding the ones above.

RETURN ON NET ASSETS			
NOPAT	x	Sales	
Sales		Avg. Net Operating Assets	
2013			
\$725.60	x	\$5,999.60	0.0514
\$5,999.60		\$14,113.60	
2012			
\$713.40	x	\$5,615.00	0.0485
\$5,615.00		\$14,694.40	

Figure 2-5 RNOA Calculations

In addition to this, the operating profit margin and net operating asset turnover are calculated in Figure 2-6.

Operating Profit Margin		Net Operating Asset Turnover	
$\frac{\text{Operating Income}}{\text{Net Sales}}$		$\frac{\text{Sales}}{\text{Net Operating Assets}}$	
2013		2013	
\$567.30	0.13488	\$5,999.60	0.42509
\$4,206.10		\$14,113.60	
2012		2012	
\$443.00	0.11311	\$5,615.00	0.38212
\$3,916.50		\$14,694.40	

Figure 2-6 Operating Profit Margin and Net Operating Asset Turnover

The RNOA is shown in Figure 2-7 and is calculated using the persistent income found previously. This number is not much different from the other RNOA calculated; however, this number is more reliable since the persistent income is what will most likely be recurring in the same amounts year after year. Future profitability can better be predicted using this value.

RETURN ON NET ASSETS (USING PERSISTENT INCOME)			
$\frac{\text{Persistent Income}}{\text{Sales}}$		$\times \frac{\text{Sales}}{\text{Avg. Net Operating Assets}}$	
2013			
\$723.19	x	\$5,999.60	0.05124
\$5,999.60		\$14,113.60	

Figure 2-7 Return on Net Assets (Using Persistent Income)

Introduction

The statement of cash flows provides relevant information about the cash receipts and cash payments of an entity during a period. It includes information not captured in the income statement and balance sheet, since it provides an in-depth analysis of cash transactions.

Methods for Preparing the Statement of Cash Flows

There are two different methods for preparing the statement of cash flows: direct and indirect. The direct method reconstructs the income statement by putting it on a cash basis and each major income statement category is converted from cash basis to accrual basis. The direct method is preferred by FASB and requires a reconciliation at the end as well with net income and adjustments... which is essentially the indirect method. The indirect method, although not fully supported by FASB, is used by almost all companies, including Golden Enterprises. The indirect method starts with net income and makes adjustments to convert it to a cash basis. Because the direct method requires a reconciliation at the end, which is basically the indirect method, most companies prefer to use the indirect method to begin with. The following adjustments are made in the indirect method:

1. Add back depreciation and amortization
2. Deduct increases in current relevant assets and add decreases
3. Add increases in current liabilities and subtract decreases
4. Add back losses and deduct gains

Sections of the Statement of Cash Flows

The three sections of the statement of cash flows are the following:

1. Operating – involves the cash effects of transactions that enter into the determination of net income
2. Investing – includes making and collecting loans and acquiring and disposing of investments (debt and equity) and property, plant, and equipment
3. Financing activities – involves liability and owners' equity items
 - a. Obtaining resources from owners and providing them with a return on their investment
 - b. Borrowing money from creditors and repaying the amounts borrowed

Cash Equivalents

The balance sheet includes an item called “cash and cash equivalents.” Cash equivalents are very short-term, very highly liquid investments, such as T-bills, commercial paper, or money-market funds.

Net Income Reconciliation

Net income is determined on an accrual basis, yet the net income is the first item on the statement of cash flows. This is because the entire operating section is related to net income and the indirect method provides a cash reconciliation by adding non-cash expenses and adjusting for gains and losses

Depreciation Expense

The net cash from operating activities is much higher than net income because the depreciation expense is large (which is a noncash expense) therefore the depreciation affects net income because it is subtracted and it does not affect cash flow.

Productive Capacity

Golden Enterprises has increased its productive capacity since its depreciation expense makes up 85.28 percent of new asset acquisitions, leaving a 15 percent increase in new assets, contributing to an increase in productive capacity. They have the capacity

to increase their assets by \$5,000,000, and could be funded through long-term debt as evidenced by the financing section on the statement of cash flows.

Golden Enterprises Statements of Cash Flows		
	12 Months Ended	
	5/31/2013	6/1/2012
Statement Of Cash Flows [Abstract]		
Net cash provided by operating activities	\$ 4,607,029.00	\$ 5,747,290.00
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of property, plant and equipment	\$ (4,149,678.00)	\$ (5,214,408.00)
Proceeds from sale of property, plant and equipment	\$ 74,514.00	\$ 222,755.00
Net cash used in investing activities	\$ (4,075,164.00)	\$ (4,991,653.00)
CASH FLOWS FROM FINANCING ACTIVITIES		
Debt proceeds	\$ 38,361,199.00	\$ 36,639,753.00
Debt repayments	\$ (38,287,529.00)	\$ (37,468,412.00)
Change in checks outstanding in excess of bank balances	\$ (267,501.00)	\$ 712,081.00
Purchases of treasury shares	\$ (6,860.00)	
Cash dividends paid	\$ (1,467,879.00)	\$ (1,466,831.00)
Net cash (used in) provided by financing activities	\$ (1,668,570.00)	\$ (1,583,459.00)
NET DECREASE IN CASH AND CASH EQUIVALENTS	\$ (1,136,705.00)	\$ (827,822.00)
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	\$ 1,893,816.00	\$ 2,721,638.00
CASH AND CASH EQUIVALENTS AT END OF YEAR	\$ 757,111.00	\$ 1,893,816.00
Net income	\$ 1,134,037.00	\$ 2,207,623.00
Adjustment non-cash items to reconcile net income to net cash provided by operating activities:		
Depreciation	\$ 3,538,740.00	\$ 3,303,353.00
Deferred income taxes	\$ (185,939.00)	\$ 557,576.00
Gain on sale of property and equipment	\$ (61,040.00)	\$ (162,876.00)
Change in receivables-net	\$ 106,367.00	\$ (345,853.00)
Change in inventories	\$ 200,985.00	\$ (161,169.00)
Change in prepaid expenses	\$ 200,137.00	\$ 48,956.00
Change in cash surrender value of insurance	\$ 62,906.00	\$ 176,177.00
Change in other assets - other	\$ (191,298.00)	\$ (151,239.00)
Change in accounts payable	\$ (1,216,399.00)	\$ (297,983.00)
Change in accrued expenses	\$ 954,938.00	\$ (132,524.00)
Change in salary continuation plan	\$ (49,774.00)	\$ (100,324.00)
Change in accrued income taxes	\$ 113,369.00	\$ 805,573.00
Net cash provided by operating activities	\$ 4,607,029.00	\$ 5,747,290.00

Note that the operating activities are explained in more detail at the end

The 2013 purchase of PPE is given in the details, as well as the gain from selling some PPE

The closeness of these two items indicates that a lot of their long term debt was paid off, potentially through incurring more long-term debt

While cash itself has decreased both years, new assets are being purchased with that cash, making it little to no concern

See next page for detailed analysis of operating activities

Indicates that a large portion of checks were cleared by 5/31/13

These items are considered investing because the transactions involve capital assets

These items are considered financing because they provide long-term funds to the company and eventually to lenders

Figure 3-1 Golden Enterprises Statement of Cash Flows with Explanations

The fundamental technique in determining the operating section is knowing whether to add or subtract the differences between years on the Statement of Cash Flows. A quick way of deciding is to follow the rule that an increase in current assets is subtracted and decrease in current assets is added. Subsequently, an increase in current liabilities results in adding the difference, whereas a decrease results in subtracting the difference. These principles can be better shown in Figure 3-2:

	Curr. Assets	Curr. Liab.
Increase	-	+
Decrease	+	-

Figure 3-2 Current Assets/Liabilities Model

The depreciation is given in the problem because the new capital assets are not accounted for in the original T chart, so a new one containing the \$3,538,740 was created. Depreciation is added back in since it is a noncash item, and no cash is technically lost.

There were other changes in Property, Plant, and Equipment, requiring a new T-chart to be made, and considered as part of investing activities.

The gain on the sale of property and equipment was given in the original problem, and is subtracted since it does not affect the daily operations of Golden Enterprises; therefore, it is considered a financing activity.

Figure 3-3 contains a ledger of T-accounts for Golden Enterprises. An explanation for each account is stated and how it affects the balance sheet using the model in Figure 3-2

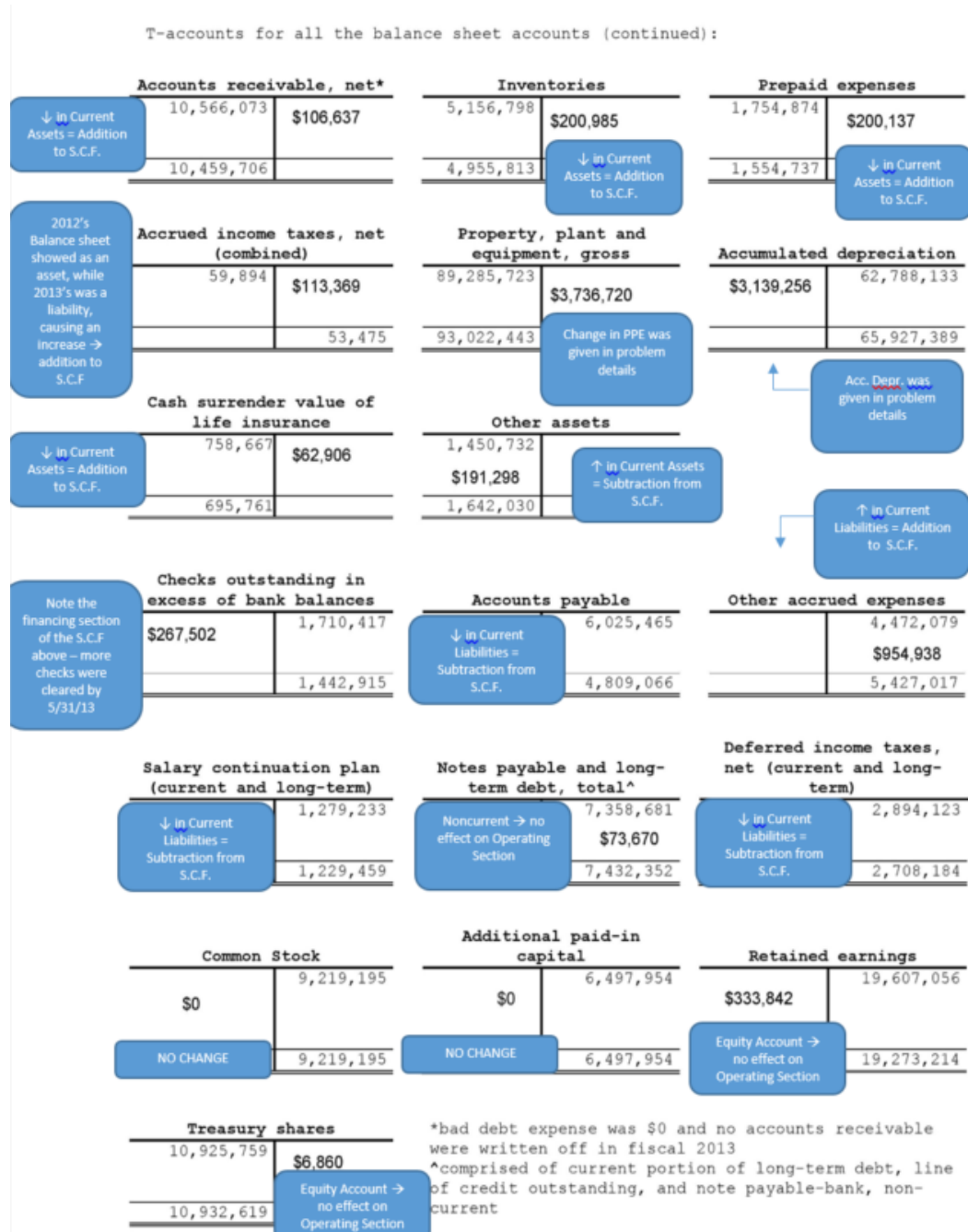


Figure 3-3 T-Accounts for Balance Sheet Accounts with Explanations

Introduction

An account receivable is a claim held against customers and others for money, goods, or services. Each customer or individual has a specific accounts receivable in the ledger, while the sum of all of the accounts receivable is the one reported on the balance sheet. Accounts receivable is also called trade receivables or receivables.

Accounts Receivable vs. Notes Receivable

While somewhat similar, notes receivable and accounts receivable differ in the sense that notes receivable are more formal and usually written promissory notes to pay by a certain time period. Notes may be either short-term or long-term (classified separately on the balance sheet) and can also include interest.

Contra Accounts

A contra account is a valuation account whose normal basis (debit or credit) is opposite of the normal balance of the account to which the valuation account relates. The two contra accounts Pearson uses are (1) provisions for bad and doubtful debts and (2) provision for sales returns. Both of these accounts are estimates and require historical data as well as managerial discretion when estimating the values of each. Because provisions for sales returns is a contra revenue account, managers could consider the amounts of earnings for that year and either overstate or understate the values of these estimations to either show an increase or decrease in net income, depending on whether they want to pocket income for later years or show a higher net income. This is called managing earnings and is strongly discouraged since it violates the faithful representation principle.

Ways to Estimate Provisions for Bad and Doubtful Debts

There are multiple ways to estimate uncollectible accounts.

- a.) Income Statement Approach – Bad Debt Expense equals a percentage times net credit sales on account of the period. Then the ending balance can be determined in the Allowance account by considering the current balance and increasing it by the amount of bad debt expense. This job does a better job at expense recognition/matching principle.

- b.) Balance Sheet Approach – Allowance for Doubtful accounts (ending balance) is estimated by multiplying a percentage times ending Accounts Receivable. Then, Bad Debt Expense equals the difference between the required ending balance and the existing balance in the allowance account. This job does a better job of stating receivables at NRV. The balance sheet approach also includes the aging-of-accounts procedure, which separates the values in the allowance account by how long they are overdue and assigns a percentage of what is estimated to be uncollectible. The sum of each of these values is then considered the estimation for the allowance account. Overall, the balance sheet approach is more accurate at estimating net accounts receivable

Credit Policy Decisions

Managers must find the ideal balance between customers paying their account in full in a reasonable time, while also finding a way where the company itself is receiving the cash as quickly as possible. Companies should not make their credit policy so strict where a majority of customers are not able to pay in time. If Pearson anticipated that some accounts will be uncollectible, they still offered credit because the allowance is already set up, and it is better to overestimate than to underestimate.

Provisions for Bad and Doubtful Debts

Figure 4-1 is the T-chart for the Provision for Bad and Doubtful debts accounts for Pearson in 2009 with explanation to the side for each of the values.

Provision for Bad and Doubtful debts		
Differences due to exchange of currency.	£ 5.00	£ 72.00 Leftover from 2008
Amount written off as a bad debt	20	26 Bad Debts Expense for 2009
		3 Obtained through acquisitions and mergers
		£ 76.00

Figure 4-1 Provision for Bad and Doubtful Debts T-chart

The journal entries used to record the “income statement movements” and “utilised” for 2009 are shown in Figure 4-2:

Bad Debt Expense	£ 26.00	
Provisions for doubtfuls		£ 26.00
Provision for doubtfuls	£ 20.00	
Accounts Receivable		£ 20.00

Figure 4-2 Income Statement Movements Journal Entries

The bad and doubtful debts expense is included in the operating expenses section of the income statement.

Provisions for Sales Returns

Provisions for Sales Returns is another contra account; this account is a contra-revenue account and is also an estimated account. The T-chart for the 2009 Sales return account is shown in Figure 4-3. (Sales were £425)

Provisions for sales returns			
£	443	£	372
			425
		£	354

Figure 4-3 Provisions for Sales Returns T-Account

The journal entries for capturing the 2009 estimated sales returns and amount of actual returns are shown in Figure 4-4.

Returns and Allowances	£ 425,000	
Provisions for sales returns		£ 425,000
Provisions for sales returns	£ 443,000	
Accounts Receivable		£ 443,000

Figure 4-4 Estimated Sales Returns vs. Actual

The provisions for sales returns goes directly under the Sales account on the income statement so that Sales is reported at net realizable value.

Aging of Accounts Receivable

The balance sheet approach also includes the aging-of-accounts procedure, which separates the values in the allowance account by how long they are overdue and assigns a percentage of what is estimated to be uncollectible. The sum of each of these values is then considered the estimation for the allowance account. This is displayed in Figure 4-5.

	Trade Receivbles Balance (1)	Estimated % uncollectible (2)	Account estimated uncollectible (1 x 2)
Within Due Date	£ 1,096	2%	£ 21.92
Up to three months past due date	£ 228	4%	£ 9.12
Three to six months past due date	£ 51	25%	£ 12.75
Six to nine months past due date	£ 20	50%	£ 10.00
Nine to 12 months past due date	£ 4	60%	£ 2.40
More than 12 months past due date	£ 20	90%	£ 18.00
TOTAL	£ 1,419		£ 74.19

Figure 4-5 Aging of Accounts Receivable

The audit team for Pearson would be comfortable with the estimation of £76 because the sum of accounts estimated to be uncollectible is £74.19, so they left a little extra room in the allowance; however, it is close enough to the estimation where it does not raise any concerns.

Accounts Receivable Ratios

Figure 4-6 shows the formulas for Accounts Receivable turnover and average collection period.

$$\text{Accounts receivable turnover} = \frac{\text{Credit sales, net}}{\text{Average gross accounts receivable}}$$

$$\text{Average collection period (days)} = \frac{365 \text{ days}}{\text{Accounts receivable turnover}}$$

	2009	2008
Credit sales, net	\$5,624	\$4,811
Average gross trade receivables	\$1,284	\$1,342
Accounts Receivable turnover	4.3801	3.5849
Average collection period	83.3321	101.8146

Figure 4-6 Accounts Receivable Turnover Calculations

The efficiency of collecting receivables can be measured using the ratios in Figure 4-6. While Pearson did decrease their collection period from 2008 to 2009, McGraw Hill (a competitor) had a collection period of 79 days. Pearson has a few options when it comes to reducing this number.

The first issue starts off with making sure that orders are going out correctly the first time because customers are not going to pay for items until the full obligation has been satisfied. Errors or damages to order might cause them to delay payment, increasing the turnover ratio. Another way to decrease this ratio is to shorten their credit period, prompting customers to pay quicker. The danger of shortening the credit period is that customers who experience cash flow difficulties might have trouble paying and default sooner. Examining the credit worthiness of major customers can help come up with an average that satisfies both parties.

Introduction

Graphic Apparel Corporation is a local t-shirt company that specializes in graphic tees. The previous owner fell sick and Nicki, an employee with a background in fashion design, took over in January 2014. Previously only the IRS used GAC's financial statements, but Nicki had to take out a loan and pledge assets as collateral to buy the shares of the former owner. Because of this, the bank now requires Nicki to comply with GAAP. The following is an examination of new policies and occurrences within the company.

Big Events to Account for in 2014

- Nicki increased the custom sales orders from \$100 in 2013 to \$10,000 in 2014
- GAC sells standard shirts to retailers and custom shirts directly to customers and organizations
- The company has had to make some changes because traditional customers do not like the new, edgier shirts as much and she has had to seek out new clients to fill that gap.
- The warehouse had a leak that damaged a lot of the shirts. Nicki managed to salvage many of the shirts by laundering them, but some shirts were left stained and she sold them using a hidden "grittiness" effect.

Revenue and Revenue Recognition

GAAP states that revenues should be recognized when the obligations of the performance contract are met at the set price. GAC reports its revenue from custom shirt orders when the order is assigned and when the cash is paid. This applies to organizations and local sports teams. Revenue should be recognized when the shirts are delivered and performance satisfactions are met. Recognizing revenue at the point of delivery means that the customer is fully satisfied and the performance obligation is fully met. The revenue recognition should occur when the shirts are delivered because there can be many things

that go wrong with a custom order from the time of design to the actual delivery. Recognizing revenue at the point of delivery for custom shirts would increase liabilities and decrease the current ratio because the denominator (current liabilities) is increasing.

Accounts Receivable

GAAP states that accounts receivable should be recognized at net realizable value (the debit in the A/R account less the credit balance in the allowance for doubtful accounts [a contra-asset]). GAC currently uses the direct write-off method. This is not supported by GAAP and since there is sufficient data from previous years to estimate bad debt, Nicki should use the allowance method. The direct write-off method is only acceptable when bad debts can't be estimated or are not material. The bank now uses GAC's financial statements and requires GAAP standards to be used.

Figure 5-1 is the A/R turnover and collection period from 2013 to 2014.

	2014	2013
Credit sales, net	\$179,950	\$170,000
Average gross trade receivables	\$23,750	\$15,500
Accounts Receivable turnover	7.5768	10.9677
Average collection period	48.1731	33.2794

Figure 5-1 2014 A/R Turnover and Collection Period

The average collection period in 2014 is about 15 days longer than 2013, suggesting that GAC's new customers are taking longer to pay (i.e. they are less reliable); therefore, it is safe to assume that the net realizable value of GAC's accounts receivable is less than it was in 2013. GAC should use the allowance method, and more specifically the aging of accounts because they can better estimate the percentages of custom versus retail

uncollectible accounts. The aging of accounts method would give a more realistic depiction of estimates for bad debts and would increase the ADA accounts, which decreases the accounts receivable... decreasing GAC's current ratio.

Sales and Inventory

GAC offers a refund to retailers at the end of the summer to buy back its unsold shirts. They do not estimate sales returns currently, which is not accepted by GAAP. Nicki should estimate the sales returns and use the allowance method for Sales Returns and Allowances (a contra-revenue account) based off of how much she thinks will be unsold. This could be estimated by polling her customers and keeping track of trends in the past.

GAC's inventory also suffered an inventory change in 2014. A leak in the roof damaged some shirts; however, Nicki was able to recover or repurpose the majority of them. Some shirts were stained during the leak, and Nicki is worried they might return them eventually once the customers purchase them from retailers. She also saw her shirts on clearance at stores, making her think that they might eventually be returned to make room for fall styles. GAAP recommends estimating the amounts that will be returned and creating an allowance account to offset part of the sales.

Sales returns are material because they decrease revenue and provide a more consistent and accurate depiction of net sales and product reliability. The allowance method is best because of the way GAC conducts its returns, which is not very common for the average company, as well as giving a more reliable sales number. Sales would go down because they would be reported at net realizable value now that the Sales Returns and Allowances is created, because it is a contra-revenue account. Sales returns will increase inventory, and possibly decrease accounts receivable, if the cash has not been paid. The

current ratio will not be directly affected by this since Sales Returns and Allowances is a contra revenue account.

GAAP requires the lower-of-cost-or-market (replacement cost) to be reported for inventory on the balance sheet. GAC uses this method, so their inventory valuation is GAAP compliant, despite the water damage on the shirts.

Figure 5-2 shows the number of days it took GAC to sell its inventory from 2013 to 2014.

Number of days to sell inventory	$\frac{\text{Inventory}}{\text{COGS}} * 365$	
2014	$\frac{\$24,500}{\$93,000} * 365 =$	96.1559
2013	$\frac{\$9,000}{\$81,000} * 365 =$	40.5556

Figure 5-2 Inventory Turnover

These numbers indicate that GAC is taking more than double the time it took from 2013 to sell its inventory. This increase could be due to the fact that they are holding a substantial amount more inventory, or that there is also less demand for the new products since retailers are returning their stuff.

GAC will have to mark down its selling price below cost since the water damage caused them to incur a loss. Gross profit is 48.32 percent of net sales, which means that GAC sells its shirts at roughly double the price it takes to make them. For reporting purposes, GAC needs to disclose the loss on the water damaged shirts in the notes in

addition to reporting them at LCM (which will virtually be zero). Reporting the impairment would decrease the current assets by reducing the inventory for the amount of the damaged shirts.

Current Ratio

Figure 5-3 shows all of the major occurrences during the past year and how these would affect the current ratio accounts.

	Inventory	A/R	Unearned Rev.
Water Damage	\$ (2,550)		
Shirts at Retailers	\$ 7,800	\$ (15,000)	
New Customers		\$ (3,000)	
Custom Shirts		\$ (2,500)	\$ 7,500

Figure 5-3 Effects of Major Occurrences in 2014

The changes decrease the current ratio because the recognition of unearned revenue for custom shirts increases current liabilities and decreases accounts receivable by \$2,500, in addition to the questionability of new customers' ability to pay. The inventory is also decreased from the water damaged shirts, ultimately decreasing current assets. The increase in the denominator (unearned revenue) as well as the increase in the numerator (inventory and accounts receivable) cause the current ratio to decrease by over 0.5. These calculations are shown in Figure 5-4.

Current Ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	
Present	$\frac{\$61,000}{\$45,180}$	1.35015
After changes	$\frac{(61000-2550+7800-15000-3000-2500)}{(45180+7500)}$	0.86845

Figure 5-4 Current Ratio Calculations

Looking Forward for GAC

Nicki needs to change her accounting methods to GAAP standards now that the bank uses her financial statements. In addition to this, she needs to suspend her return policy, since this increases her inventory and the total days to sell her inventory. Another thing Nicki needs to do is to begin estimating the amount of sales returns for her company, regardless of whether she decides to get rid of the current return policy or not. Since GAC is a local company, Nicki could talk with her customers to increase her accounts receivable turnover ratio so that customers pay quicker and the liability now incurred while she designs the shirts decreases as well. If Nicki invest more capital she can increase the current ratio in addition to cutting costs since the increase in net income would affect the retained earnings.

Introduction

Depreciation is an estimate of the decline in service potential due to physical and economic factors. It involves allocating the cost of tangible assets to expense in a rational and systematic manner over the periods of use. Note that depreciation is not a process of valuation. There are a few factors to be considered in the depreciation process: depreciation base and estimated service life. These two factors play a role in the estimation in the process because they can be manipulated and affect net income according to the estimations and depreciation method.

Airline Depreciation

Figure 6-1 summarizes the depreciation values for three airline companies: Northwest, Delta, and United. All three use straight-line depreciation, which increases the accumulated depreciation by the same amount each period.

<i>IN MILLIONS</i>	Northwest	Delta	United
Book Value	\$75	\$75	\$75
Residual	\$3.75	\$3.75	\$3.75
Depreciable Amount	\$71.25	\$71.25	\$71.25
Useful Life	25 years	20 years	27 years
Annual Depreciation	\$2.85	\$3.5625	\$2.638
Acc. Depreciation, 12/31/08	\$11.4	\$14.25	\$10.552
Book Value, 12/31/08	\$63.6	\$60.75	\$64.448
Sale Price I	\$55	\$60	\$65
Gain (Loss) on Sale I	-\$8.6	-\$0.75	\$0.552
Sale Price II	\$60	\$60	\$60
Gain (Loss) on Sale II	-\$3.6	-\$0.75	-\$4.448

Figure 6-1 Depreciation Summarization

While each of the companies bought the same plane, they chose to depreciate using different useful lives in order to minimize income tax because depreciation expense is subtracted out, leading to a lower taxable income. This also is favorable since depreciation is not technically a loss of money, it is just an allocation. The companies could also use different useful lives since their planes might be used more or less, depending on the popularity on the airline.

Regarding sales price, it is more realistic that Sales Price I would be used, since each airline will most likely get a different value depending on how used it was and how well it was maintained over its useful life.

Applying Depreciation to Waste Management

The following part examines Waste Management and applies depreciation manipulation lessons to the company as well as the auditor, Arthur Andersen.

Waste Management inflated profits by over \$1.7 billion in the 90's through a variety of ways:

- Made unsupported changes in depreciation estimates
- Didn't record losses in value of landfills as they were being used (depreciation)
- Didn't write off landfills after they had been completely used and filled
- Offset increase in assets and equity with inflated environmental liabilities, as well as expenses associated with these liabilities
- Improperly capitalized a variety of expenses
- Did not have sufficient reserves to pay for income tax and other expenses

Regarding the depreciation expense, they could use an accelerated depreciation method or a method that isn't standard across similar companies. By depreciating assets quickly, their book value goes down, and a quick sell for FMV would look like a large

gain on the books. Waste Management mingled with the estimated useful life by extending it as well as increasing the salvage value on a variety of their assets.

Waste Management executives wanted to manage earnings to create a false reserve and look more profitable for investors, so that the stock price would go up. This coincided with their scheme to increase performance-based benefits as well as enhance retirement benefits.

Arthur Andersen allowed Waste Management to overstate their profits by more than \$1 billion and wrote off on all of audits by releasing false and misleading audit reports that said they were GAAP and GAAS compliant.

Introduction

The following is an excerpt from a given case regarding Construct Company and IRFS/GAAP.

“In 2007, a construction materials manufacturing company (Construct) purchased a tract of property located in New York City from BigMix, Inc. (BigMix). BigMix was a privately held manufacturer of bituminous concrete. The property was the site of one of BigMix’s manufacturing facilities. The purchase and sale agreement for the property included an indemnification provision for potential environmental liabilities. However, Construct did not require a portion of the purchase price to be placed in escrow because it concluded that such a provision would adversely affect the purchase negotiations. Construct intended to use the site to produce construction materials, which would be delivered in New York City. Construct believed that the proximity of the site would give it a competitive advantage in the local market. In 2008, subsequent to the purchase, BigMix filed under Chapter 11 of the United States Bankruptcy Code. Construct immediately attempted, without success, to secure an interest in the assets of the shareholders of BigMix. In 2009, Construct was notified by a government agency that the Environmental Protection Agency (the EPA) was investigating the property acquired from BigMix for potential water contamination. Construct, being proactive, contacted an environmental agency to do some testing related to the potential contamination. The agency estimated the probability of the EPA actually assessing Construct penalties would be approximately 60 percent, and the costs associated would be \$250,000, including legal fees. In 2010, Construct was notified by the EPA that the property acquired from BigMix was placed on the EPA’s National Priorities List. The EPA named Construct, BigMix and the former shareholders of BigMix as responsible parties (PRPs). Knowing the financial position of the other PRPs, the EPA issued a unilateral administrative order to Construct to undertake the remedial investigation and feasibility study (RI/FS). Understanding the significance of the potential penalties associated with non-compliance of the unilateral administrative order, Construct began the RI/FS and filed suit against BigMix’s former shareholders for an unspecified amount. In 2010, Construct estimated its legal fees related to administering the remediation action would be \$100,000 and the total estimated amount of the RI/FS would be \$300,000. The legal proceedings with BigMix were in the discovery stages at the end of 2010. In addition, Construct was unable to reasonably estimate the total cost of the remediation effort. Upon completion of the RI/FS in June 2011, Construct was advised by the contractors performing the RI/FS that the soil at the location was contaminated but the contamination had not affected water supplies. The contractors provided their recommended remediation plan which was presented to the EPA in late 2010. As of 2011, the plan was estimated to cost \$1.5 million

to implement. In August 2012, Construct's attorneys believed that they had a 75 percent chance of obtaining a \$1 million settlement of their claim against BigMix's former shareholders."

Analysis

Construct should not record the liability at the time of purchase because Paragraph 410-30-25-1 states that the accrual of a liability is only supposed to be recorded if there is information available that an asset has been impaired or a liability has occurred. In this case, the loss could not be reasonably estimated so Construct should not record it. In addition to this, Paragraph 410-30-25-1 states that "remedial actions" (e.g., an investigation) must have taken place in order to the liability to be required.

Even though Construct has a claim on BigMix's assets, the indemnification provision is classified as remote according to 840-10-25-13. The loss cannot be reasonably estimated, and at this point, there are no known liability costs associated with contamination since the information was leaked in 2009.

Construct should not record the liability in 2009 (according to GAAP) because 410-30-25-6 states the following:

- Litigation has commenced or a claim or an assessment has been asserted, or commencement of litigation or assertion of a claim or assessment is probable.
- The reporting entity is associated with the site—that is, it in fact arranged for the disposal of hazardous substances found at a site or transported hazardous substances to the site or is the current or previous owner or operator of the site

According to this, Construct has not begun the removal of the contaminated water, so they should not record the liability. With IFRS, however, IAS 37.14 implies that it should be recorded since it can be estimated and is greater than 50 percent.

The amount recorded should be \$400,000 because the conditions above are now met since Construct is forced to remove the contamination. IFRS also requires this liability to be recorded.

Topic 410-30-30-11 infers that the \$1.5 million should be recorded as a liability since it falls under multiple of the following classifications for a remedial plan.

- a. Pre-cleanup activities, such as the performance of a remedial investigation , risk assessment, or feasibility study and the preparation of a remedial action plan and remedial designs for a Superfund site, or the performance of a Resource Conservation and Recovery Act of 1976 facility assessment, facility investigation , or corrective measures studies
 - b. Performance of remedial actions under Superfund, corrective actions under the Resource Conservation and Recovery Act of 1976, and analogous actions under state and non-U.S. laws
 - c. Government oversight and enforcement-related activities
 - d. Operation and maintenance of the remedy, including required post-remediation monitoring.
2. Paragraph 450-30-25-1 of GAAP states that gain contingencies should not be recorded, but should be reported in the notes. This is so revenue should not be recognized prematurely. IFRS states that the amount should be reported as a gain according to IAS 37.31-35.

Introduction

Rite Aid is a large, publicly traded company with a large amount of long-term debt. Rite Aid's secured debt is backed by pledged collateral by their senior secured credit facility. Their unsecured debts are riskier and are not backed by collateral. They distinguish between the two types of debt to reinforce shareholders' opinions and outlooks of their financials based off the ratio of secured to unsecured debts.

Rite Aid has many smaller companies that roll up into the larger parent corporation (Rite Aid) as evidenced by their "consolidated" financial statements. The guarantor for these unsecured debts is the parent company, Rite Aid, who cosigns loans and debts for its subsidiaries since they are larger and more financially stable.

Their debt is organized by "seniority." Senior debts are more important debts that are organized so that they can be in order of lender importance and establish significance of the order to be paid. Their "fixed-rate" debts mean that the interest rate for these loans does not change over time, no matter how the market fluctuates.

Convertible bonds are bonds that can be exchanged for common stock or other securities or equity, as opposed to cash.

Note that there are also different debt interest rates; these could be due to subsidiary companies requiring a higher interest rate or the fact that different projects require different rates.

2010 Debt Reconciliation

As of 02/27/2010, Rite Aid has over \$6,370,899 of debt. This is composed of the “Current maturities of long-term debt and lease financing obligations” of \$51,502 “Long-term debt, less current maturities” of \$6,185,633 and “Lease financing obligations less current maturities” of \$133,764,000.

Senior Notes**7.5% Senior Secured Notes due March 2017**

The face value of this debt is \$500,000. This is assumed to be issued at par since there is no discount or premium classified on this debt.

The journal entries for the issuance of this note and the annual interest payments are shown in Figure 8-1:

Cash	\$500,000	
Notes Payable		\$500,000
Interest Expense	\$37,500	
Cash		\$37,500

Figure 8-1 Note Issuance and Interest Payment Journal Entries

Note that the interest expense is the face rate times principal since the note was issued at par.

When the note matures in March 2017, the entry will look like Figure 8-2:

Notes Payable	\$500,000	
Cash		\$500,000

Figure 8-2 Note Maturity Journal Entry

9.375% Senior Notes Due December 2015

The face value of this debt is \$410,000 and the carrying value is \$405,951. These amounts differ because there is a discount on this note since the market value was not the same as the stated interest rate.

During Fiscal Year 2009, Rite Aid paid \$38,437.50 in cash interest (\$410,000 * 9.375%).

The total amount of interest expense recorded was \$39,142.50 (\$38,437.50 + \$705). This was found by adding the cash payment to the discount amortized during the period.

The journal entry to record interest expense on these notes is shown in Figure 8-3:

Interest expense	\$39,143	
Disc. On N/P		\$705
Cash		\$38,438

Figure 8-3 Interest Expense Journal Entry

The total rate of interest recorded for 2009 was found by the following formula:

$$\text{Interest expense/CV of Notes at Beg. of Fiscal Year}$$

$$39,142.50/405,951 = 9.64\%$$

Other Notes

9.75% Notes due June 2016

Rite Aid made the following entry when the notes were issued at 98.2 percent:

Cash	\$402,620	
Discount on N/P	\$7,380	
Notes Payable		\$410,000

The effective interest rate (10.12 percent) of these notes was calculated in Excel using the rate function. All inputs of the formula are also stated.

Number of Periods		7
Cash Payment	410,000 * 9.75%	39,975
Present Value		402,620
Future Value		410,000

Eff. Int. Rate = 10.12%

Figure 8-4 figure is an amortization table for this note. The **effective interest** method is assumed here.

Date	Interest Pmt	Interest Exp	Bond Disc. Amort	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%

Figure 8-4 Note Amortization Table – Effective Interest Method

The net book value of these notes as of February 27, 2010 is \$403,136.65.

$$(\$774.98 * (8/12) + \$402,620)$$

Figure 8-5 is an amortization table for this note. The **straight-line** interest method is assumed in this table.

Date	Interest Pmt	Interest Exp	Bond Disc. Amort	Net Book Value of Debt	Effective Interest Rate
6/30/2009	-	-	-	\$402,620	10.1212%
6/30/2010	\$39,975	\$41,029.00	\$1,054.00	\$403,674	10.1905%
6/30/2011	\$39,975	\$41,029.00	\$1,054.00	\$404,728	10.1639%
6/30/2012	\$39,975	\$41,029.00	\$1,054.00	\$405,782	10.1374%
6/30/2013	\$39,975	\$41,029.00	\$1,054.00	\$406,836	10.1111%
6/30/2014	\$39,975	\$41,029.00	\$1,054.00	\$407,890	10.0849%
6/30/2015	\$39,975	\$41,029.00	\$1,054.00	\$408,944	10.0588%
6/30/2016	\$39,975	\$41,029.00	\$1,054.00	\$409,998	10.0329%

Figure 8-5 Note Amortization Table – Straight Line Method

Note that with this method, the effective interest rate changes while the payment and expense stay the same.

Figure 8-6 can explain the differences between the effective interest method and the straight-line method. The straight-line method is much easier to use, so it is safe to assume that Rite Aid uses the straight line since the difference between the two is immaterial.

Date	Interest Exp. – Effective Int.	Interest Exp. – Straight Line	Difference (EI – SL)
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	\$86
6/30/2015	\$41,230	\$41,029	\$201
6/30/2016	\$41,357	\$41,029	\$328
TOTALS	\$287,205	\$287,203	\$2

Figure 8-6 Differences between Effective Interest and Straight Line Method

Note Repurchasing

If Rite Aid were to repurchase the 9.5 percent senior notes and record a gain, the entry would look like Figure 8-7:

Notes Payable	\$810,000	
Cash		\$797,769
Discount on N/P		\$8,481
Gain		\$3,750

Figure 8-7 Gain Recognition Journal Entry

Rite Aid could result in a gain because the market rate could have risen below the face rate. Another possibility could be the deterioration of Rite Aid's credit worthiness and the fact that the market thinks they might not be able to continue to pay these notes.

The market rate is higher than both the rates since Rite Aid claimed a gain on this repurchase, which is not typically a good sign for the market and future of the company.

Convertible Notes

Firms issue convertible notes so that they may convert their cash payments to equity, which can be useful for times when cash and liquid/current assets could be short or tied up. Rite Aid's balance sheet would not be affected by issuing these notes since it just goes from cash payments to an equity account.

Credit Analysis

Figure 8-8 shows the debt ratios for Rite Aid and compares them to the industry average.

Credit Analysis

The following table shows the debt ratios for Rite Aid and compares them to the industry average.

Ratio	Definition	Industry Average	Rite Aid FY2009	Rite Aid FY2008
Common-size debt	TL/TA	43.83%	121%	114%
Common-size interest expense	$\frac{\text{Int exp}}{\text{Net Sales}}$	0.35%	8%	7%
Debt to Assets	Total LTD/TA	14.41%	93%	72%
Long-term Debt to Equity	Total LTD/TE	0.26	-3.70	-4.98
Proportion of long-term debt due in one year	$\frac{\text{Current portion of LTD}}{\text{Total LTD}}$	6.11%	0.81%	0.68%
Times-interest-earned	$\frac{(\text{Pretax income} + \text{int exp})}{\text{Int Exp}}$	33.44x	.069x	-4.41

Figure 8-8 Debt Ratio Comparison

Rite Aid is clearly much lower than the industry average in their debt management, which could be due to the majority of their Liabilities and Equity coming from long-term debt and the stockholders' deficit.

As evidenced by the proportion of long-term debt due in one year, very little of their debt is coming up within the next year, which means that their ability to pay these long-term is in question since so many of their debts mature in a year or longer.

Based off of the calculations above, Rite Aid's credit rating at this point in time would most likely be a CCC since they are such a large company, but still very vulnerable to the fact that their long-term debt is so substantial.

Introduction

As evidenced from the Figure 9-1, Glaxo has many more shares authorized than Merck, a potential problem which will be examined in this comparison between the two companies. Figure 9-1 simply outlines basic share and stock information for Merck and GlaxoSmithKline.

	Merck	Glaxo
Authorized Shares	5,400,000,000	10,000,000,000
Issued Shares	2,983,508,675	6,012,587,026
Outstanding/free issue	2,172,502,884	5,373,862,862
Treasury Shares	811,005,791	504,194,158

Figure 9-1 Common Shares Comparison

Also note that Merck's shares have a 1 cent par value, which reconciles with the \$2.98 billion given on the balance sheet.

Merck's total market capital capitalization at Year End was calculated by taking the amount of outstanding shares and multiplying by the price per share at market close (\$57.61) to get a number of \$125,157,891,147.24.

Since Glaxo is a British company, they follow IFRS and so their financial statements and rules look a little different than Merck's, who follows GAAP. Their share capital account is essentially par value of common stock; and the share premium account is the equivalent of excess of par value. Merck calls these accounts their GAAP terms of common stock and excess of par value.

Dividends

Dividends are payments made to shareholders periodically after a successful financial year. The most common form is a cash dividend; however, stock dividends can be declared as well. Companies pay dividends to keep stockholders happy and stay in good faith with investors. Usually the day after a dividend is announced, the stock price drops to the previous value less the dividend amount, which is also known as “X Day of Dividend.” This is due to the expected cash flows being “less” because stock purchased directly after the dividend date will not receive dividends.

The entry for Merck when they declared their dividends is shown in Figure 9-2:

Dividends Declared	\$3,310,700,000
Cash	\$3,307,300,000
Div. Payable	\$3,400,000

Figure 9-2 Merck Dividend Declaration Journal Entry

The entry for Glaxo in Figure 9-3 is a little different since they do not use a “payable” because their dividends are paid as they are declared.

Dividends Declared	£ 2,793,000,000.00
Cash	£ 2,793,000,000.00

Figure 9-3 Glaxo Dividend Declaration Journal Entry

Note that this number does not reconcile with the £2,905 because part of the dividends come from 2008 since they operate in quarters, and the 2008 numbers are not given in the Statement of Cash Flows due to the delay explained in the footnotes.

Treasury Stock

Shares that a company buys back itself is called treasury stock. There are many reasons why a company may do this. Companies repurchase their own shares to buy “low”

and sell “high” if they feel their stock is undervalued. They might also want to increase their earnings per share (EPS) by reducing the number of shares outstanding as well as “privatizing” to limit a takeover.

There are two methods of accounting for treasury stock: Cost method and Par Value method. The cost method is much more widely used by companies. Merck uses the cost method, which is evidenced by the treasury stock being listed last under retained earnings, with the Paid-in-Capital from Treasury Stock being bundled in with Other Paid in Capital on the balance sheet.

Note that treasury stock is *always* a contra-equity account as opposed to an asset account. This is to prevent companies from buying their own stock and keeping this as an inflated amount to increase their assets.

Merck

In 2007, Merck purchased 26.5 million shares, according to their Statement of Stockholders' Equity.

The total cost paid was \$1,429,700,000 and the cost per share is \$53.95 which was taken by dividing the Shares cost in 2007 by the Shares purchased, given in Note 11. This is included in the financing section of the Statement of Cash Flows.

GlaxoSmithKline

Glaxo purchased 285,034,000 shares in 2007, and 269,000,000 were included as treasury stock. On average they paid £13.09 for each share repurchased.

Since Glaxo uses IFRS, the equivalent for Movements in Equity is the Statement of Stockholders' Equity. The entry to record the repurchase and cancellation of shares is shown in Figure 9-4:

Retained Earnings	£ 3,750,000,000.00	
Cash		£ 3,750,000,000.00

Figure 9-4 Repurchase and Cancellation of Shares Journal Entry

GAAP treats this by debiting the treasury stock and crediting cash. IFRS does not have a treasury stock account.

Analysis

The following tables compare specifics of Merck and Glaxo and examine the dividends paid using particular financial ratios. The bases are given in Figure 9-5.

	Merck - \$		Glaxo - £
	2007	2006	2007
Dividends Paid	\$3,307.3	\$3,322.6	\$2,793.0
Shares Outstanding	\$2,172.5	\$2,167.8	\$5,373.9
Net Income	\$3,275.4	\$4,433.8	\$6,134.0
Total Assets	\$48,350.7	\$44,569.8	\$31,003.0
Operating Cash Flows	\$6,999.2	\$6,765.2	\$6,161.0
Year-end Stock Price	\$57.61	\$41.94	\$97.39

	Merck - \$		Glaxo - £
	2007	2006	2007
Dividends per Share	1.5223	1.5327	0.519734
Dividends Yield	2.64%	3.65%	0.53%
Dividend Payout	1.0097	0.7494	0.4553
Dividends to Total Assets	0.0684	0.0745	0.0901
Dividends to Operating CF	0.4725	0.4911	0.4533

Figure 9-5 Dividends Paid and Financial Ratios

What Figure 9-5 highlights is that Glaxo's shareholders and investors are probably not as pleased with their returns, when compared to another industry leader such as Merck. The low dividend payout ratio is most likely due to the fact that they have so many shares outstanding and the shares are very diluted. Glaxo can fix this by repurchasing some of their shares, which decreases the denominator for EPS, this increasing the amount.

Introduction

Trading Securities

Trading securities are debt or equity investments that are held for less than a year to produce a short-term profit. The general entry to record dividends (shown in Figure 10-1) is similar to when a company pays a dividend of their own where they recognize the dividend receivable and eventually the cash received.

Dividend Receivable	
Dividend Income	
Cash	
Dividend	
Receivable	

Figure 10-1 General Journal Entry to Record Dividends

The entry to record an increase in the fair market value of a trading securities involves a debit/credit to Unrealized Holding Gains – Income, which eventually shows up on the Accumulated Other Comprehensive Income statement.

Securities Available-for-Sale

Essentially, available-for-sale securities are investments that are not classified as either trading securities or held-to-maturity securities since they are an intermediary. The general entry to record these investments is shown in Figure 10-2:

Investments available for sale
Cash

Figure 10-2 General Journal Entry to Record Available for Sale Securities

The entry to record an increase in the market value is similar to a trading security and is shown in Figure 10-3:

Available-for-sale securities
Unrealized holding gain - Income

Figure 10-3 General Journal Entry to Record Trading Security

Securities Held-to-Maturity

Investments that are held to maturity are similar to the other types of trading securities, except that the purpose of these is to hold them until they reach their maturity date. No changes in FMV are reflected in these types of equity investments. Note that equity investments cannot be classified as held to maturity because they have no maturity.

Held for maturity securities are recorded at their amortized cost over their life, until their maturity date, therefore there is no entry to record an increase in the fair market value of the security.

Balance Sheet Accounts

Trading Account Assets

The balance on State Street's balance sheet for Trading Account Assets as of December 31, 2012 is \$637 million. This is also the market value since trading securities are recorded on the balance sheet at this amount.

The journal entry to record the adjustment for market value where the original asset amount was \$552 million is shown in Figure 10-4:

Trading account assets	85,000,000	
	Unrealized holding	
	gain-income	85,000,000

Figure 10-4 Market Value Adjustment Journal Entry

Investment Securities Held to Maturity

The 2012 year-end balance for investment securities held to maturity was \$11,379 million; the fair value was \$11,661 million.

The amortized cost is \$11,379, which represents the amortized amount of the premium or discount when the securities were bought. The amount given on the balance sheet is amortized cost less impairment. (Fair value – book value). This amount will also eventually reach face value over its life.

The difference between these two costs represents that the market rate on these securities has risen and they are earning a higher return.

Investment Securities Available for Sale

The 2012 year-end balance for investment securities available for sale was \$109,682 million, which represents the market value of their securities.

The amount of these gains is \$2,001 million and the losses is \$882 million. This will result in a net gain of \$1,119 million.

The net gain from sale of investment securities in 2012 was \$55 million, according to their income statement. This would increase income and cash flows since these gains are realized, meaning they sold their securities, or they matured.

Investing Activities

Numbers in this section are in millions.

Figure 10-5 shows the journal entry that was made to record the purchase of select available-for-sale securities:

Investments available for sale	60,812	
Cash		60,812

Figure 10-5 Purchase of Available for Sale Securities Journal Entry

The journal entry to record the sale of these securities (and the resulting gain) is shown in Figure 10-6:

Available for sale securities	67	
Unrealized holding gains		67
Cash	5.339	
Available for sale securities		5.339

Figure 10-6 Sales of Available for Sale Securities Journal Entry

The original cost of these securities was \$61,601 million, which is the difference between \$67 million and the proceeds from the sale of \$5,399.

The entries and journal entry to record to net unrealized gain during 2012 are shown in Figure 10-7:

Adjustment to AFS for FMV	1,367	
Unrealized holding gains		1,367

Net unrealized gain on AFS Securities

181	
67	1,367
	1,119

Figure 10-7 Recognition of Net Unrealized Gain

The \$1,367 million credit represents that fair value adjustment for the available for sale securities on hand. This would still have no effect on cash flows since these gains are unrealized, meaning they haven't been sold yet so no cash is received.

Introduction

Groupon is one of the fastest growing companies ever, which a growth in gross revenue by over 23x from 2009 to 2010. This growth in revenue also raised many questions about how they should recognize their revenue. The SEC had to step in because it seemed Groupon was overstating their revenues with their current method of recognition. Groupon pushed back a little and eventually gave way to the different form of recognizing revenue.

Comparison

Amazon's business model is to purchase items in high quantity and be able to sell them to the end consumer for a lower price, while also focusing on "the consumers, seller, and developers." Wal-Mart is committed to everyday low prices, where their pricing philosophy is that they "price items at a low price every day so our customers trust that our prices will not change under frequent promotional activity." Groupon has a different model than these companies because their business is different in that there are no tangible items they are selling and they are an intermediary. The primary focus of Groupon is to maximize revenue (specifically with the gross method), especially since the pressure for a young company is to increase sales. Each of these companies faces risks of high rates of returns since they sell millions of products daily, in addition to competition amongst themselves and other retail stores like Target. These risks can potentially cause an overstatement of revenue in order to keep up with competition and keep investors happy. How each company recognizes revenue is outlined in their respective policies and disclosed to investors so that there is a better understanding and more transparency.

Amazon and Revenue Growth

Figure 11-1 represents data from Amazon regarding their revenue, income, and stock price from 1997-2010. The evidence shows that Amazon focuses more of their initial efforts on revenues, which proves to have a large impact on stock price since mathematically, the present values of cash flows are better represented based off of revenue since a negative perpetuity (derived from net loss) looks bad to investors.

	Revenue	Income	Stock Price
2010	34,204,000,000	1,152,000,000	\$ 180.00
2009	24,509,000,000	902,000,000	\$ 134.52
2008	19,166,000,000	645,000,000	\$ 51.28
2007	14,835,000,000	476,000,000	\$ 92.64
2006	10,711,000,000	190,000,000	\$ 3.46
2005	8,490,000,000	359,000,000	\$ 47.15
2004	6,921,000,000	588,000,000	\$ 44.29
2003	5,264,000,000	35,000,000	\$ 52.62
2002	3,933,000,000	(149,000,000)	\$ 18.89
2001	3,122,433,000	(567,277,000)	\$ 10.82
2000	2,761,983,000	(1,411,273,000)	\$ 15.56
1999	1,639,839,000	(719,968,000)	\$ 76.13
1998	609,819,000	(124,456,000)	\$ 53.54
1997	147,787,000	(31,020,000)	\$ 5.02

Figure 11-1 Amazon Data for Comparison

In addition to this, the Figure 11-2 is a history of Amazon's stock price from 1997-2010 taken from morningstar.com. This shows the steady rise of online shopping and the success of Amazon.



Figure 11-2 Amazon Stock Price History

Common Size Income Statement

Figure 11-3 is a common size income statement for 2009 showing both gross and net amounts.

Common Size Income Statement

The following is a common size income statement for 2009 showing both gross and net amounts.

	2009			
	Gross	Common	Net	Common
Revenue	\$ 30,400,000	1.0000	\$ 14,500,000	\$ 1.0000
Cost of Sales	\$ 19,500,000	0.6414	\$ 4,400,000	\$ 0.3034
Gross Margin	\$ 10,900,000	0.3586	\$ 10,100,000	\$ 0.6966
Marketing Expense	\$ 4,600,000	0.1513	\$ 4,900,000	\$ 0.3379
General and Admin. Expense	\$ 7,500,000	0.2467	\$ 6,400,000	\$ 0.4414
Other Expenses		0.0000		\$ -
Net Loss	\$ 1,340,000	0.0441	\$ 1,090,000	\$ 0.0752
Net Loss to common shareholders	\$ 6,920,000	0.2276	\$ 6,920,000	\$ 0.4772
EPS (Basic)		-0.04		-0.04
Total Assets	\$ 14,962,000			
Gross Margin		35.86%		14.47%
Asset Turnover Ratio		2.0318		0.9691

Figure 11-3 2009 Common Size Income Statement

Figure 11-4 is a common size income statement for 2010 showing both gross and net amounts.

	2010			
	Gross	Common	Net	Common
Revenue	\$ 7,134,000,000	1.0000	\$ 312,900,000	1.0000
Cost of Sales	\$ 433,400,000	0.0608	\$ 32,500,000	0.1039
Gross Margin	\$ 280,000,000	0.0392	\$ 480,400,000	1.5353
Marketing Expense	\$ 263,200,000	0.0369	\$ 284,300,000	0.9086
General and Admin. Expense	\$ 233,900,000	0.0328	\$ 213,300,000	0.6817
Other Expenses	\$ 203,200,000	0.0285	\$ 203,200,000	0.6494
Net Loss	\$ 413,400,000	0.0579	\$ 420,100,000	1.3426
Net Loss to common shareholders	\$ 456,300,000	0.0640	\$ 456,300,000	1.4583
EPS (Basic)		2.66		2.66
Total Assets	\$ 381,570,000			
Gross Margin		6.08%		0.46%
Asset Turnover Ratio		18.6964		0.8200

Figure 11-4 2010 Common Size Income Statement

It is clear that Groupon's expenses increased drastically from 2009 to 2010, proportionate to their revenues. The percentage of expenses was higher in 2009 using the gross method, which is different in 2010 actually where the net method is higher. While the revenues in 2010 were higher, the net loss suffered was much greater since their marketing expense rose due to their growing success.

SEC Pushback

The difference between the revenues originally reported and in their amended S-1 is the net vs. gross method after SEC interference where they told Groupon they needed to use the net method since it more accurately reflects the actual revenues earned and received. Groupon prefers the gross since it makes their revenues look higher, and in 2009 this held to be true, while 2010 was actually the opposite. Groupon justified their reporting of revenue with the SEC because they felt they were the primary obligor. Groupon does

not have the obligation to deliver the goods since the actual companies providing the services have to perform the service goods. The only “obligation” Groupon has is to both parties where they deliver the details of the Groupon itself.

Groupon Returns

ASC 605-15-25 requires that if there is a possibility for a full or partial refund to be given, revenue must be deferred until the expiration date of the refund has passed. Groupon seems to be hurt by this standard since they took a lot of their pride in their policy that matched or even exceeded the companies. Groupon was wrong in that they should have created an allowance account for their returns since their policy was so encompassing. This allowance would have affected their financial statements by creating a contra-asset account on the balance sheet for an allowance for returns.

Groupon Cash Flow

The reason that the decreases in revenues and operating income from restatement did not affect cash flow was that the cash received is still the same, as evidenced by the example journal entries given in the case. The only differences are noncash temporary accounts affected by these changes.

Introduction

Book income is defined as the income presented on the financial statements according to the journal entries and what is on the “books.” This is different than the income reported on a company’s tax return since different tax laws disallow and limit certain forms of income or expenses.

Permanent tax differences are items that are not deductible or that may only go on the books like fines, penalties, or municipal bond interest. Temporary tax differences are differences that are caused by timing and discrepancies between book and the tax return like depreciation or rent, which requires immediate recognition on the tax return.

The statutory tax rate is the basic, marginal rate as defined on the corporate tax schedule. The effective tax rate is usually different from the statutory tax rate and is computed by tax expense over net income. It is the average rate which profits are taxed.

A company reports their deferred income tax as a line on their income statement because the entry required usually has amounts that differ between income tax expense and income tax payable.

Deferred tax liabilities are the increase in taxes payable in future years as a result of taxable temporary differences existing at the end of the current year. Deferred income tax asset represents the increase in taxes refundable in future years as a result of deductible temporary differences at the end of the current year.

An income tax valuation allowance is created if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

Note 8 – Income Taxes

The entry to record the income tax provision is shown in Figure 12-1:

Income Tax Provision	9,393	
Net deferred tax asset	8,293	
Income tax payable		17,686

Figure 12-1 Income Tax Provision Journal Entry

The increase in the Net deferred tax asset from 2011 to 2012 gives rise to the entry and the total amount of total deferred tax assets.

There is a net deferred income tax asset balance of \$13,508,000 on the balance sheet. This is split up between both the current and noncurrent portion of deferred income tax, which summed together equals this amount.

Effective Interest Rate

The calculation for the effective income tax rate is as follows:

$$\frac{\$9,393}{\$23,898} = 39.30\%$$

This rate is higher due to the deferred tax liabilities.

Differences between Book and Tax Depreciation Expense

Depreciation for book purposes is often different than tax depreciation since tax laws usually do not allow accelerated depreciation. In 2012 the tax return contained a higher depreciation expense, leading to a deferred tax liability. The effect of this different is given using Figure 12-2:

Cumulative difference in book and tax depreciation expense \$ 2,269
x
Statutory income tax rate 35%
=
Deferred income tax liability relating to property and equipment at 12/31/2012 \$ 794

Figure 12-2 Differences between Book and Tax Depreciation Expense

The book value of the Property and equipment account under the tax system's depreciation method would be \$1,048, which is the difference in the depreciation amounts, using the \$794 found above.

Allowance for Doubtful Accounts

In 2012, the books contained a higher expense for the doubtful accounts, which is evidenced by the deferred tax assets since future tax liabilities will be lower. Using the same model as before, the difference between the book and tax system is calculated in Figure 12-3:

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

Figure 12-3 Allowance for Doubtful Accounts Calculation

Deferred Tax Asset Valuation Allowance

The deferred income tax asset valuation allowance at the end of 2012 was \$713,000,000, given in the Deferred Tax Asset portion of Note 8. This amount specifically comes from their investment in HzO and explanation of the “development stage enterprise” in the note disclosures. Their reason for recording this was that the deferred tax asset would most likely be realized, erring on the side of conservatism.

Changes in Statutory Tax Rate

The entry to record the difference in tax rates is shown in Figure 12-4:

Income Tax Provision	1,777
Deferred Tax Assets	1,777

Figure 12-4 Difference in Tax Rates Journal Entry

This number was found by taking the deferred tax assets amount and dividing by the state statutory rate of 38 percent and then multiplying the new federal tax rate of 30 percent.

Introduction

A defined contribution plan is where the employer is obligated to contribute a certain sum every period based on a formula determined by actuaries. An example of this is a 401k or another defined contribution plan. A defined benefit plan is where the employer's obligation is to provide a certain benefit at the time of retirement and there is a larger variable where an appropriate funding pattern must be established. Johnson and Johnson has both, which is common for many companies.

Retirement plan obligations are liabilities that are accrued from obligations to pay employees from a value determined by an actuarial formula.

The basic assumptions are that the employer sponsors the plan and makes contributions to the pension fund. The fund is also a separate entity that receive the contributions, administers and invests the assets, and makes payments to the retirees.

Service costs are the additional liabilities created because another year has gone by, for which all current employees get credit for their service – much like how most companies offer incentives for employees to stay longer by increasing percentages of contributions every year. Interest costs are the annual interest accrued on the beginning balance the PBO from the investments. Actuarial gains or losses are differences between the estimated costs from the actuary and the realized gains or losses from the plan.

Actual return on pension investments is the adjustment to pension for interest and dividends that accumulate as the market fluctuates, which results in a gain or loss.

Company contributions are the actual amount put into the pension fund by the employer that match a percentage of their pay. Benefits paid to retirees are the contributions and actual amounts given to the retired employees.

The difference in the actual return and the unexpected return summed together equals the expected return on plan assets.

The change in healthcare/insurance benefits and plan benefits is that plan benefits are invested in a third party fund and taxed in different ways than other types of retirement benefits.

Pension Expense

The total pension expense is \$646 million, which is the sum of the different types of costs mentioned above, giving a total net periodic benefit cost. The journal entry to record is shown in Figure 13-1.

Service Cost	597	
Interest Cost	656	
Projected Benefit Obligation		1253

Figure 13-1 Pension Expense Journal Entry

Retirement Plan Obligation

The value of the pension liability at 2007 year end is \$12,002 million, which represents the vested and nonvested service of future salaries according to a sum of different estimations. This number is not reliable in the sense that it is an estimation, but as actuarial formulas get more advanced, this number is becoming more accurate, which a gain/loss account to buffer any differences.

The average interest rate can be found by dividing the interest costs by the beginning PBO. This leads to a 5.62 percent average interest rate, which is reasonable when compared to the 6.5 percent discount rate, meaning that Johnson and Johnson is paying less. The total pension interest cost is \$656 million.

Johnson and Johnson paid \$481 million to its retirees in 2007. This payment wasn't a cash payment, but instead was a withdrawal from the pension funds, previously set up with cash contributions.

Retirement Plan Assets

The total amount of plan assets for end of year are \$10,469 million, which is the company contributions, benefits paid, interest rate changes, as well as other factors listed on page 62.

The differences in the expected return on plan assets is significant since the PBO is overestimated every year by millions of dollars, as evidenced by the differences between the two each year.

The employees contributed \$379 million in 2007 and \$306 million in 2006. These pension funds are placed in diversifying equities on a board basis combined with currency matching fixed income assets like bonds. It is evident that Johnson and Johnson underfunded their retirement plan due to the greater pension related liabilities on their balance sheet than assets.