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## Accounting Research Thesis

Henry Creel

*University of Mississippi*

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ACCOUNTING RESEARCH THESIS

by  
Henry Creel

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

Oxford  
May 2019

Approved by



Advisor: Professor Victoria Dickinson



Reader: Dean W. Mark Wilder

**ABSTRACT**  
**HENRY CREEL: Accounting Research Thesis**  
**(Under the direction of Dr. Victoria Dickinson)**

During the junior year of my academic career in the Patterson School of Accountancy, I participated in an accountancy thesis class. In this class we independently analyzed and assessed the financial statements and information presented by each case. The practical application of my accounting knowledge on the professionally formatted financial information presented by each case has strengthened my understanding in accounting in ways that no other class has. Through this course, I have grown in both professional and academic aspects, and my findings will be relevant for the rest of my career.

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**CASE 1: HOME HEATERS INC.**

The decision of which accounting method one uses during financial reporting can cause great differences if applied correctly. Some companies can boost their net income by deferring expenses to later periods through their valuation of inventory. Other companies can choose to expense everything in the current period in order to lower net income and pay a lower income tax. When deciding which method to use, companies should assess their long-term goals and ensure that their reporting methods match these. The two companies Eads Heater, Inc. and Glenwood Heating, Inc. both opened at the beginning of the 20X1 year. They both had the same financial operations throughout the year but differ in their use of accounting methods. This resulted in different end totals for their notable accounts. In this case I will identify where the end totals differ and why.

This case has taught me the importance of clear and concise data and why it should be formatted in a way that is easily comprehensible. Although the two companies record mostly the same data, their methods of recording cause noteworthy differences in end data. Without tools such as excel, organizing data would be much harder and much less coherent. This case has also shown me that the method that gives the best net income is not always the best.

In APPENDIX 1: FINANCIALS OF GLENNWOOD HEATING INC. AND EADS HEATERS INC is the transaction data of both companies from part A. Since they use the same methods to record this data, their end totals are the same. Going into Part B, however, the records begin to change.

In APPENDIX 1: FINANCIALS OF GLENNWOOD HEATING INC. AND EADS HEATERS INC is Glenwood Heating, Inc.'s data recorded from part B. One will notice that this data is almost completely different from the data recorded for Eads

Heater, Inc. from part B. First, Glenwood recorded one percent of ending accounts receivable as uncollectible. I have chosen to use the direct method to record this—subtracting the bad debt from Accounts Receivable directly rather than creating an allowance for bad debts account and making an adjusting entry later. Inventory is recorded using FIFO leading Cost of Goods Sold to be low and remaining inventory to be high. The depreciation on the building and the equipment are both recorded using the straight-line method. A payment of \$16,000 is made for use of rental equipment, and the owner has agreed to rent it out for the same price next year. Finally, income tax is recorded as twenty-five percent of the GAAP income found on the income statement.

In APPENDIX 1: FINANCIALS OF GLENNWOOD HEATING INC. AND EADS HEATERS INC is Eads Heaters, Inc.'s data recorded from part B. The manager records five percent of Accounts Receivable as uncollectible; it is unknown why Eads records a higher percentage than Glenwood although their differing locations may be responsible. I have recorded this data in the same fashion as Glenwood for clarity. Inventory is recorded using the LIFO method yielding a high Cost of Goods Sold and a low remaining inventory. The depreciation of the building is recorded using the straight-line method; however, double-declining balance is used for the equipment causing a large depreciation expense equal to twenty-five percent of the equipment's book value. Eads has decided to enter into a capitalized lease with the owner of the rental equipment. The terms are an annual interest rate of eight percent with a total payment of \$16,000 due at the end of every year for eight years. The total value of the leased equipment is recorded as an asset with a straight-line depreciation rate and no salvage value. Income tax is recorded as twenty-five percent of the GAAP income found on the income statement.



In APPENDIX 1: FINANCIALS OF GLENNWOOD HEATING INC. AND EADS HEATERS INC are the income statements of Glenwood Heating, Inc. and Eads Heaters, Inc. Glenwood's net income is more than \$20,000 higher than Eads's net income. Although they have the same sales, their methods of recording inventory, FIFO vs LIFO, cause a different gross profit. The included depreciation expense for the rental equipment in Eads's income statement also brings the profit lower. Interest expense is higher in Eads's income statement because of the capitalized lease; however, it does not have a rent expense. Eads also has a higher bad debts expense. Having a higher income does not mean that Glenwood is doing better financially than Eads; they just have different methods of recording data. In some cases, having a lower reported income can be beneficial because a lower income tax must be paid.

In APPENDIX 1: FINANCIALS OF GLENNWOOD HEATING INC. AND EADS HEATERS INC are statements of retained earnings of both companies. Due to the lower net income, Eads also has a lower retained earnings balance.

In APPENDIX 1: FINANCIALS OF GLENNWOOD HEATING INC. AND EADS HEATERS INC are the balance sheets of both companies. The differences in accounting methods are most evident here. Glenwood's debt-to-equity ratio (total debt divided by total equity) is 1.8 whereas Eads's is 2.4. This difference indicates that Glenwood is a better investment for outside parties. Glenwood's current ratio (current assets divided by current liabilities) is 4.9 whereas Eads's is 4.6 indicating that Glenwood's capacity to pay short-term liabilities is slightly better than Eads's. However, this difference is partially due to Eads's conservative estimate of uncollectible debts, so the data is inconclusive.

In conclusion, it is hard to say which company is doing better financially. If one were to only take the numbers by their face-value, then Glenwood is the obvious choice. After careful examination, I have come to the opinion that Eads is the better choice. Although the manager's methods make Eads's numbers less notable than Glenwood's, his decisions are conservative and conscientious. A five percent estimate on bad debts is much more reasonable than Glenwood's one percent. Eads's use of LIFO has allowed its income tax to be much lower—leaving more cash left over at the end of the year. The capitalized lease has given Eads a guaranteed flat rate of \$16,000 a year for 8 years whereas Glenwood's rate has the chance to go up after next year. This lease may affect Eads's net income, but it does not actually affect Eads's cash balance any more than Glenwood's current deal. The methods one uses to account for their financial information are almost as important as the information itself.



Glennwood Heating, Inc.														
Part II Recording Additional Information														
Transaction	Cash	Account Receivable	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciable Equipment	Accumulated Depreciable Cost of Goods Sold	Depreciation Expense	Depreciation Expense - Equipment	Rent Expense	Income Tax Expense	Bad Debts Expense	
Balance-Part I	4750	9900	0	23000	7000	35000	0	8000	0	0	0	0	0	0
Part II (1) Bad Debts		-994												994
Part II (2) COGS				-17700					17700					
Part II (3) Depreciation														
Building							10000			10000				
Equipment								750		750				
Part II (4) Equipment														
Rental Payment	-1600										16000			
Part II (5) Income Tax	-3054												3054	
Balance	426	9906	0	6200	7000	35000	10000	6000	750	10000	750	16000	3054	994
Liabilities														
Account Payable	2640	653	36000											
Part II (1) Bad Debts														
Part II (2) COGS														
Part II (3) Depreciation														
Building														
Equipment														
Part II (4) Equipment														
Rental Payment														
Part II (5) Income Tax														
Balance	2640	653	36000		15000	70435								



<b>Glenwood Heating, Inc</b>		
<b>Income Statement</b>		
<b>For Year End December 31, 20X1</b>		
Sales		\$ 398,500.00
Cost of Goods sold		<u>(177,000.00)</u>
Gross Profit		221,500.00
Operating Expenses		
Bad Debt Expense	(994.00)	
Other Operating Expenses	(34,200.00)	
Depreciation Expense (building)	(10,000.00)	
Depreciation Expense (equipment)	(9,000.00)	
Equipment Rent Expense	(16,000.00)	
Total Operating Expenses		<u>(70,194.00)</u>
Operating Income		151,306.00
Other Expenses		
Interest Expense	(27,650.00)	
Total Expense		<u>(27,650.00)</u>
Income before tax		123,656.00
Income tax		<u>(30,914.00)</u>

<b>Eads Heaters, Inc</b>		
<b>For year-end December 31, 20X1</b>		
<b>Income Statement</b>		
Sales		\$ 398,500.00
Cost of Goods sold		<u>(188,800.00)</u>
Gross Profit		209,700.00
Operating Expenses		
Bad Debt Expense	(4,970.00)	
Other Operating Expenses	(34,200.00)	
Depreciation Expense (building)	(10,000.00)	
Depreciation Expense (leased equipment)	(11,500.00)	
Depreciation Expense (equipment)	(20,000.00)	
Equipment Rent Expense	-	
Total Operating Expenses		<u>(80,670.00)</u>
Operating Income		129,030.00
Other Expenses		
Interest Expense	(35,010.00)	
Total Expense		<u>(35,010.00)</u>
Income before tax		94,020.00
Income tax		<u>(23,505.00)</u>

<b>Glenwood Heating, Inc</b>	
<b>Statement of Retained Earnings</b>	
<b>For Year-end December 31, 20X1</b>	
Beginning Balance	\$ -
Net Income	92,742.00
Dividends	<u>(23,200.00)</u>

<b>Eads Heaters, Inc</b>	
<b>Statement of Retained Earnings</b>	
<b>For Year-end December 31, 20X1</b>	
Beginning Balance	\$ -
Net Income	70,515.00
Dividends	<u>(23,200.00)</u>

Glenwood Heating, Inc			
Balance Sheet			
December 31, 20X1			
Assets			
Current Assets			
Cash	\$ 426.00		
Accounts Receivable	98,406.00		
Inventory	<u>62,800.00</u>		
Total Current Assets		161,632.00	
Long-Term Assets			
Land	70,000.00		
Equipment	80,000.00		
Building	350,000.00		
Accumulated Depreciation (Building)	(10,000.00)		
Accumulated Depreciation (Equipment)	<u>(9,000.00)</u>		
Total-Long Term Assets		<u>481,000.00</u>	
Liabilities			
Current Liabilities			
Allowance for Bad Debts	-		
Accounts Payable	26,440.00		
Interest Payable	<u>6,650.00</u>		
Total Current Liabilities		33,090.00	
Long-Term Liabilities			
Note Payable	<u>380,000.00</u>		
Total Long-Term liabilities		<u>380,000.00</u>	
Total Liabilities			413,090.00
Stockholder's Equity			
Common Stock	160,000.00		
Retained earnings	<u>69,542.00</u>		
Total Equity			229,542.00



Eads Heaters, Inc			
Balance Sheet			
December 31, 20X1			
Assets			
Current Assets			
Cash	\$ 7,835.00		
Accounts Receivable	94,430.00		
Inventory	<u>51,000.00</u>		
Total Current Assets		153,265.00	
Long-Term Assets			
Land	70,000.00		
Equipment	80,000.00		
Building	350,000.00		
Equipment (leased)	92,000.00		
Accumulated Depreciation (Equipment)	(20,000.00)		
Accumulated Depreciation (Building)	(10,000.00)		
Accumulated Depreciation (Leased)	<u>(11,500.00)</u>		
Total Long-Term Assets		<u>550,500.00</u>	
Liabilities			
Current Liabilities			
Allowance for Bad Debts	-		
Accounts Payable	26,440.00		
Interest Payable	<u>6,650.00</u>		
Total Current Liabilities		33,090.00	
Long-Term Liabilities			
Lease Payable	83,360.00		
Note Payable	<u>380,000.00</u>		
Total Long-Term Liabilities		<u>463,360.00</u>	
Total Liabilities			496,450.00
Stockholder's Equity			
Common Stock	160,000.00		
Retained earnings	<u>47,315.00</u>		
Total Equity			<u>207,315.00</u>

## CASE 2: MOLSON COORS BREWING COMPANY

Molson Coors Brewing Company is a company in the business of brewing and selling beers. The purpose of this case study is to analyze and interpret the financial information from the 2011, 2012, and 2013 years. From this I have learned more about how to analyze financial information and the proper way of disclosing it. Disclosure is an incredibly important concept within financial reporting. The majority of work an auditor performs pertains to the requirements of disclosure by financial regulatory bodies. This case has also taught me that there are different ways to disclose financial information depending on a company's objectives and activities.

The major classifications are on an income statement can be seen below in Figure 2A.

Figure 2A

Income Statement	
Operating Section	Sales/Revenue Cost of Goods Sold Gross Profit Operating Expenses Operating Income
Non-Operating Section	Other sources of income/gains and Expenses/losses Income Tax Expense Gain/Loss on discontinued operations Shares outstanding Earnings Per Share

U.S. GAAP requires that companies provide “classified” income statements to enable that anyone with basic accounting knowledge may understand the financial information listed. Income statements provide a look into the activities of a company for the span of time it represents. It can sometimes be called the statement of activities. Users can use this information to assess the yearly activities of a corporation. A

standardized template for income statements keeps information organized and allows ease of access. It also allows readers to understand what the information means and helps prevent companies from altering their financial information. This standardization increases comparability of companies.

Persistent income is regular income received from operational activities. This allows users to understand which income is normal for the company and which income is incidental or irregular. Revenue from day-to-day transactions that fall under the scope of the purpose of the company is persistent income. An example of this might be the daily sales a grocery store makes. An income including unusual gains or losses is not an accurate measure of a company since it does not show how the company fairs in an ordinary period.

Comprehensive income is income with all changes in equity that are not related to the investments by or distributions to the owners. There are two different ways to record comprehensive income. The first is using the one-statement approach which while simpler, has the drawback of hiding the actual net income in the subtotals of the statement. The other way is the two-statement approach which has a separate statement for comprehensive income following the income statement.

Sales is the total revenue made from selling merchandise. Net sales is the result of subtracting sales returns, sales discounts, or excise taxes. In this case Molson must pay an excise tax which is a special tax for certain goods such as gas or tobacco. When sold to consumers, this tax is part of the product's price. Molson has reported Sales and Net sales separately because they wish to show that this tax is paid for by the consumer rather than the company themselves. They do not want to include this tax in their sales

and subtract it out later as an expense. Their net sales is their true revenue which they want to show investors.

Special items are sources of expense or revenue that are either unusual or infrequent. These are separate from the other items on the income statement as they do not have anything to do with core operational activities. Molson includes employee-related charges, impairments or asset abandonment charges, unusual or infrequent items, termination fees, and other gains/losses.

These items are called special because they are not part of core operations. By listing them as operating expenses, Molson contradicts this. Because of that, I do not agree with this classification.

Special items are activities that are either unusual or infrequent. Other income (expense) are transaction that are both unusual and infrequent. Special items relate to the business activities of the company, but they are not part of the day-to-day operations. Other income (expense) are gains and losses not associated with normal business operations.

The comprehensive income for Molson was a \$760.2 million loss. The net income was a loss of \$572.5 million. The difference is almost a \$200 million loss. This is due to the changes in equity not relating to the investments by or distributions to owners.

Effective tax rate can be found by dividing income tax expense (84) by pretax income (654.5). Molson's effective tax rate is 12.83 percent. The statutory Federal income tax rate for corporations is 35 percent; however, they only paid 12.83 percent.

The reason for this substantial difference is because of foreign tax rates on foreign business and tax planning.

In conclusion, Molson Coors Brewing Company must disclose a great amount of complicated financial information in a format that is understandable and concise. The use of standardized financial statements helps facilitate this. This case has shown me how important GAAP is. Without it, there would be no way to know how a company is doing without learning each individual company's method of disclosing information.

### CASE 3: PEARSON PLC.

This case is about the receivables of the company Pearson plc. I have learned more about the intricacies of receivables within a company and the many transactions that come along with them. Receivables are among the more important accounts within financial reporting. Since the company does not physically own the cash yet, it is important for the financials to reflect a proper estimation of the cash due. Uncollectible debts and sales returns can both affect receivables greatly. This case has taught me the importance of estimating these numbers and accounting for the actual amounts.

Receivables are obligations of customers to one's own company to provide money, goods, or services in the future. Accounts receivable are short term receivables and are therefore current assets. They are also open accounts meaning there is no specified due date. They are usually paid within 30 to 60 days of the transaction. Another name for accounts receivable is trade receivables, which can be either notes receivable or accounts receivables. Trade receivables are receivables due from a customer in return for goods or services.

Accounts receivable are oral promises with a general due date, usually within 30 to 60 days of the transaction. Notes receivable are written contracts with a specified due date. Notes receivables can also be current or non-current assets. Since note receivables are typically for a longer period of time, they usually bear some sort of interest due periodically or at the maturity of the note.

A contra account is an account that is created to reduce an asset, liability, or equity account. The contra assets associated with Pearson's trade receivables are sales returns and provisions (allowances) for doubtful accounts. The sales return account is an estimated account for the amount of goods sold that will be returned. This is estimated



based off previous history of returns as a percentage of previous sales. When the actual sales return is found, the amount is subtracted from accounts receivable. Provisions for doubtful accounts is an estimated account for the projected amount of accounts receivable that will not be collected due to bad debts. This is estimated using previous history of bad debts as a percentage of accounts receivable. When a debt is found to be bad it is subtracted from this account and accounts receivable.

The percentage-of-sales approach estimates general amount using a percentage of outstanding receivables. These estimations are made using information from past events. This amount is only an estimation of the total uncollectible receivables, so specific uncollectable accounts are not accounted for. The aging-of-accounts procedure identifies specific outstanding accounts and applies percentages accordingly. These estimations are made using the specific age of each past due account. The aging-of-accounts procedure is the most accurate approach because it uses each individual account's history to estimate rather than the general loss experience from the past.

Customers may have a variety of reasons for not paying debts. It is hard to accurately guess which account will end up being uncollectible even with the aging-of-accounts approach. For this reason, companies will issue financing conditions based upon one's credit score. Someone with a low credit score will have lesser chance of paying off their debt, so a company will assign them a higher interest rate on their debt to make up for this.

Figure 3A below shows the T-account for the activity in the provision for bad and doubtful account of the company. The first entry is the beginning balance from the previous year. The next entry is due to the exchange differences in foreign transactions.

Changes in the income statement cause the next entry. An account is declared to be uncollectable it is written off by debiting Provision for bad and doubtful accounts (20) and crediting accounts receivable. Through a business combination the company acquires more doubtful debt.

Figure 3A

Provision for bad and doubtful accounts	
	72
5	
	26
20	
	3

When recording bad debt expense for 2009, Pearson will debit bad debt expense, an income statement account, for twenty and will credit provisions for bad and doubtful accounts, a balance sheet account, for twenty. When writing off bad debt for 2009, Pearson will debit provisions for bad and doubtful accounts for five and will credit accounts receivable, a balance sheet account, for five. Since bad debt expense is an expense account relating to the operation activities of the company, it will be placed in the operational expenses section of the income statement.

The activity for provisions for sales returns can be seen below in the T-account Figure 3B.

Figure 3B

Provisions for sales returns	
443	372
	425
354	

Recording of the estimated sales returns and the actual sales returns are shown in the entries below.

Sales returns (income statement)	425
Provision for sales returns (balance sheet)	425
Provisions for sales returns (balance sheet)	443
Accounts receivable (balance sheet)	443

Estimated sales returns follows sales in the computation of net sales at the beginning of the income statement.

Figure 3C below shows the activity of gross trade receivables throughout the 2009 financial year. The journal entries for these activities can be seen below Figure 3C. This activity represents the day-to-day sales on credit of the company for 2009.

Figure 3C

Gross trade receivables	
1,474	5,679
5,624	
1,419	
Trade receivable	5,624
Sales	5,624
Cash	5,679
Trade Receivable	5,679

## CASE 4: TRANSFERS OF RECEIVABLES

In the financial world, companies usually issue notes to other entities in order to raise cash for expenditures. In some cases, a company may transfer a receivables accounts to another entity in exchange for services, assets, or products. This may be because a company needs to liquidate their assets quickly, provide financing, or believes it too costly to collect the accounts themselves. Whatever the reason, it presents some unique recordings in accounting.

Below is a transaction involving the transfer of receivables.

On October 1, 2017, Arden Farm Equipment Company sold a pecan-harvesting machine to Valco Brother Farm, Inc. in lieu of cash payment Valco Brothers Farm gave Arden a 2-year \$120,000 8% note (a realistic rate of interest for a note of this type). The note required interest to be paid annually on October 1. Arden's financial statements are prepared on a calendar-year basis. Assuming Valco Brothers Farm fulfills all the term of the note, prepare the necessary journal entries for Arden Farm Equipment Company for the entire term of the note.

In this problem, Valco Brothers is financing their purchase of the machine with a note receivable.

The first step is to record the sale of the equipment for October 1. This is done by debiting Notes receivable for \$120,000 and crediting sales revenue for \$120,000.

The next step is to make the adjusting entry for the interest built up over the three months. The amount is calculated by multiplying \$120,000 by its interest rate and then by the amount of time its grown. Therefore, your calculations should be  $\$120,000 \times 8\% \times 3/12$  months. This amount is \$2400. Your adjusting entry should be a debit to interest receivable for \$2400 and a credit to interest revenue for the same amount.

After this the next recording for this transaction should be the payment received from Valco Brothers for a year of interest on October 1, 2018. To find this amount you add the interest receivable from last year to the interest that has built up over the nine months. The interest built up is calculated in the same fashion as in the last step. Your

calculations should be  $\$120,000 \times 8\% \times 9/12$  months. This amount is \$7,200 and when added to your interest receivables is \$9,600. Therefore, you must debit cash for \$9,600, credit interest receivable for \$2,400, and credit your interest revenue for \$7,200.

Next, you must once again make an adjusting entry at the end of the year for the three months of interest. Therefore, you debit interest receivable for \$2,400 and credit interest revenue for \$2,400.

Since the note is for two years, on October 1, 2019 you must record both the payment of interest and the payment of the note. The cash received in the transaction is equal to the note added to the nine months of interest and the balance of interest receivables. The nine months of interest is the same as last year (\$7,200), so this plus the note (\$120,000) and the balance of interest receivable (\$2,400) is \$129,600. You record this by debiting cash for \$129,600, crediting notes receivable for \$120,000, crediting interest receivable for \$2,400, and crediting interest revenue for \$7,200. Once transaction has occurred, Valco Brothers have fulfilled their obligation.

## CASE 5: PALFINGER AG



This case addresses the property, plant, and equipment portion of Palfinger. They are an Austrian company that manufactures hydraulic lifting, loading, and handling solutions. They supply a number of different cranes and provide other industrial services. I have learned more about the different factors involved with calculating property, plant, and equipment account balances. This case has also taught me about special circumstances such as assets under construction and additions to plant assets. I have also learned that differing depreciation methods have the same impact on the income statement regardless of their depreciation expense.

Palfinger has multitude of equipment and property for their daily operations. They provide different types of cranes, vehicles, and other plant assets. Because of this they require large amount of land for storage and equipment for manufacturing and transportation. Their inventory mainly consists of self-constructed long-term assets which are assigned costs based upon manufacturing cost.

The 2007 balance sheet shows that the property, plant, and equipment account has a balance of €149,990 which represents the value of their long-term assets net of accumulated depreciation using straight-line depreciation. All assets purchased with a discount are recorded net of that discount. Assets purchase through deferred payment are recorded at the present value of this deferred payment. This amount includes changes in scope of consolidation, additions, additional capitalization, government

Palfinger reports only equipment which they use for operation. All equipment for sale is reported as inventory. Their current equipment might be net of government grants provided, and leased equipment is reported in the balance sheet of the lessee.

Palfinger does not begin depreciation until an item being constructed is finished. The items in Palfinger's financials are all partially completed or constructed. Because of this their cost is not fully accounted for and do not have any accumulated depreciation. Reclassification is moving of an amount from one account to another account usually meaning a change in the type of asset. When assets in this account are finished, their cost is transferred to their corresponding completed account.

Palfinger uses the straight-line depreciation method which takes the original reported value of the asset net of salvage value and divide it by its estimated service life. This amount is the amount at which the asset depreciates each year. This method uses time to allocate depreciation which allows depreciation to be evenly spread among the four years but fails to account for years of use and disuse. An asset used all year long will be in a different state than an untouched asset.

Palfinger treats expenditures used to perform major renovations and value-enhancing modifications as assets and depreciate the expenses over time as they would for any other long-term asset. They either add onto the old asset account or create a new asset account. An alternative method would be to reduce the accumulated depreciation account.

The amount of new property purchased in the 2007 fiscal year is €61,444. Government grants are money received from the government in exchange for compliance. They are reported as income over the periods associated with their costs. When an item is purchased using these grants, the cost of the item is either recorded net of the grant; or the grant is recorded as a deferred income. Palfinger deducts their grants

from the cost of the assets. The depreciation expense for 2007 is €12,557. The net book value of property, plant, and equipment disposed in 2007 was €13,799-€12,298= €1,501.

According to the statement of cash flows, Palfinger received €1,655 from the sale of property, plant, and equipment. The gain on this sale equals €1,655- €1,501= €154.

This number represents the difference between the amount received and the net value of the asset. This means that Palfinger received more money for their assets than they were worth.

There are many different methods of recording depreciation in accounting. In straight-line depreciation, the purchase price of an asset less its salvage value and divided by its useful life will equal the yearly depreciation expense for that asset. In double-declining-balance depreciation, the net value at the beginning of the year is divided by half of the useful life and depreciated at that amount for that year. This is done until the salvage value is reached. Figures 5A and 5B below, show the schedule for depreciation for each of these methods.

Figure 5A – Straight line depreciation

Year	Depreciation Expense	Net Book Value End of Year
2007	€1,880	€8,793
2008	1,880	6,913
2009	1,880	5,033
2010	1,880	3,153
2011	1,880	1,273

Figure 5B – Double-declining-balance depreciation

Year	Depreciation Expense	Net Book Value End of Year
2007	€4,269.2	€6,403.8
2008	2,561.52	3,842.28

2009	1,536.91	2,305.37
2010	922.15	1,383.22
2011	110.22	1,273

If this asset were to be sold for €7,500, Palfinger would recognize a loss of €1,293 because its acquisition price was €8,793. With straight-line depreciation, this would decrease income by €3,173 for the year. If the asset were to be sold in the second year while using the double-declining-balance method, there would be a gain of €1,096.2 on the sale and depreciation of €4,269.2. This would cause a net decrease in income of €3,173. Although the yearly amounts are different, both methods give the same impact on the income statement over the entire useful life of the asset. This is because the difference created by the separate methods of reporting depreciation are cancelled out by adding the gain/loss to the depreciation expense.

## CASE 6: VOLVO GROUP

This case addresses capitalization of special expenditures for the Volvo group. The Volvo group is a company that specializes in providing commercial vehicles and engine parts. This case assesses their research and development costs and the different methods of recording them. When research and development costs appear, it can be difficult to choose whether to expense it or to capitalize them. I have learned that there are many factors that come into play when making this decision. These factors can be mostly generalized into whether the intangible asset has the potential to produce future benefits. I have also learned the differences in reporting these under both GAAP and IFRS and how these differences can affect the adjustments made to financial statements.

Research and development costs are costs associated with the searching and obtaining of new knowledge beneficial to the company. These could be new methods of production, different product-engineering, or evaluation of current company activities.

According to IAS 38, R&D costs with absolute certainty of future gain are to be capitalized. These costs must be close to completion with the intent to use/sell, usable, have a known market or method of revenue, have available resources for completion, and have easily traceable expenditures.

Research and development costs are amortized over a specific useful life. The factors for determining useful life are how long the company believes it will last, the useful life of related assets, regulatory or contractual limitations, regulatory or contractual extensions, economic factors relating to stability of the asset, and the expenditures associated with maintaining the cash flows of the asset.

I believe that IFRS better reflects the costs and benefits of periodic R&D spending because it does not generalize these expenditures. IFRS recognizes that some

R&D costs have monetary benefits that should be disclosed separately. I feel that it is improper to disclose something as an expense when it obviously will provide economics benefits like an asset.

The net carrying value in balance sheet 2009 line from intangible assets reports the total amount of capitalized product and software development costs to be SEK 11,409. In Figure 6A below, this accounts activity for the year of 2009 is shown.

Figure 6A

Capitalized Product and Software, net

12,381	
	524
	14
3	
	460
23	
11,409	

Figure 6B is a schedule of Volvo's research and development costs for the years 2007, 2008, and 2009.

Figure 6B

	2007	2008	2009
1) Product and software development costs capitalized during the year	2,057	2,150	1,858
2) Total R&D expense on the income statement	11,059	14,348	13,193
3) Amortization of previously capitalized costs (included in R&D expense)	2,357	2,864	3,126

4) Total R&D costs incurred during the year = 1 + 2 - 3	10,759	13,634	11,925
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The proportion of costs capitalized per year can be calculated by dividing row one by row four in Figure 6B. For 2007, this is 19.1 percent. For 2008, this is 15.8 percent. For 2009, this is 15.6 percent.

Figure 6C below shows the net sales and total assets of Volvo from 2007-2009.

Figure 6C

(in SEK millions)	2007	2008	2009
Net Sales, Industry Operations	276,795	294,932	208,487
Total Assets from Balance sheet	321,647	372,419	332,265

The comparison of the proportion of total research and development costs incurred to net sales from operations shown in Figure 6D below show that Volvo is increasing its Research and development expenditures in comparison to its net sales, and Navistar is decreasing and then increasing them. An increase shows potential growth in a company.

Figure 6D



	Volvo Net Sales	Research and Development	Proportion	Navistar Net Sales	Research and Development	Proportion
2007	276,795	11,059	4.00%	11,910	375	3.15%
2008	294,932	14,348	4.86%	14,399	384	2.67%
2009	208,487	13,193	6.33%	11,300	433	3.83%

## CASE 7: DATA ANALYTICS

This case addresses the use of data analytics software, specifically SAS, and its use in the business world. Data analytics is an emerging concept in the accounting industry and the rest of the world. With the growing rate of data collection online, companies are seeing more and more worth in personal information. Data analytics is the handling, organizing, and analyzing of a large amount of data into a form that is readily accessible and structured. I have learned more about what data analytics is and how it can be used in a business setting. Data analytics software has the potential to completely change the scope of business as we know it. It goes further than simply putting data into tables. It can be used to find patterns and make decisions that human fail to see or make on their own. By having access to all the information in a company, this software can readily solve problems and find inconsistencies. It is the technology of the future.

With the amount of data growing more and more, special software and tools are needed to process and organize raw data in usable form. SAS is a data analytics tool started in North Carolina State University for the purpose of analyzing agricultural research data. Since then it has expanded into other fields as the need for data analytics has grown. SAS is a program which reads and processes data—finding patterns and organizing it. This can allow businesses to make sense of their consumer behavior and make decisions upon it. The uses for data analytics are endless. Not only can it monitor consumer behavior, but it can also search for discrepancies and fraud within financials. SAS can run on all the mainstream operating systems: Linux, IOS, windows. To implement an SAS system, one needs an SAS programming expert and knowledge on how to use the software which can be taught on the SAS website. SAS is best utilized in positions where large amounts of information are needed to be more efficiently managed.

A good understanding of technology and big data is necessary to use this tool. In order to implement a data analytics tool, one must first have a good idea of its uses. It can only be used effectively if it is installed in areas where it can work most efficiently. SAS's website offers multiple tutorials and informational videos to help one learn more about SAS. With more companies moving towards data analytics, a lot of universities have now begun offering courses and specializations relating to data analytics. The uses of this tool are endless, but in the accounting industry it can be used to assist auditing, tax planning, and financial statement analysis.

Auditing requires lengthy examinations of a company's financial data in order to make sure everything is presented correctly and accurately. SAS software can be used to do this more effectively and efficiently. It might take several days for someone to sift through all the financial data of a big company like apple, but for a data analytics program, it can be done in hours. SAS can search through a company's financials looking for patterns or incongruities in the numbers. Since accounting is all done by the book, it would be easy to design a software with an understanding of GAAP rules.

A data analytics software could also be extremely useful for tax planning. Tax planning requires in depth analysis of a company's financials and operations to find ways to reduce taxes. A data analytics software can organize a company's data and use it to find tax write-offs and reductions. By programming a software to be able to recognize patterns and activities, the company can efficiently establish a tax plan. Since this software has access to all of a company's data it can fully employ the best possible scenario. Humans on the other hand lack the ability to analyze and make computation

using such a large amount of data. To do so would take weeks while a data analytics software can do it in hours.

One of the revolutionary parts of a data analytics software is that it can store large amounts of data and analyze it all. That includes a company's entire financial statement history. It can recognize patterns and trends to help a company understand its value and where it is moving. It can also detect patterns in the shift of sales and consumer behavior. Data analytics software can make constant decisions using an entire company's data whereas a human or group of humans will struggle to retain this information. A data analytics database is also updated frequently, so it can quickly identify problem before it can develop.

Data analytics software is the future of business. It can process all our data into a structured and usable form. Imagine being able to find all the information on one client in the push of a button. Imagine solving a problem before it can even happen. Imagine the perfect tax plan. Data analytics software can do all of this and more.

This software will allow us to cut down on manpower by efficiently speeding up processes. A task that might require multiple personnel to accomplish can be accomplished easily by someone educated in using data analytics software. We will be able to apply our resources in areas that better need it.

SAS is a trusted data analytics tool which can only help our company excel. All other firms are shifting their practices towards data analytics, and I believe that we should do so as well. If we do not jump on this now, we will be left behind by the technology of the future.

## CASE 8: RITE AID CORPORATION

This case addresses the debt of Rite Aid corporation. A lot of different factors can come into play with the issuance of debt. Debt can be secured or unsecured, senior or junior, guaranteed, fixed, and convertible. The interest rate on debt can also be different depending on inflation rates and debtor credit. A debt can also have two different interest rates. The market rate is the current rate assigned to securities of the same type at the time of issuance. The stated rate is the agreed upon rate for the issued debt.

Debt can have different aspects. Debt that is secured is backed by collateral while unsecured debt has no backing. An unsecured debt can be risky which is why it is important to distinguish between them. Guaranteed debt is debt that a 3<sup>rd</sup> party agrees to cover incase the debtor fails to pay. The Rite Aid Corporation's subsidiaries provides guarantee for Rite Aid's unsecured debt. Senior refers to the priority of payment of debt. Debt that is senior is payed off before non-senior debt. Fixed-rate refers to the fixed interest rate. This means that the interest rate will not change with time and allows future payments to be projected easily. Convertible refers to a debt's ability to be converted into other securities under a specific time period. Interest rates are based off projected inflation rates and the debtor's ability to pay off debt. Since these numbers tend to fluctuate, interest rates themselves tend to fluctuate. Therefore, a loan taken out last year will not have the same interest rate as debt taken out this year.

Rite Aid's total debt for February 27, 2010 is \$6,370,899. Current maturities are \$51,502. Rite Aid's long-term debt less current maturities is \$6,185,633. That plus current maturities and leasing financial obligations of \$133,764 is \$6,370,899 which matches Rite Aid's total debt in note 11. Rite Aid has a 7.5 percent senior note with a

face value of \$500,000. The face value is the amount that the creditor expects to be paid back at the maturity less an interest. To record the issuance of this note, Rite Aid will debit cash for \$500,000 and credit note payable for \$500,000. To record annual interest paid on this note, Rite Aid will debit interest expense for \$37,500 and will credit cash for \$37,500. When Rite Aid pays the note off at its maturity, it will debit note payable for \$500,000 and will credit cash for \$500,000.

The 9.375 percent senior note due December 2015 has a different face value from its carrying value. The face value of this note is \$410,000, and the carrying value is \$405,951. These two values differ because the stated interest rate and the market rate are different. Rite Aid paid \$38,437.50 interest on these notes. In 2009. For year ended February 27, 2010, Rite aid's total interest expense is the \$38,437.5 interest paid plus the amortized discount \$705 (4,754-4049). This amount is \$39,142.50. The entry for this would be a debit to interest expense for \$39,142.5 and credits to discount on note payable for \$705 and cash for \$38,437.5. The total rate of interest is the interest expense \$39,142.50 divided by the carrying value of the note in 2009 \$405,246 which equals 9.66% interest.

Figure 8A below shows the payment schedule for the 9.75 percent note due in June 2016. When issued Rite Aid recorded debits to cash for \$402,620 and discount on note payable for \$7,380 and a credit to note payable for \$410,000. The effective annual rate of interest is 10.12%. The journal entry to accrued interest on February 27, 2010 is as follows:



Interest Expense 27,167

Discount on N/P 517

Interest Payable 26,650

From this we can easily find the book value of the note for the next period. The book value should be the book value from the previous period \$402,620 plus the amortized discount \$517 which is \$403,137.

Figure 8A

<b>date</b>	<b>Interest payment</b>	<b>Interest Expense</b>	<b>Discount Amortized</b>	<b>Book Value</b>	<b>Interest Rate</b>
30-Jun-09				40,2620	10.12%
30-Jun-10	39,975	40,750	775	403,395.002	
30-Jun-11	39,975	40,828	853	404,248	
30-Jun-12	39,975	40,915	940	405,188	
30-Jun-13	39,975	41,010	1,035	406,223	
30-Jun-14	39,975	41,115	1,140	407,363	
30-Jun-15	39,975	41,230	1,255	408,618	
30-Jun-16	39,975	41,357	1,382	410,000	

## CASE 9: MERK & CO

This case addressed the stockholder's equity of Merck & Co. The three main sections of stockholder's equity can be broken down into retained earnings, capital stock, and additional paid in capital. Retained earnings is an equity account in which net income and dividends are closed out into. It represents all earnings after expenses and dividends. Capital stock is an equity account which contains all of the issued shares of a company priced by the par value of the stock. Additional paid in capital is an equity account which represents the excess of par paid for a share.

This case has taught me more about the intricacies of stockholder's equity. Stockholder's equity is very important because it represents the residual earnings of a company or its net assets. I have learned about the different nomenclature for stock such as authorized, issued, and outstanding, and I have learned how to find and analyze this information on a company's financial statements. I now can look at any company's balance sheet and understand it completely.

By assessing Merck's financials, we can conclude a few things. Merck has authorized 5,400,000,000 shares to issue. At December 31, 2007 Merck has issued 2,983,508,675 shares. Merck's common stock has a one cent par value, so one cent multiplied by 2,983,508,675 shares is \$29,835,086.75. This number almost matches their common stock account balance which is 29.8 million dollars. Merck most likely rounded down because the \$35,086.75 is immaterial. 811,005,791 common shares are held in treasury. Outstanding shares are all shares held by non-company shareholders. There are 2,172,502,884 outstanding shares at December 31, 2007. Total market capitalization is total number of shares outstanding (2,172,502,884) multiplied by the stock price (\$57.61). This is \$125,157,891,100.

A dividend is a disbursement from retained earnings to a company's shareholders. Companies do this because it gives more incentive to buy their stock. This increases demand for their stock thus driving up their stock price. A higher stock price gives the company more capital to fund their operations when the stock is bought.

Repurchasing shares is a common practice of companies. When a share is repurchased, it is referred to as treasury stock and is valued at market price upon purchase. Companies will repurchase their shares for a multitude of reasons. It is a common that a company will choose to buy back stock rather than pay dividends because it is a more tax-efficient method of distribution of earnings to stockholders. Since treasury stock is a reduction of stockholder's equity, buying back stock can make financial analysis ratios such as earnings per share more favorable. Companies might also repurchase stock in order to reduce the number of shares outstanding in the event of a takeover. If a company's issued stock is close to their number of authorized shares, they might buy them back for the purpose of compensation contracts.

The following is the journal entry for Merck's common dividend activity in 2007:

Retained Earnings	3,310,700,000
Cash	3,307,300,000
Dividends Payable	3,400,000

Merck uses the cost method to account for its treasury stock transactions. This means that treasury stock is valued at the market price it is purchased at—as opposed to common stock being valued at par and crediting the excess to paid in capital. If Merck

chooses to resell the stock, they will still value the treasury stock at its original purchased market price and will charge the rest to paid in capital as well. Merck repurchased 26.5 million shares on the open market during 2007. Merck paid \$1,429.7 million in total for an average of \$53.95 per share. This represents the value of treasury stock since it is priced at purchased market price. Since treasury stock represents common stock that has been bought back, it is inappropriate to disclose it as an asset. Treasury stock is having a natural debit balance is a deduction from common stock. Therefore, it is a contra-equity account.

Figure 9A below is a schedule of dividends and relating financial and analytical information for Merck in 2006 and 2007 and for Glaxo in 2007. Merck pays about the same amount in dividends across the two years. However, a decrease in net income and an increase in stock price causes some notable differences in the dividend yield ratio and the dividend payout ratio. Glaxo pays much less dividends per share than Merck but has a much higher stock price and net income. This results in wildly different dividend yields and dividend payouts. The other ratios are close.

Figure 9A

	2007	2006	2007 (Glaxo)
Dividends paid	\$3,307.3 million	\$3,322.6 million	£2,793 million
Shares Outstanding	2,172,502,884	2,167,785,445	5,373,862,962
Net Income	\$3,275.4 million	\$4,433.8 million	£6,134 million
Total Assets	\$48,350.7 million	\$44,569.8 million	£31,003 million
Operating Cash Flows	\$6,999.2 million	\$6,765.2 million	£6,161 million
Year-end Stock Price	\$57.61	\$41.94	£97.39

Dividends per Share (Dividends paid/Shares outstanding)	\$1.52	\$1.53	£0.52
Dividend Yield (Dividends per share/year- end price)	2.66%	3.65%	0.53%
Dividend Payout (Dividends paid/net income)	100.97%	74.94%	45.53%
Dividend to total Assets (Dividends paid/total assets)	6.84%	7.45%	9.01%
Dividends to Operating Cash Flows (Dividends paid/Operating cash flow)	47.25%	49.11%	45.33%

## CASE 10: STATE STREET CORPORATION



This case addresses the investments section of State Street Corporation's balance sheet. Investments are incredibly important for a corporation. They allow for a corporation to offset its risks with investments in other markets. There are three separate types of investments: trading, available-for-sale, and held-to-maturity. These classifications are decided based upon intended use. Once a company has classified a security, it is permanent. While held-to-maturity investments are always debt, trading and available-for-sale investments can be either debt or equity. Held-to-maturity investments must be reported at amortized cost; whereas, trading and available-for-sale investments must be reported at fair value.

This case has taught me about the various ways of reporting investments. Investments can be used to make a quick gain or a long-term profit. Intended use is extremely important, and companies must make a decision upon buying securities. I have also learned that since the market is constantly changing, a company's investment can fluctuate through the year. This fluctuation can cause large gains or losses for a company if the amounts are great enough. Accounting for these changes are made easier with the techniques used in this case.

Trading securities are equity or debt securities that are purchased for the purpose of resale in the near future. A company would record a dividend or interest received on a trading security with a debit to cash and a credit to dividend or interest revenue. The company might also debit or credit debt investments depending on whether the security was bought at a premium or discount. If the market value of a trading security increased by \$1 during the period, State Street would record it as the following:

Fair Value Adjustment 1

### Unrealized holding gain income 1

Available-for-sale securities are securities that are neither held-to-maturity nor trading. This class acts as a default class for securities without specific classification. A company would again record that with a debit to cash and a credit to dividend or interest revenue. A company would record a dividend or interest received on an available-for-sale security with also debit or credit debt investments depending on whether the security was bought at a premium or discount. If the market value of an available-for-sale security increased by \$1 during the period, State Street would record it as the following:

Fair value adjustment 1

Unrealized holding gain equity 1

Held-to-maturity securities are securities whose purpose, as the name implies, are to be held to maturity. If a company chooses to classify these securities as held-to-maturity, then they cannot be sold or traded before maturing. There are no held-to-maturity equity investments because equity investments do not mature. There would be no journal entry for a change in the value of the security during the reporting period because held-to-maturity securities are reported at amortization cost rather than fair value.

State Street's balance sheet shows that they have trading account assets with a market value of \$637,000,000. If the unadjusted balance was \$552 million at the end of the period, then State Street would have to make the following entry:

Fair value adjustment 85,000,000

Unrealized holding gain income 85,000,000

State Street's balance sheet shows that they have investment securities held to maturity at a balance of \$11,379,000,000. The market value of these securities is \$11,661,000,000. The amortized cost is \$11,379,000,000. Amortized cost is the carrying value of a security. This amortization is due to a difference between the stated interest rate and the market interest rate. The amortized cost is lower than the original cost due to this. The difference between market value and amortized cost represents a difference in the stated interest rate and market interest rate. The difference suggests that market rates for similar securities have gone down—giving these securities a higher market value.

State Street's balance sheet shows a balance of \$109,682,000,000 for investment securities available for sale. This balance represents the market value of the investment at year end. There is a net unrealized gain of \$1,119,000,000 for these securities. There is a net realized gain of \$55,000,000 for these securities. This amount increases the statements of income and cash flows.

In 2012 State Street made the following entry to record the purchase of available-for-sale securities:

Available-for-sale investments 60,812

Cash 60,812

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

Cash	5,399
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Unrealized holding gain	67
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Available-for-sale investments	5,411
--------------------------------	-------

Gain on sale of investments	55
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From this the original cost of the available-for-sale securities sold in 2012 can be calculated. The original cost is the market value (5411) minus any unrealized holding gains or losses (67); therefore, the original cost is \$5,344,000,000.

## CASE 11: ZAGG INC.

This case addresses the income taxes and their various intricacies for Zagg's Inc. Tax requires two forms of reporting: one that follows financial reporting under GAAP and one that follows tax reporting under IRC. Under GAAP, transactions are recorded using an accrual basis. Under IRC, transactions are recorded at using a modified cash basis. Revenues are recorded in the period in which the service or product from which the revenue is derived is provided under the accrual basis. According to the matching principle, all costs related to revenue must be recorded in that same period. In comparison, the modified cash basis records income when cash is received and records expenses when there is an outflow of cash. These two different bases create two different sets of financials that may require a reconciliation at the end of the period.

This case has taught me the importance of taxes. Accounting for temporary and permanent differences between financial and tax reporting can be very important. Both methods follow very strict guidelines. The modified cash basis records revenue and expenses according to the cash flow. This means inflows of cash are revenues and outflows of cash are expenses. This means that expenses such as depreciation, which represent the allocation of the total expenditure of an asset over the asset's useful life, are not recorded. I have also learned how the results of differences, deferred tax liability and deferred tax asset, are to be reported, and the additional disclosures that follow them.

Book income is income reported on financial statements for financial reporting purposes in accordance with GAAP. This income is calculated primarily for the purpose of presenting it to potential investors and creditors. Taxable income is reported for the purpose of calculating income taxes payable in accordance with IRC. Book income is computed using the full accrual method; whereas, taxable income is reported using the

modified cash basis. Zagg's book income for 2012 is its Income before provision for income taxes which is \$23,898,000.

Permanent tax differences are differences between taxable income and book income arising from an item that affects one but not the other. Interest received on state and municipal obligations are an example of an item that is recognized for financial reporting purposes but not tax. Temporary tax difference is the difference between the tax reported value of an item and the financial reporting of an item that causes taxable or deductible sums in the future. The use of accrual versus cash basis to report sales is an example of this. Statutory tax rate is the rate of tax designated by the law in accordance with one's income. Effective tax rate is the tax rate calculated by dividing total income tax expense by the pretax financial income.

Deferred income taxes are the result of a temporary difference at the end of the year resulting in an increase in deferred tax liability. According to ASC they must be disclosed with a total of all deferred tax liabilities and assets in paragraph and with the total valuation allowance for deferred assets in paragraph. They must also disclose the net change in the valuation allowance account. The deferred taxes must be computed for each distinct entity.

Deferred tax liability is the increase in taxes payable for future years. The sum of change in deferred tax liability and income taxes payable which is the current tax expense is the income tax expense for the year. Companies must include deferred taxes as a part of their total income tax expense because GAAP requires that they disclose the consequences of the temporary differences arising in that period in accordance with the matching principle. Since these differences arise in that period, they must be disclosed in

that period. For the years following, the deferred tax liability amount is adjusted with the increases or decreases throughout the year.

Deferred income tax assets represent the deferred tax consequence that results from a temporary difference. It is the increase in taxes refundable in future years. An increase in deferred tax asset is known as a deferred tax benefit. This amount is subtracted from current taxes when calculating total tax expense for the year. An example of this would be a contingency required under GAAP to be recorded in the current year, but under IRC to be recorded in the following year when it occurs. This results in a deferred tax asset because it is taxes that will be deducted in future periods because it is recorded in the current year. Deferred tax liability represents a deferred tax consequence that results from a temporary difference. In this case it is the increase in taxes payable in future years. The amount of change in deferred tax liability is added to current tax in calculation of total tax expense for the year. An example of this would be a difference in ending accounts receivable balances at the end of the year between the financial reporting and tax reporting. The tax rate is applied to this difference and the deferred tax liability for that year will be computed.

A valuation allowance is used to reduce a deferred tax asset account when it is more likely than not that it will not realize even a portion of the deferred tax asset. When a situation occurs where a portion of deferred tax asset might not be realized, the allowance is recorded by debiting income tax expense and crediting allowance to reduce deferred tax asset to expected realizable value. The valuation allowance account is a contra account because it exists to reduce deferred tax asset on the balance sheet.



According to the information from note 8, Zagg recorded the following entry for income tax provision in 2012:

Income tax expense 9,392

DTA, net                      8,294

Income tax payable 17,686

We can also calculate the following from note 8. The change in deferred tax asset for 2012 is  $\$14,302 - \$6,300 = \$8,002$ . The change in deferred tax liability for 2012 is  $\$794 - \$1,086 = \$-292$ . To find the net deferred tax, deferred tax liability is subtracted from deferred tax asset which equals  $\$8,002 - (\$-292) = \$8,294$ . Zagg's effective tax rate is its tax expense, \$9,393, divided by its pretax income, \$23,898, which equals 39.3%. This is most likely due to a change in statutory rates or deferred tax asset. The net deferred income tax asset balance is divided into two sections. The current assets section has a balance of \$6,912,000, and the long-term assets section has a balance of \$6,596,000.

## CASE 12: APPLE INC.

This case addresses revenue recognition under different situations and specifically under apples operational activities. Revenue recognition is one of the main concepts of GAAP financial reporting. Revenue recognition's main requirement is that it be recognized in the period in which the party's performance obligation is fulfilled. In general, a performance obligation is the product or service which a company agrees to deliver upon as their side of a contract. This is the reason behind deferred or unearned revenue. When a company receives payment for services they have not yet performed, they must record the liability unearned revenue to show that they have an obligation that needs to be performed in the future. The liability is cleared with a credit to revenue when the obligation is performed. This way revenue is only recognized when the company fulfills its obligation.

I have learned a lot about the intricacies of revenue recognition from this case. ASC 606 addresses the process by which a company must follow in order to recognize revenue and the different situations in which this process might not be clear. This process is five steps: identify the contract, identify the performance obligation, determine the transaction price, allocate the transaction price, and recognize revenue when the performance obligation is fulfilled. This process can be complicated by having more than two parties involved or having multiple deliverables under the performance obligation. If more than two parties are involved, then it is difficult to identify who recognizes what portion of the revenue. Usually this can be clarified by tracing ownership of product. If one of the parties never assumes ownership, then they cannot recognize revenue on that product; they can only recognize commission revenue. If multiple deliverables are included under the performance obligation, then revenue is prorated across the different

products according to their relative selling prices; however, they cannot recognize any revenue until the entire performance obligation has been completed.

Revenues are increases in net in a period from operational activities. Gain are changes in net assets from activities other than those that create revenue—nonoperational activities. Since revenues are an operating account, they are reported at the top of the income statements; whereas, gains are reported at the bottom of the income statement because they are not as important.

Revenues should be recognized in the same period that the performance obligation, the service or product owed, is completed. According to ASC 606 this process should follow five steps. First, identify the contract. Second, Identify the performance obligations. Third, determine the transaction price. Fourth, allocate the transaction price to the performance obligations. Fifth and finally, recognize revenue when the performance obligation is satisfied. Balance sheet, Income statement, and statement of stockholder's equity are all affected due to changes in revenue, product, and receivables/cash accounts.

According to apple's 10-k, they recognize revenue when it is reasonable clear that an arrangement exists, delivery has occurred, the sales price is fixed or determinable, and collection is probable. If it is reasonable clear that an arrangement exists, then there is a contract between the parties with performance obligations. If delivery has occurred, then apple has fulfilled their performance obligation. If the sales price is fixed or determinable, then the transaction price is determined and allocated. Therefore, apple's criteria align with the ASC 606 revenue recognition criteria. Most of their transactions are recognized when the product ships.

A multiple-element contract is a contract in which more than one product or service is included in the performance obligation. This leads to a contract with multiple deliverables. This leads to problems with recognizing revenue because there is ambiguity in when revenue for each separate deliverable is recognized. Do you recognize revenue for each deliverable when it is fulfilled, or do you wait until the entire performance obligation is completed?

Managers usually receive bonuses based upon their sales for the year. Therefore, it is in the managers best interest to maximize their sales, and this can lead to an inclination to apply revenue recognition rules in a less than perfect fashion. This, in turn, can lead to fraud or omission.

Apple requires recognition of different type of income. For iTunes songs sold online, apple must recognize only commission revenue since they do not own the songs. They are not the primary selling party in this transaction. For Mac-branded accessories such as headphones, power, adaptors, and backpacks sold in apple stores, they may recognize revenue. If the product is exchanged with the other party, then revenue can be recognized. This follows ASC 606 criteria because apple has fulfilled their performance obligation. If the products are sold online, then Apple cannot recognize revenue until the customer has received the product because apple retains risks while it is being shipped. This follows ASC 606 because apple does not fulfill performance obligations until ownership and all the risks associated with the product have been transferred. For iPods sold to a third-party reseller in India, once apple transfers ownership and all risks associated with the product to the third-party reseller, they can recognize revenue. This follows ASC 606 because apple's performance obligation is not fulfilled if it still retains

ownership of the product. For revenue from gift card sales, apple must wait until the gift cards are used in order to recognize revenue. Therefore, apple must recognize a deferred revenue upon sale of the gift cards. This follows ASC 606 because apple has not actually exchanged products until the card itself is used.

“On my honor, I pledge that I have neither given, received, nor witnessed any unauthorized help on this case”

Signature: \_\_\_\_\_