

# CASE STUDIES OF STANDARD FINANCIAL ACCOUNTING PROCEDURES

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## ABSTRACT

### MICHAEL LYON REDDOCH, JR.: Case Studies of Standard Financial Accounting Procedures

What follows is a series of case studies concerning standard financial accounting procedures completed in the 2017-2018 academic school year. The following case studies dive into particular concepts and theories within financial accounting that I had not seen or been exposed. I was challenged throughout the year to dissect scenarios seen in the real world and attempt to solve real accounting issues. I was exposed to many different theories, methods, and situations where an inquisitive accounting mind was essential. The purpose of our honors accounting class was to complete, individually, various case studies in order to expand our accounting prowess. As opposed to other theses, this thesis covers a vast array of topics, thus, giving me a wider breadth of knowledge. Every case took numerous hours per week to finalize. Some cases were group work and some cases were individual work, giving our class experience working as a team and working by ourselves. Without this class, my intrigue with accounting would be drastically minimalized, and I would not have nearly as much exposure to real-life scenarios with accounting while still an undergraduate.

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# CASE 1

Glenwood Heating, Inc. and Eads Heaters, Inc.

Michael Reddoch

## Executive Summary

Upon analysis shown in the figures below, I would recommend investing in Glenwood Heating, Inc. Figures 1-1 and 1-2 show how the two companies operated in the same fashion until applying GAAP in their financial statements. Both corporations, under the same economic conditions, managed to have a sizable equity turnover at \$313,450, maintaining relatively low liability.

However, Glenwood Heating, Inc. should be the company that receives more investments and a higher loan cap. This trust should be put in Glenwood Heating partially because of the company's lower liability exposure. While Eads Heaters has a higher value on assets, they also have more liabilities. The Lease Payable account adds an extra weakness to Eads Heaters's liabilities, and Eads has a lower Retained Earnings total, comparable in Figures 1-4 and 1-7. This fact leads one to believe that an investment in Glenwood Heating is more beneficial than an investment or loan with Eads Heaters.

Glenwood Heating also yields a higher net income than Eads Heaters, comparable in Figures 1-9 and 1-10. Also, Eads is once again bested in Retained Earnings, shown in Figures 1-11 and 1-12. Additionally, there is a large difference in the margins in the Allowance for Bad Debts account in the two companies. Eads allows \$4970 and Glenwood only allowed \$994. In fact, the only two accounts that both companies share that Eads bests Glenwood on are the Inventory and Cash accounts. Even though that Eads has sold more inventory than Glenwood, inventory can easily be liquidated, so that account plays a very small factor when comparing the advantages of one company over the other. Cash is highly liquid in the same way. In every other account that differs from the shared Home Heaters transaction recordings, Glenwood outdoes Eads. For example,

Figures 1-3,1-4, 1-6, and 1-7 illustrate how Glenwood has a lower Allowance for Doubtful Accounts account, fewer liabilities, and a higher Retained Earnings account.

Glenwood Heating should be the clear company in which to invest, seeing as it has a higher rate of efficiency and more illustrious financial statements at the end of the period. Investors should be interested in its fewer liabilities and higher Retained Earnings, which should also persuade banks to lend money more easily. Glenwood Heating, Inc. would be my recommendation.

Home Heaters Part A: Recording Basic Transactions													
	Assets						=	Liabilities			+	Stockholder's Equity	
	Cash	A/R	Inventory	Land	Building	Equipment		A/P	N/P	Interest Payable		Common Stock	RE
No. 1	\$ 160,000											\$ 160,000	
No. 2	\$ 400,000							\$ 400,000					
No. 3	\$ (420,000)			\$ 70,000	\$ 350,000								
No. 4	\$ (80,000)					\$ 80,000							
No. 5			\$ 239,800					\$ 239,800					
No. 6		\$ 398,500											\$ 398,500
No. 7	\$ 299,100	\$ (299,100)											
No. 8	\$ (213,360)							\$ (213,360)					
No. 9	\$ (41,000)							\$ (20,000)					\$ (21,000)
No. 10	\$ (34,200)												\$ (34,200)
No. 11	\$ (23,200)												\$ (23,200)
No. 12										\$ 6,650			\$ (6,650)
<b>Balances</b>	<b>\$ 47,340</b>	<b>\$ 99,400</b>	<b>\$ 239,800</b>	<b>\$ 70,000</b>	<b>\$ 350,000</b>	<b>\$ 80,000</b>		<b>\$ 26,440</b>	<b>\$ 380,000</b>	<b>\$ 6,650</b>		<b>\$ 160,000</b>	<b>\$ 313,450</b>

Figure 1-1

Home Heaters Trial Balance - Part A		
	Debits	Credits
Cash	\$ 47,340	
A/R	\$ 99,400	
Inventory	\$ 239,800	
Land	\$ 70,000	
Building	\$ 350,000	
Equipment	\$ 80,000	
A/P		\$ 26,440
N/P		\$ 380,000
Interest Payable		\$ 6,650
C/S		\$ 160,000
Dividend	\$ 23,200	
Sales		\$ 398,500
Other Operating Expenses	\$ 34,200	
Interest Expense	\$ 27,650	
<b>Total</b>	<b>\$ 971,590</b>	<b>\$ 971,590</b>

Figure 1-2

Glenwood Heating, Inc. Part B: Recording Additional Information										
Transactions	Assets									
	Cash	A/R	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation Building	Equipment	Accumulated Depreciation Equipment	
<b>Balances: Part A</b>	\$ 47,340	\$ 99,400		\$ 239,800	\$ 70,000	\$ 350,000		\$ 80,000		
Part B (1) Bad Debts			\$ 994							
Part B (2) COGS				\$ (177,000)						
Part B (3) Depreciation							\$ 10,000			
Part B (4) Equipment									\$ 9,000	
Rental Payment	\$ (16,000)									
Part B (5) Income Tax	\$ (30,914)									
<b>Balances</b>	<b>\$ 426</b>	<b>\$ 99,400</b>	<b>\$ 994</b>	<b>\$ 62,800</b>	<b>\$ 70,000</b>	<b>\$ 350,000</b>	<b>\$ 10,000</b>	<b>\$ 80,000</b>	<b>\$ 9,000</b>	

Figure 1-3

	Liabilities			Stockholder's Equity	
	A/P	Interest Payable	N/P	C/S	RE
Balances: Part A	\$ 26,440	\$ 6,650	\$ 380,000	\$ 160,000	\$ 313,450
Part B (1) Bad Debts					\$ (994)
Part B (2) COGS					\$ (177,000)
Part B (3) Depreciation					
Building					\$ (10,000)
Equipment					\$ (9,000)
Part B (4) Equipment					
Rental Payment					\$ (16,000)
Part B (5) Income Tax					\$ (30,914)
Balances	\$ 26,440	\$ 6,650	\$ 380,000	\$ 160,000	\$ 69,542

Figure 1-4

Glenwood Heating, Inc.		
Part B: Trial Balance		
	Debits	Credits
Cash	\$ 426	
A/R	\$ 99,400	
Allowance for Bad Debts		\$ 994
Inventory	\$ 62,800	
Land	\$ 70,000	
Building	\$ 350,000	
Acc. Dep. - Building		\$ 10,000
Equipment	\$ 80,000	
Acc. Dep. - Equipment		\$ 9,000
A/P		\$ 26,440
Interest Payable		\$ 6,650
N/P		\$ 380,000
C/S		\$ 160,000
Dividend	\$ 23,200	
Sales		\$ 398,500
COGS	\$ 177,000	
Other Operating Expenses	\$ 34,200	
Bad Debt Expense	\$ 994	
Dep. Expense - Building	\$ 10,000	
Dep. Expense - Equipment	\$ 9,000	
Rent Expense	\$ 16,000	
Interest Expense	\$ 27,650	
Provision or Income Tax	\$ 30,914	
Total	\$ 991,584	\$ 991,584

Figure 1-5

Eads Heaters, Inc.											
Part B: Recording Additional Information											
Transaction	Assets										
	Cash	A/R	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation Building	Accumulated Depreciation Equipment	Leased Equipment	Accumulated Depreciation Lease	
Balances: Part A	\$ 47,340	\$ 99,400		\$ 239,800	\$ 70,000	\$ 350,000		\$ 80,000			
Part B (1) Bad Debts			\$ 4,970								
Part B (2) COGS				\$ (188,800)							
Part B (3) Depreciation											
Building						\$ 10,000					
Equipment							\$ 20,000				
Part B (4) Equipment											
Lease									\$ 92,000		
Lease Payment	\$ (16,000)										
Depreciation										\$ 11,500	
Part B (5) Income Tax	\$ (23,505)										
Balances	\$ 7,835	\$ 99,400	\$ 4,970	\$ 51,000	\$ 70,000	\$ 350,000	\$ 10,000	\$ 80,000	\$ 20,000	\$ 92,000	\$ 11,500

Figure 1-6



	Liabilities				Stockholder's Equity	
	A/P	Interest Payable	N/P	Lease Payable	C/S	RE
Balances: Part A	\$ 26,440	\$ 6,650	\$ 380,000		\$ 160,000	\$ 313,450
Part B (1) Bad Debts						\$ (4,970)
Part B (2) COGS						\$ (188,800)
Part B (3) Depreciation						
Building						\$ (10,000)
Equipment						\$ (20,000)
Part B (4) Equipment						
Lease				\$ 92,000		
Lease Payment				\$ (8,640)		\$ (7,360)
Depreciation						\$ (11,500)
Part B (5) Income Tax						\$ (23,505)
Balances	\$ 26,440	\$ 6,650	\$ 380,000	\$ 83,360	\$ 160,000	\$ 47,315

Figure 1-7

Eads Heaters, Inc. Part B: Trial Balance		
	Debits	Credits
Cash	\$ 7,835	
A/R	\$ 99,400	
Allowance for Bad Debts		\$ 4,970
Inventory	\$ 51,000	
Land	\$ 70,000	
Building	\$ 350,000	
Acc. Dep. - Building		\$ 10,000
Equipment	\$ 80,000	
Acc. Dep. - Equipment		\$ 20,000
Leased Equipment	\$ 92,000	
Acc. Dep. - Leased Equipment		\$ 11,500
A/P	\$ 26,440	
Interest Payable		\$ 6,650
N/P		\$ 380,000
Lease Payable	\$ 83,360	
C/S		\$ 160,000
Dividend	\$ 23,200	
Sales		\$ 398,500
COGS	\$ 188,800	
Other Operating Expenses	\$ 34,200	
Bad Debt Expense	\$ 4,970	
Dep. Expense - Building	\$ 10,000	
Dep. Expense - Equipment	\$ 20,000	
Dep. Expense - Leased Equipment	\$ 11,500	
Rent Expense		
Interest Expense	\$ 35,010	
Provision or Income Tax	\$ 23,505	
Total	\$ 1,101,420	\$ 1,101,420

Figure 1-8

Glenwood Heating, Inc. Income Statement	
Sales	\$ 398,500
(COGS)	\$ (177,000)
GM	\$ 221,500
(Expenses)	
(Operating Expenses)	\$ (34,200)
(Depreciation Expense - Building)	\$ (10,000)
(Depreciation Expense - Equipment)	\$ (9,000)
(Rent Expense)	\$ (16,000)
(Interest Expense)	\$ (27,650)
(Bad Debt Expense)	\$ (994)
	\$ (97,844)
Net Income Before Taxes	\$ 123,656
(Income Tax of 25%)	\$ (30,914)
Net Income After Taxes	\$ 92,742

Figure 1-9

Eads Heaters, Inc. Income Statement	
Sales	\$ 398,500
(COGS)	\$ (188,800)
GM	\$ 209,700
(Expenses)	
(Operating Expenses)	\$ (34,200)
(Depreciation Expense - Building)	\$ (10,000)
(Depreciation Expense - Equipment)	\$ (20,000)
(Depreciation Expense Leased Equipment)	\$ (11,500)
(Interest Expense)	\$ (35,010)
(Bad Debt Expense)	\$ (4,970)
	\$ (115,680)
Net Income Before Taxes	\$ 94,020
(Income Tax of 25%)	\$ (23,505)
Net Income After Taxes	\$ 70,515

Figure 1-10

Glenwood Heating, Inc. Statement of Retained Earnings	
Beginning Retained Earnings	\$ -
Net Income After Taxes	\$ 92,742
(Dividends)	\$ (23,200)
Ending Retained Earnings	\$ 69,542

Figure 1-11

Eads Heaters, Inc. Statement of Retained Earnings	
Beginning Retained Earnings	\$ -
Net Income After Taxes	\$ 70,515
(Dividends)	\$ (23,200)
Ending Retained Earnings	\$ 47,315

Figure 1-12

Glenwood Heating, Inc. Balance Sheet			
<b>Assets</b>			<b>Liabilities</b>
Cash	\$ 426	A/P	\$ 26,440
A/R	\$ 99,400	Interest Payable	\$ 6,650
Allowance for Bad Debts	\$ (994)	N/P	\$ 380,000
Inventory	\$ 62,800	<b>Equity</b>	
Land	\$ 70,000	C/S	\$ 160,000
Building	\$ 350,000	RE	\$ 69,542
Accumulated Depreciation Building	\$ (10,000)		
Equipment	\$ 80,000		
Accumulated Depreciation Equipment	\$ (9,000)		
<b>Total</b>	<b>\$ 642,632</b>		<b>\$ 642,632</b>

Figure 1-13

Eads Heaters, Inc. Balance Sheet			
<b>Assets</b>			<b>Liabilities</b>
Cash	\$ 7,835	A/P	\$ 26,440
A/R	\$ 99,400	Interest Payable	\$ 6,650
Allowance for Bad Debts	\$ (4,970)	N/P	\$ 380,000
Inventory	\$ 51,000	Lease Payable	\$ 83,360
Land	\$ 70,000	<b>Equity</b>	
Building	\$ 350,000	C/S	\$ 160,000
Accumulated Depreciation Building	\$ (10,000)	RE	\$ 47,315
Equipment	\$ 80,000		
Accumulated Depreciation Equipment	\$ (20,000)		
Leased Equipment	\$ 92,000		
Accumulated Depreciation Lease	\$ (11,500)		
<b>Total</b>	<b>\$ 703,765</b>		<b>\$ 703,765</b>

Figure 1-14

# CASE 2

## Molson Brewing Company

Michael Reddoch

## **Executive Summary**

A larger portion of this case pertained to the relevance and importance of the classified income statement and its encompassed parts. We took a look into different statements and compared certain facets of each statement that were related in some way. For example, we looked at comprehensive income and net income and the difference between each. Not only did we look at just the differences, but we also looked into why each is important in its own way.

We also looked at items on the different notes that were asked to conceptualize each item's influence on the company. We were specifically looking at investments and how persistent income affects the decision-making process.

Over this case I learned just how much is involved in making an investment decision. Not only is it a single set of financial statements, but also it is an inclusion of these statements over multiple periods in order to make a final decision. I also learned how the differentiation of seemingly synonymous accounts can make a large difference in the overall company. For example, the difference in "Other income (expenses), net" and "Special items, net" seems negligible, but the amount of foreign activity in the "Special items, net" account is very large. Overall, I learned how minor dissimilarities can affect an entire company.

1.
  - i. Operating
    - a) Revenues and Sales
    - b) Selling and Administrative Expenses
    - c) Cost of Goods Sold
  - ii. Non-operating
    - a) Other revenues/Gains
    - b) Other Expenses/Losses
  - iii. Income Tax
  - iv. Discontinued Operations
  - v. Non-Controlling Interest
  - vi. Earnings per Share
2. The unclassified income statement includes the broad spectrum of revenues and expenses, grouped into one category. The classified income statement is required by GAAP because it fully discloses all transactions specific to the type of revenue or expense, thus, following the full disclosure principle. The full disclosure principle requires that a company disclose all information material to that company, which a classified income statement does, and an unclassified income statement omits.
3. The investors would be interested in persistent income because one can make a prediction for the future instead of excluding a fact that might aid a decision to invest. Forecasting stock price would be a major reason to include this fact because it is relevant in determining future stock price. The notion of investing

pertains to the income that persists compared to the income that does not which all leads back to forecasting.

4. Comprehensive income differs from net income because it is a broader measure. It includes items such as unrealized holding gains/losses on available-for-sale securities, certain pension adjustments, and certain foreign currency translation gains/losses.
5. The difference between “Sales” and “Net Sales” is that “Net Sales” does not include “Excise tax” and that tax is included in “Sales” in the Molson Coors Brewing Company. The company reports the two accounts separately to illustrate that the only difference in the two accounts is “Excise tax”.
6. Molson Coors Brewing Company’s “Special items, net” line refers to benefits that are not indicative of core operations and are not necessarily non-recurring. For example:
  - Infrequent or unusual items
  - Impairment or asset abandonment-related losses
  - Restructuring charges and other atypical employee-related costs
  - Fees on termination of significant operating agreements and gains (losses) on disposal of investments
7. “Other income (expense), net” is distinguished from “Special items, net” because “Special items, net,” in this case, is based on completely foreign items not considered to be a part of core operations. “Other income (expense), net” pertains to pension adjustments, unrealized gains, and foreign currency adjustments, all in one.

8.

- i. Comprehensive income in 2013 is a loss of \$760.20. Net income in 2013 is a loss of \$572.5. Comprehensive income is more of a loss because of the inclusions of unrealized gains, foreign currency adjustments, amortizations, and other items not included on the income statement because of the broader spectrum of comprehensive income.
- ii. The difference is attributable to the accounts related to comprehensive income and not to net income. These accounts are foreign currency adjustments, unrealized gains, pension adjustments, and ownership shares

9.

- i. The effective tax rate of Molson Coors' in 2013 is 12.8% which is a result of income tax expense divided by pre-tax income. This tax is relatively low because of the amount of foreign business conducted by the company.



# CASE 3

## Pearson plc – Accounts Receivable

Michael Reddoch

## Executive Summary

This case pertained to the accounts receivable terminology and how it relates to bad debts and sales returns. These accounts and the contra accounts relating to them compile the gross accounts receivable. In this case, we were asked to figure out the gross accounts receivable as a result of a series of movements of uncollectables and returns. I learned how to correctly calculate the “Accounts Receivable” account from the uncollectable accounts and the return accounts. I also learned that there is an “Allowance for Sales Returns and Allowances” account created as a complement to the “Sales Returns and Allowances” account.

In the analysis of the accounts, the European company uses terminology that is different than that of the U.S. For instance, in the U.K., the word “provision” means “allowance” in the U.S. The word “provision” in the U.S. means “expense.” This case also uses the monetary unit of the pound sterling represented by the “£” instead of the U.S. dollar. All of figures that are used in this analysis and case are in millions of pounds sterling. I am using U.S. terminology in my analysis in describing the different accounts including renaming the “Trading Receivables” account to “Account Receivables.”

1. An account receivable is basically a promise for future cash that has almost no claim but word of mouth. Another name for account receivable is a trade receivable.
2. An account receivable is more on the verbal side, while a note receivable would more likely be written, probably with interest included. Also, note receivables are more likely to be long-term rather than a short, highly liquid account.
3. A contra account is an account that goes against the normal balance of a certain account. For example, the normal balance of an asset would be a debit. A contra account would have the normal balance of a credit. The two contra accounts associated with Pearson's trade receivables are "provision for bad and doubtful debts" and "provision for sales returns." The types of activities include allowing room for bad debt in transactions (housekeeping) and the allowance for realistic sales returns. In estimating the balance of both of these accounts, one should look at the transaction history in which the individual or company was involved. The track record of an entity should aid one to make the decision for what to allow.
4. The percentage-of-sales procedure basically says that the transaction history showed that a certain percentage of sales were returned previously, so the fact that history repeats itself should allow for a similar amount to be returned this year. The aging-of-accounts procedure essentially organizes the accounts from the accounts not due yet to the accounts that are farthest overdue. The managers still need the past transactions in order to properly gauge the activities and find the final account balance. In order to most accurately calculate the net accounts receivable, one would probably use the aging-of-accounts method because it most

accurately represents each individual circumstance where allowances need to be made.

5. Pearson extended credit to these companies in the first place because extending credit would perhaps make a customer more likely to either build a rapport with Pearson or seduce the company to purchase from Pearson. The cost benefits would outweigh the cost expenses.

6.

i. Some of the terms within the T-chart are as follows. Exchange differences occur because they sell outside the UK. Income statement movements are movements on the income statement like revenues and expenses.

Acquisitions from business combinations explain that the company absorbed another company as a subsidiary and then took on all of its accounts and contra accounts. The utilised account is the account that track the write-off of receivables.

<u>Allowance for Bad Debts</u>	
(Exchange) £5	£72 (Beginning)
(Utilised) £20	£26 (I/S Movements)
	£3 (Business combinations)
	<hr/>
	£76 (Ending)

ii. Bad Debt Expense £26  
 Allowance for Doubtful Accounts £26  
 (found on the Income Statement)

Allowance for Doubtful Accounts £20  
 Accounts Receivables £20  
 (found on the Balance Sheet)

iii. “Bad Debt Expense” is found under “Operating Expenses” in the Income Statement.

7.

i.

Allowance for Sales Returns and Allowances

(Actually Returned) £443	£372 (Beginning)
	£425 (Estimated Sales Returns and Allowances)
	£354 (End)

ii. Sales Returns and Allowances £425  
 Allowance for Sales Returns and Allowances £425  
 (found on the Income Statement)

Allowance for Sales Returns and Allowances	£443
Accounts Receivables	£443
(found on the Balance Sheet)	

iii. The “Allowance for Sales Returns and Allowances” is found under “Sales Revenue” and is subtracted.

8. The amount represented in “Credit Sales” is taken from the footnote in the case. The amount in the “Write-Off” and “Sales Returns” sections are plugged in from the previous T-charts “Allowance for Doubtful Accounts” and “Allowance for Sales Returns and Allowances,” respectively.

Accounts Receivable (Gross)	
(Beginning) £1474     (Credit Sales) £5624  (End) £1419	£5216 (Cash Collections)  £20 (Write-Off)  £443 (Sales Returns)

Cash	£5216
Accounts Receivable (Gross)	£5216
Accounts Receivable (Gross)	£5624
Sales Revenue	£5624

Allowance for Doubtful Accounts	£20
Accounts Receivable (Gross)	£20
Allowance For Sales Revenues and Allowances	£443
Accounts Receivable (Gross)	£443

# CASE 4

## Palfinger AG – Property, Plant, and Equipment

Michael Reddoch



## **Executive Summary**

This case pertained to the property, plant, and equipment section of the balance sheet. Specifically, this case refers to depreciation and self-constructed assets. We were also asked about government grants and how they relate to a company like Palfinger. In this case, we were asked to figure out how the two different depreciation methods would affect Palfinger and when it would be appropriate to use a certain method over the other. I learned how modifications of an asset can affect that certain asset's depreciation, and the different methods of accounting for these expenditures.

In the analysis of the accounts, Palfinger uses the euro instead of the U.S. dollar. The calculations in part "g" through part "j" were calculated using the numbers provided on the subsequent financial statements. It is interesting to see when doing the two different methods of depreciation, the income statement totals end up being the same. The difference in the PPE section in evaluating the equipment of the balance sheet is made by the two methods, yet the end totals end the same.

1. Even though Palfinger produces a lot of equipment, they also use a fair amount of the equipment that they produce as well. Things like container handling systems, tailgates, aerial, work platforms, transportable forklifts, and railway system solutions, hydraulic lifts, heavy construction machinery are used.
2. The €149,990 represents the amount of money invested into the machines. Depreciation is also accounted for in calculation this property, plant, and equipment over time.
3. Palfinger reports the buildings and investments in 3<sup>rd</sup> party buildings, plant and machinery, and fixtures, fittings, and equipment. These different types of equipment are wider categories for the specific, individual parts of property, plant, and equipment owned.
4. Prepayments and assets under construction are also considered self-constructed assets. The financial accounting term self-constructed assets refer to the assets that are built by the company. The cost of self-constructed assets would include direct costs such as materials and labor associated with its construction. One would not depreciate things that are in construction. The items under construction are only depreciated after they are done. One credits different assets with cash when creating a building. Construction in progress is a parking account in order to have an asset to counter the credit. The €14,958 that was reclassified in 2007 refers to reallocation of funds towards depreciation because a part of property, plant, and equipment is being used.
5. Straight-Line depreciation is used. Double declining is used for things that lose value quickly like computers or technology. This policy makes sense because the

equipment is more long term than technology in a quickly changing market.

Straight line is easier to use than double-declining. One would not want to depreciate equipment that might be used in the long term so much because assets would decrease more quickly than using straight-line depreciation.

6. Palfinger books these expenditures as current expenses. An alternative treatment of these expenditures would be to treat these modifications as an addition and use accumulated depreciation and depreciate them. Since new modifications are made to this property, plant, and equipment, one can get back some of the depreciation lost from the normal item being depreciated with no additional modifications.
7.
  - i. The purchase of PPE for fiscal 2007 would be €68,196 with all additions made.
  - ii. The government grants are €733, and they are deducted when the grant is recognized as income over the time to match them with the related costs, because they need to compensate for lost costs. There are two methods: deferred income or by deducting the grant from the asset's carrying amount.
  - iii. €12,557 is the depreciation expense for 2007 for all PPE.
  - iv. €1,501 is the disposal of PPE in 2007. The net of the acquisitions was subtracted from the net of the depreciation.
8. There should be a gain of €154 from the sale of the PPE of €1,655 subtracted from the net book value of €1,501. This gain represents the sale over the BV of

the equipment. This gain in income would go under “other comprehensive income” on the income statement.

9.

i & ii.

		Straight-Line Balance	Double- Declining Balance
BV	Base Year	€ 10,673	€ 10,673
	Depreciation	€ (1,880)	€ (3,760)
	Year 1	€ 8,793	€ 6,913
	Depreciation	€ (1,880)	€ (2,435)
	Year 2	€ 6,913	€ 4,478
	Depreciation	€ (1,880)	€ (1,578)
	Year 3	€ 5,033	€ 4,478
	Depreciation	€ (1,880)	€ (1,022)
	Year 4	€ 3,153	€ 4,478
	Depreciation	€ (1,880)	€ (606)
Net BV	Year 5	€ 1,273	€ 1,273

10.

- i. There would be a loss of €1,293 doing the carrying value of the equipment (€8,793) subtracted from the selling price (€7,500) using the straight-line

method. In the income statement, there would be a grand total of a loss of €3,173, adding together the loss on the equipment and the loss from depreciation.

- ii. If Palfinger were to use double-declining balance method of depreciation, the result from the sale would be a gain of €587. There would be a gain because the selling price of the equipment would be larger than the carrying value under this method. The income statement would total to a loss of €3,173, again, adding the €587 to a negative €3,760.
- iii. Using both methods, the income statement would be impacted the same. The initial loss using the straight-line method and the gain using the double-declining method would even out to be the same thing since the depreciation expense is offset by the same amount.

# CASE 5

## Volvo Group – Research and Development Costs

Michael Reddoch

## **Executive Summary**

This case enlightened me about the ins-and-outs of product research and development and how to handle these items pertaining to their depreciation and amortization. One of the main things that I found interesting was the difference in knowing whether to expense certain facets of the research and development or when to expenditure them and calculate them into the asset. Also, it was interesting to see how the different methods of depreciation and amortization can be used to differentiate the research and development's costs in calculating the following proportions. Additionally, I learned how the U.S. GAAP system has its advantages compared to the IFRS system in dealing with the different valuations of depreciations and amortizations. The U.S. GAAP system allows Volvo Group to be compared to other U.S. companies as well as international groups in the way that the expenses match the period in which they were incurred. The numbers used in the calculations in this case are all in millions of SEK which is the currency used in Sweden.

1. Cost that might be included are expenditures on research among other things. Not only research would be expensed but development as well. Things like production systems and software will be reported as intangible assets which are then expensed. Things like intangible assets are amortized. Other costs might include things like prototypes and samples of a software that they are using or part of other products that need to be tested.
2. Volvo Group has to consider how certain it is to add additional useful life to the product that they are making and if the product is going to gain some sort of useful addition. In a product development case like this, expenditures are normally capitalized as the product is actually being developed, hence, adding useful life to the product. Things like other research and development expenses are expensed as they happen on the income statement.
3. They would consider estimated useful life, sales and scrapping, acquired and divested operations, translation differences, reclassifications, and capital expenditures. If something is more useful in its early stages of its life, then debating over different depreciation or amortization techniques would be a good way in estimating its overall carrying value at the end of certain periods.
4. While the IFRS principles might allow the regulations to be looser due to the different cultural climates, and the ability to strictly put a price on R&D might limit the information that a company can put on its financial statements and restrict them, GAAP would be the more beneficial of the two. GAAP would better apply the matching principle in order to keep an accurate record of how



amortization would match the period when they are incurred. IFRS is too inconsistent with their methods of keeping track of these things.

5.

i. In order to find the amounts capitalized of product and software development costs, the amortization of these costs would need to be found first. The product and software development value of intangible assets, acquisition costs on the balance sheet in 2009 of 25,148 should be subtracted by the product and software development value of accumulated depreciation and amortization value in the balance sheet in 2009 of 13,739. This result yields the value of 11,409 which is the net value of the asset after depreciation and amortization.

ii.

<u>Capitalized Product and Software Development, net (SEK millions)</u>		
Beg. Bal.	12,381	
		3,126 Amortization
Amounts Capitalized	2,602	
		448 Adjustment
End Bal.	11,409	

6.

i.

(in SEK millions)	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

iii.

$$\begin{array}{ccc} \mathbf{2007:} & \frac{2,057}{10,759} = \mathbf{19.12\%} & \mathbf{2008:} & \frac{2,150}{13,634} = \mathbf{15.77\%} & \mathbf{2009:} & \frac{1,858}{11,925} = \mathbf{15.58\%} \end{array}$$

This proportion is found by the Product and Software Development Costs divided by the Net Research and Development Costs at year end.

7.

i.

(in SEK millions)	2007	2008	2009
Net sales, industrial operations	276,795	294,932	208,487
Total assets, from balance sheet	321,647	372,419	332,265

ii.

**Navistar Group:**

2007:  $\frac{375}{11,910} = 3.15\%$       2008:  $\frac{384}{14,399} = 2.67\%$       2009:  $\frac{433}{11,300} = 3.83\%$

**Volvo Group:**

2007:  $\frac{10,759}{276,795} = 3.89\%$       2008:  $\frac{13,634}{294,932} = 4.62\%$       2009:  $\frac{11,925}{208,487} = 5.72\%$

This proportion is found by the Net Research and Development Costs at year end divided by the Net Sales. Volvo Group seems to have a much stronger correlation between their R&D costs and their Net Sales as compared to Navistar's smaller percentage. There is a

consistent increase in the proportion of spending on R&D for Volvo Group, and Navistar has more of a sporadic percentage over their three years.

# CASE 6

## Data Analytics – Google Fusion

Michael Reddoch

## Executive Summary

This case pertained to the use of certain software and data analytic tools in order to improve accountancy. Google Fusion is a data management tool used to convert data tables into visual representations of data. It can be used in a variety of ways that benefit the industry as a whole, as well as benefit many other industries through the relationships of accounting firms with ads of industries. I learned in this case the way that technology is rapidly becoming more and more involved in the everyday processes of all sectors of an accounting firm. Google Fusion, especially, can be used to easily represent data that might be hard to understand in a data table. In a technology-driven world, establishing a relationship with technology and capable users will be the bedrock on which our future as accountants will work.

1. In 2009, <sup>1</sup>Alon Halvey and Rebecca Shapley introduced Google Fusion. It was not until 2011 that it was introduced as a part of the Google Docs package under the name “Tables.” In a nutshell, Google Fusion is a data management, SaaS or software as a system, application that integrates tabular data. The main job of Google Fusion is to transform the data perceived in a table into visuals that are easily interpreted by viewers. Operated through Google, it is used to integrate important business information into visualizations that can be used to make critical business decisions. <sup>1</sup>Sometimes the ones in charge of making important business decisions cannot easily interpret information given to them in tables, and this application empowers the decision-makers within a company to be able to make their informed decisions. And the only resource that would need to be used is some data and a computer.
2. In order to use this tool effectively, one would need to have a strong affinity for spreadsheets and applications like Excel. In order to convert specific data into a visual model, one would need to know how to create tables and tableaus for this data in the first place. Another useful skill to have when using Google Fusion is data grouping. This application does a lot of the hard data crunching and grouping for the user in an easy-to-use way which makes it such a beneficial tool to use in business decision making. A student like myself could gain knowledge in learning about spreadsheets by taking a systems class or an MIS class that improves the student’s ability to use Excel related programs. By using knowledge gained in

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<sup>1</sup> <https://www.techopedia.com/definition/26624/google-fusion-tables>

classes like these, Google Fusion would just be the tool to project the data inputted.

3.

- a. For auditing, especially, there are a couple of scenarios where using Google Fusion would greatly benefit that sector of accounting. For one example, a specific company's board of directors might not know or completely understand what all of the numbers stemming from different accounts do. Using Google Fusion, these numbers can come to life when auditing different companies to explain to a board of directors different parts of an audit statement. A second way that this tool can be used to improve efficiency is to transform important data into a chart for potential investors. Investors can learn thing about a certain company being audited in charts and graphs that they can understand rather than having it be explained by an expert or someone who understands the data. It can also improve efficiency when dealing with debit and credits equaling. If there was some sort of bar chart that kept track of total debits and credits or debits and credits in certain areas, the total equalization could be easier to interpret in terms of equality. It could help catch errors in balancing.
- b. For taxation, the major key to using this software would be to minimize the potential tax payment of a company. This software tool could be very integral in minimizing this expense by taking certain categories within a company and visualizing what can be changed. Sometimes it can really help people to see something in a chart that shows them what they can change rather than



looking at hundreds of numbers in a data table. One way this could improve efficiency would be to get a graph of all expenses and seeing what can be rearranged or cut out to improve the company's efficiency. Another way that this could help would be to look at 401k to improve savings for retirement that could save money. Having a graph of regular income and 401k saving next to each other would give someone the opportunity to compare these. A third reason that this could improve tax planning would be to see what sort of write-offs that a company can improve on. Being able to visualize past write-offs to future write-offs could decrease overall tax payments. Also, the ability to see how much that the company makes is written off can give one a way to see what can be improved or changed.

- c. The financial statement analysis probably benefits the most from using this software tool. There are a lot of formulas and equations used in analyzing financial statements that easily can confuse officers within a company or potential investors to a company. This tool can be used to explain these analyses in ways that are less confusing to someone who does not comprehend why certain financials are the way that they are. For instance, if the current ratio of a company was 2.4, a person with little or some knowledge of what this mean would have no idea what to do with this information. Google Fusion could be implemented in this case to explain what the current ratio is and how this 2.4 would compare to the rest of the market and its competitors. This tool can also be used for valuation. As a comparison tool, one could take the data accumulated from his findings and plot them into a graph that could compare

the valuation of certain item with the rest of the market. This comparison could also lead to the company determining how to proceed with marketing of a certain product or service and at what to price it. Advisory could play a large role in the implementation of this tool. When advising a company, this tool, like in auditing, could bring to life some numbers that a board of directors that might not know what to do with in the correct way. It also brings long term goals can certain projections into the picture. Using this tool along with a program like Excel, future values can be estimated and projected with Google Fusion.

4. Google Fusion is the future. First of all, it is easy to use, and it is free. Especially if numbers are put into the complimentary program Google Sheets, Google Fusion can easily make graphs and charts with that information. In accounting, it is very important to use programs that are easy to access and easy to use. As accountants, we are trying to optimize the utilization of easy-to-use programs to be able to produce efficient and effective results. This program would have no acquisition fee since it is free, and there need only be a minimal effort in discovering the ins-and-outs of this tool.

Google Fusion also accomplishes one of the major goals of accountants. This goal is to present information in a meaningful way. How is someone supposed to learn from certain information if he cannot interpret it meaningfully? By using this visualization software, data tables are not some other boring, confusing chart.

Google Fusion allows information to be projected onto a graph or chart that accountants, business officers, and investors can interpret much more easily.

Another key ability of Google Fusion is that it is easily modified and shared. If there is a change in a few figures, Google Fusion can be changed in accordance to the figures in the data table correlated with it. In the future, we can improve our transparency and efficiency by using this tool to report certain statements and ratios on a screen for investors and company members to see and deliberate on.

# CASE 7

## Rite Aid Corporation – Long-Term Debt

Michael Reddoch

## Executive Summary

In this case, we analyzed the total debt of Rite Aid Corporation. Below is the analysis of the long-term debt of Rite Aid, specifically dealing with their notes payable and bonds. I learned about how different effective interest rates can determine the different amounts of cash paid on these long-term notes and how discounts affect the different notes. It is also helpful to note the different effects of these debts on assets, liabilities, and equity. These notes are all going to increase the total liabilities of a company, but the different interest rates determine how much of this liability is decreased over a certain period of time. The notes payable not only is going to increase liabilities, but also it is going to increase total assets as well. As the notes payable increases, so does total cash in the short term. In the long term, the discount is going to be amortized on these notes, thus, increasing the total carrying value on these notes in order to bring the carrying value of the note up to the book value. Note that all numbers used in this case are in thousands.

1.

- i) Rite Aid's secured debt is debt that is backed up by some sort of collateral like revenue or some asset. Their unsecured debt, on the other hand, is not backed by anything; therefore, nothing is guaranteed to be able to repay the debt. Nothing can be repossessed in this circumstance if the debt payment is not met. They distinguish between these two types of debt because there is a huge difference in order to account for the debt that is backed with collateral, as opposed to debt that has no collateral at all.
- ii) If the debtor happens to default on a payment, guaranteed debt means that this default is supported by someone else. In short, this debt is going to be guaranteed to be paid either by the borrower or the person or company that is supporting the borrower. Rite Aid's subsidiaries' unsecured debt has been guaranteed by the parent company.
- iii) The senior debt term is simply referring to the debt that has senior priority on being paid. These debts are going to be paid before any other debt, including the unsecured debt. The term "fixed-rate" means that the bond in question has one rate over its life, so the payments will be equal. Convertible debt is debt that is going to be converted to equity later in time after a corporation borrows money from its investors. This debt is converted over time at predetermined intervals.
- iv) Since Rite Aid has so many different subsidiaries and, in turn, different debtors, there are bound to be many different types of debt with lots of different interest rates.

2. On February 27, 2010, Rite Aid currently has \$6,370,899 in total debt. This amount is reconciled by adding the long-term debt (\$6,185,633), the current maturities (\$51,502), and the lease financing obligations (\$133,764). Consequently, the current maturing debt of \$51,502 is what is going to be due within the year since it is current, meaning due within the year or operating cycle.

3.

i) The face value of these notes is \$500,000 because there is no change in face value and no discount or premium talked about.

ii) Cash	\$500,000	
	N/P	\$500,000

iii) Interest Expense	\$37,500	
	Cash	\$37,500

This entry was made this way by multiplying the face value (\$500,000) of the notes by the stated rate (7.5%) in order to calculate the interest expense.

iv) N/P	\$500,000	
	Cash	\$500,000

4.

i) The face value of these notes is \$410,000. The carrying value at February 27,2010 is \$405,451. These two values differ because of the unamortized discount of \$4,049 provided in the notes.

- ii) In the fiscal year 2009, Rite Aid paid interest of \$38,438. That number is calculated by first finding the cash interest payment by multiplying the principle (\$410,000) by the rate (9.375%) and getting \$38,438.
- iii) In the fiscal year 2009, Rite Aid incurred interest of \$39,143. That number is calculated by first finding the cash interest payment by multiplying the principle (\$410,000) by the rate (9.375%) and getting \$38,438 of cash interest. One then finds the discount on the bond payable by using an amortization table and getting \$705. The plug number is then the interest expense of \$39,143, but the noncash interest is \$705.

iv) Interest Expense      \$39,143

Discount on N/P	\$705
Cash	\$38,438

- v) The total rate of interest is found by dividing the interest expense found (\$39,413) by the beginning of year carrying value (\$405,246). The total rate of interest is 9.659%

5.

i) Cash      \$402,620

Discount on N/P      \$7,380

N/P	\$410,000
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The cash proceeds are found by multiplying the face value of the principle by the bond pricing of 98.2%. The discount on the bonds payable is the difference between the bonds payable and the cash proceeds.



ii) The effective interest rate at which the bonds were issued is 10.1212%. This rate was found by using the RATE function in Excel and plugging in the following values: number of periods = 7, cash interest payment = -\$39,975, present value = \$402,620, future value = -\$410,000.

iii)

Effective  
Interest  
Rate  
10.1212%

Date	Interest Payment	Interest Expense	Bond Discount Amortization	Carrying Value	Effective Interest Rate
6/30/09	-	-	-	\$402,620	10.1212%
6/30/10	\$39,975	\$40,750	\$775	\$403,395	10.1212%
6/30/11	\$39,975	\$40,828	\$853	\$404,248	10.1212%
6/30/12	\$39,975	\$40,915	\$940	\$405,188	10.1212%
6/30/13	\$39,975	\$41,010	\$1,035	\$406,223	10.1212%
6/30/14	\$39,975	\$41,115	\$1,140	\$407,363	10.1212%
6/30/15	\$39,975	\$41,230	\$1,255	\$408,618	10.1212%
6/30/16	\$39,975	\$41,357	\$1,382	\$410,000	10.1212%

iv) Interest Expense      \$27,167

Discount on N/P              \$517

Interest Payable              \$26,650

The interest payable is found by multiplying the cash interest payment (\$39,975) by the number of months (8/12). The discount on bonds payable is found by multiplying the bond discount amortization (\$775) by the number of months (8/12). And lastly, the interest expense is found by multiplying the interest expense (\$40,750) by the number of months (8/12).

- v) The net book value of the notes would be found by adding the cash of \$402,620 to the discount on the notes of \$517 which would be \$403,137.

# CASE 8

## Merck & Co., Inc. – Shareholders' Equity

Michael Reddoch

## Executive Summary

In this case, we interpreted the shareholders' equity disclosures to find the effects of the selling and repurchasing of treasury stock. We also analyzed the effects of different dividends on the account and how to work backwards with the information provided in the statement of cash flows and the balance sheet. I found it very interesting to figure out the different reasons that companies would pay out dividends to shareholders. It opened my eyes to a couple of different ways to look at common stock and dividends paid out.

1.
  - i) Merck can authorize 5,400,000,000 common shares.
  - ii) As of December 31, 2007, Merck issued 2,983,508,675 common shares.
  - iii) In order to reconcile the number of shares at December 31, 2007, the number of common shares issued (2,983,508,675) needs to be multiplied by the par value of the stock (\$0.01). This result gives you 29,835,087.
  - iv) Merck holds 811,005,791 shares of treasury stock at December 31, 2007.
  - v) In order to find common shares outstanding, one would need to subtract the number of shares issued (2,983,508,675) by the number of shares of treasury stock (811,005,791) which would result in 2,172,502,884 shares outstanding.
  - vi) The market capitalization is found by multiplying the number of shares outstanding (2,172,502,884) by the market price per share (\$57.61) which would result in \$125,157,891,147.
2. Companies would pay dividends on their common shares in order to repay the stockholders for their investment in the company. Another good reason for paying dividends is the ability to show the Board of Directors' trust in the company's ability to make money and the future financial stability of the company. Paying out dividends also lowers stock price of a company which might be advantageous for the company in terms of investors' interest.
3. Companies might repurchase their own shares of stock because there could be a power issue. If the main directors are in jeopardy of losing controlling interest of the company, then they might repurchase the issues of stock to regain concrete

controlling interest. Another reason might be to increase the overall earnings per share in order to pique interest in the purchase of the stock. A third reason might be to increase the profit on the shares in the long run by waiting out a dip in the market until it rises back up.

4. Dividends Declared	\$3,310,700.00
Cash	\$3,307,300.00
Dividends Payable	\$3,400.00

5.

- i) To account for treasury stock transactions, Merck uses the cost accounting method. This method ignores the par value of the stock and records the transaction at the price at which it was repurchased on the market.
- ii) 26,500,000 shares were repurchased during 2007 by Merck.
- iii) Merck paid \$1,429,700,000 in total to repurchase their stock. Per share, Merck paid \$53.95 for the repurchase of their stock. The \$53.95 was found by dividing the \$1,429,700,000 in total to repurchase their stock by the 26,500,000 shares repurchased.
- iv) An asset in accounting is something that has economic value in the future that has a certain dollar amount. Treasury stock is not recorded as an asset because it is a contra-equity account. Since treasury stock is part of their own equity, it cannot be used as something that produces cash flow in the future. If the company were

to present treasury stock as an asset, there would be false information given on their balance sheet which would cause major issues.

6.

	Merck (\$)	Merck (\$)
<i>(in millions)</i>	2007	2006
<b>Dividends Paid</b>	\$3,307.30	\$3,332.60
<b>Shares Outstanding</b>	\$2,172.50	\$2,167.79
<b>Net Income</b>	\$3,275.40	\$4,433.80
<b>Total Assets</b>	\$48,350.70	\$44,569.80
<b>Operating Cash Flows</b>	\$6,999.20	\$6,765.20
<b>Year-End Stock Price</b>	\$57.61	\$41.94
<b>Dividends Per Share</b>	\$1.52	\$1.54
<b>Dividend Yield</b>	3%	4%
<b>Dividend Payout</b>	1.01	0.75
<b>Dividends To Total Assets</b>	0.07	0.07
<b>Operating Cash Flows</b>	0.47	0.49

# CASE 9

## State Street Corporation – Marketable Securities

Michael Reddoch



## Executive Summary

In this case, we interpreted the differences between held-to-maturity securities, available-for-sale securities, and trading securities. I learned how not only these securities are journalized differently, but also, I learned how these different securities affect the financial statements and the overall outlook of the company. Held-to-maturity securities are lower risk and usually have a fairly low rate of return. On the other hand, trading securities are more like stocks in the stock market. With the constant purchasing and selling of stocks, it makes sense to value these trading securities at fair market value. The held-to-maturity securities, however, are priced at the amortized cost because of the intent to keep them until the maturity date occurs.

Even though this case's numbers were put into millions, I wrote out all of the numbers because I thought it was more interesting. I think showing the whole number more clearly exemplifies the magnitude of trading and debt securities with which the company is dealing. On a larger scale, these securities, especially trading securities, are bought and sold in large masses for incredibly large sums of money. In addition, the interest incurred on these securities is also significant, so I thought the power of trading at this quantity was very interesting. Overall, I learned how reporting each security correctly can largely change the overall net income or equity of a corporation when dealing with securities at this high of a level.

1.

- i) Trading securities are either equity or debt that a company intends to sell within the year. A lot of this trading is done through the stock exchange. They are usually recorded at fair value in the balance sheet as a current asset. Over time, they can either gain or lose value, and this change is recorded in the income statement as an unrealized holding gain or loss.
- ii) A company would record \$1 of dividends or interest received from trading securities by using either dividend or interest receivable depending on the transaction. Once this receivable is paid off, the receivable will be taken off the books by debiting cash and crediting this particular receivable.
- iii) In order to record the increase in value of a trading security, the company would credit Unrealized Holding Gains or Losses – Income, and they would debit Fair Market Adjustment to increase the fair market value of the trading security. This unrealized holding gain will show up later on the accumulated other comprehensive income statement since it is unrealized.

2.

- i) Securities that are considered “available-for-sale” are securities that are not up for sale, per se, but they could be bought. These securities are a happy medium between held-to-maturity securities and trading securities. They are adjusted to fair market value, but not under income. These securities are adjusted under Unrealized Holding Gains or Losses – Equity under comprehensive income.
- ii) Available-for-sale securities have the same entry as trading securities when it comes to recording a \$1 dividend or interest receivable. The receivable would be

debited, and the revenue would be credited. When the cash is realized, cash would be debited, and the receivable would be credited to clear out the receivable balance.

- iii) The increase in value of the security would increase similarly to trading securities except for one thing. The debit to Fair Value Adjustment would be the same, but the credit would change to Unrealized Holding Gain or Loss – Equity instead of income.
- 3.
- i) These securities are typically held on to with no intent of selling in the short term. Unlike the trading and available-for-sale securities, the held-to-maturity securities are not adjusted to fair market value but are amortized over their lifetimes. Equity securities do not have a final maturity point in time, so they cannot ever be classified as a held-to-maturity security.
  - ii) Since these securities are held-to-maturity, the increase in \$1 of market value does not affect the security. The journal entries made are to amortize the cost of the security over its life.
- 4.
- i) The balance in this account on December 31, 2012 is \$637,000,000. The market value of these securities is also \$637,000,000 because these trading securities are carried and adjusted at fair value.

ii) Fair Value Adjustment – Trading Securities	\$85,000,000	
	Unrealized Holding Gain or Loss – Income	\$85,000,000

5.

- i) The 2012 year-end balance in the “Investment securities held to maturity” account is \$11,379,000,000.
- ii) The market value of State Street’s investment securities held to maturity account is \$11,661,000,000.
- iii) The amortized cost of these securities is \$11,379,000,000. The term “amortized cost” represents the face value of the security minus or plus the discount or premium that accumulates each year. This addition or subtraction is dependent on whether or not the security was sold at a discount or a premium. The amortized cost compares to the original cost of the securities by slowly converging to the cost of the security at the end of the maturity date.
- iv) The difference between the market value and amortized cost represents the difference in a market rate and stated rate on the different securities. Since the market value on the held-to-maturity securities has risen, that means that the market rate on the securities has risen as well since they were originally purchased.

6.

- i) The 2012 year-end balance in the “Investment securities available for sale” account is \$109,682,000,000. This amount represents the market value of this available-for-sale security.
- ii) The amount of the net unrealized gains or losses on the available-for-sale securities on December 31, 2012 is a \$1,119,000,000 net gain. This amount was

calculated by subtracting the gain of \$2,001,000,000 from the loss of \$882,000,000.

iii) The net amount of realized gains or losses on the sale of the available-for-sales securities for 2012 is \$55,000,000. On the statement of income, this amount increases the overall net income and the cash flow because it is not an unrealized gain; it is a realized gain.

7.

i) Available for Sale Investment	\$60,812,000,000
Cash	\$60,812,000,000
ii) Fair Value Adjustment – Available for Sale	\$67,000,000
Unrealized Holding Gain or Loss – Equity	\$67,000,000
Cash	\$5,399,000,000
Available for Sale Investment	\$5,399,000,000

iii) The original cost of the available-for-sale securities can be determined by subtracting the \$67,000,000 adjustment value from then \$5,399,000,000 selling price of the securities.

CASE 10  
ZAGG, Inc. – Deferred Income Taxes

Michael Reddoch

## Executive Summary

This case pertained to the deferred income taxes of ZAGG, Inc. Using ZAGG's different financial statements we interpreted the deferred tax liabilities and deferred tax assets, and how they are journalized. We also found the difference in the statutory rate and effective rate and what makes them different. The difference in taxable income and pre-tax income also plays a large factor in the overall presentation of a company. Externally a company can look different than it is on the inside depending on how the information is interpreted. One of the main things that I got from this case is the fact that deferred tax assets (DTAs) can never become deferred tax liabilities (DTLs). Once the deferral comes to maturation, it disappears and does not go back into the opposite account.

I learned the most about how temporary differences have a different effect of taxes than permanent differences. Temporary differences stem from differing views on when revenues or expenses are recognized, and in turn, effect when the tax is recognized on those revenues and expenses.

1. One would find book income on the income statement. This income is reported in the financial statements by the company pre-tax. This income is based on accruals as opposed to the taxable income. ZAGG's statement of operations reports \$23,898,000 as the book income for the corporation in 2012. Book income is not always the same as taxable income, and taxable income can be differentiated by things like temporary differences and permanent differences. Temporary differences result in either deferred tax liabilities or deferred tax assets. Permanent differences could be things like fines or bond interest.
2.
  - i) Permanent tax differences are differences that never go away. These differences, like temporary tax differences, are reported differently on the financial statements and the tax return. These differences would include things like fines or bond interest.
  - ii) Temporary tax differences are differences that change the tax expense due to differing views on when the revenues and expenses are recognized between the financial statements and the tax return. Examples of such would be things like depreciation, prepaid expenses, or estimates.
  - iii) The statutory tax rate is a rate that is legally imposed on a company.
  - iv) The effective tax rate is the actual percentage of our income that we pay in taxes. As opposed to the statutory tax rate, this rate is not legally imposed, but can be calculated by dividing our tax expense by the pre-tax (book) income. This rate allows for provisions when calculating the tax rate, while the statutory rate does not.



3. The main reason that someone might include the deferred taxes as well as their regular tax expense is to be completely transparent in the position of the company. If a company had a much larger tax expense than it was leading on, then potential or current investors could be led astray, thinking that their positions were better than they actually are. In accounting, it's extremely important to be both relevant and reliable with the information presented to potential or current investors. In order to do this job, deferred taxes should be added into the tax expense. Since deferred taxes would be something that a reliable person would present to their investors in order for them to make an educated decision about their holdings, they should be presented. ASC 720 alludes to this fact. It says that any tax positions taken or expected to be taken should be reported in order not to misrepresent a company's liabilities. Taxes should be represented on recognition rather than on technical merit. Another reason for releasing the entirety of the tax expense, could be for public relations reasons. A company would look better in the public eye if it did not try to hoodwink investors into buying stock that was not worth what the company might say what it is worth. There are, however, exceptions to this rule. Tax exemptions could improve the overall income of a company. The fact that the company would include all deferred taxes and their regular tax amounts might give the company an incentive to improve the look of their stock. This incentive could lead a company to look for more tax exemptions and minimize its taxes in a legal way in order to maximize the value of the company. However, as shown later, having deferred taxes is not always a bad thing. Deferred tax assets and deferred tax liabilities both have their distinct advantages depending on how the information is presented. For example, deferred tax

assets have already been paid, so that prepaid tax is an asset included on the balance sheet. Deferred tax liabilities have an advantage of retaining cash until the liability period comes to fruition.

4. Deferred tax assets represent taxes that have already been paid. They are recorded as an asset on the balance sheet because the taxes have already been paid, and they create an asset that the company holds until the tax period comes where the tax is no longer paid in advance. At that time, the deferred tax asset is taken off the books and put into tax expense. An example of a deferred tax asset would be rent paid in advance. Since this rent has already been paid, the cash might be gone, but the asset of prepaying one's rent of equal value is still there. This asset could help to reduce a company's deferred tax liability. A deferred tax liability is largely a result of the temporary differences in the taxes to be paid in the future. Having a deferred tax liability does not mean that it is a bad thing, however. Even though a company might pay taxes in the future, it has not yet. So, cash might be higher in the period where a deferred tax liability occurs because the tax has yet to be paid. When the time comes to pay the deferred tax liability, that account will decrease as will cash. These two accounts can be netted together in the long term, but a deferred tax asset will never become a deferred tax liability. These accounts reflect the amount of tax either to be paid in the future or that is prepaid; one cannot become the other one.
5. A deferred income tax valuation allowance occurs when a company does not think that it can recognize all of the benefits of a deferred tax asset. This account offsets the deferred tax asset account in order to more accurately realize deferred tax assets. It is often used when a company thinks that it might suffer losses in the coming years or if

the company does not recognize all of the deferred tax asset in the future because of a possible expiration of the asset.

6.

i)	Income Tax Expense	\$9,393	
	DTA, net	\$8,293	
			Income Tax Payable
			\$17,686

ii)	Income Tax Expense	\$9,393	
	DTA, net of Valuation Allowance	\$8,002	
	DTL	\$291	
			Income Tax Payable
			\$17,686

These values are found from the information given to us in Note 8. The deferred tax assets are increased by \$8,002 and the deferred tax liabilities are decreased by \$291.

iii) In order to calculate the effective tax rate for ZAGG, we need to take the income tax provision and divide it by the pre-tax income factor labeled “income before provision for income taxes. This calculation gives us the effective tax rate of 39.30%. The 4.3% difference can be accounted for by the permanent tax differences of our pre-tax income and our taxable income. Even though there could be a difference in the statutory rate over multiple years, it is unlikely that the rate changed over three years.

iv) This amount appears on the balance sheet for ZAGG by adding both current net deferred tax assets and noncurrent deferred tax assets. This calculation should look as follows:  $\$6,912 + \$6,596 = \$13,508$  Total deferred tax assets.

# CASE 11

## Apple, Inc. – Revenue Recognition

Michael Reddoch

## Executive Summary

This case pertained to the recognition of revenues of Apple, Inc. In recognizing revenues, there seems to be a clear way to recognize when a contract is made and when to recognize the revenues according to ASC 606. This accounting standard lays out all of the pertinent information when it comes to revenue recognition. What is tricky about Apple, is that a lot of their recognition is not all cut and dry. A lot of Apple's products are not specifically owned by Apple such as songs, apps, and videos. Apple has certain systems to account for all of these different types of entities. There is also the matter of software products that are conjoined to the hardware products. This fact can lead to certain irregularities in the contracts between Apple and the customer. Along with the criteria in ASC 606, Apple has their own recognition policy to further their own criteria of recognizing revenues.

I was very intrigued by this case, mostly because this is one company that everyone has heard of and can relate to. It is great to see our accounting knowledge reach its zenith on our last case and hopefully on a company and topic in which we are all interested. I found it particularly interesting to think about the addition to the case: how gift cards are recognized. Thinking from the company's perspective, I came to the conclusion that gift cards are amazing for a company's revenues as one will see in the following part f(iv). Seeing as I am very interested in music, I also found it interesting how Apple records their revenues with selling songs on iTunes and how artists give commission to Apple. Overall, I am glad that we could combine our accounting knowledge with a company that hits so close to home on multiple levels.

1. To me, revenues do not have to specifically be just cash from sales. Revenues are any sort of promised payment from the selling of goods or services included in the income statement. They are also an easy reflection of the overall status of the company's sales and operations. Revenues are different than gains because revenues are a result of the day-to-day operations of a company's business. Gains are different because gains are not a result of daily operations, but they are a result of any sort of irregular gain from an irregular occurrence such as selling equipment or stock. A gain is still shown on the income statement but operating income in non-operating income.
2. Recognition of revenues is a business actually recognizing the fact in their financial statements that a business transaction occurred. For a business to recognize revenues, there are a couple things that need to happen. When recognizing revenues, a company needs to identify a contract with a customer, identify what is to be performed within the contract, determine the price of what is to be done, be able to allocate these transaction prices to what is being transferred, and finally, to recognize the revenues once the obligation has been satisfied. Once these criteria have been met, revenue can be recognized.  
  
Generally, both the income statement and the balance sheet are affected by the recognition of revenue because in a journal entry, the sales revenue is recognized, but also some form of inventory is usually recognized along with cash or accounts receivable.
3. According to Note 1, Apple recognizes revenues when there is persuasive evidence that an arrangement exists, delivery has occurred, sales prices is fixed or

determinable, and collection is probable. For the most part, these criteria do align with the one's described in ASC 606. In Apple's statement of cash flows, one can see their deferred revenue section. This item is named deferred revenue because a customer has not yet received the products that they ordered, and Apple is liable for the transit to the customer. This fact overlays with their criteria for recognizing revenue because a delivery has not occurred. Performance obligations can either be satisfied at a point in time or over time. In this case, Apple's performance obligations are satisfied at a point in time once they are received by the customer.

4. Multiple-element contracts are contracts that include more than one obligation. For example, if someone were to order a washing machine, mostly likely he would purchase an installation and purchase a warranty for maintenance on this machine. This multiple-element contract includes an obligation to transfer the washing machine as well as provide installation and maintenance services on the machine. It is hard to recognize revenues on these contracts because the obligation of selling the washing machine could be satisfied much faster than the installation or maintenance on the machine. So, in lies a problem when it comes to recognizing certain revenues at certain times. An installation could not be recognized until the obligation was finished. And maintenance would not be recognized until something goes wrong with the machine, and it needs fixing.
5. An obvious incentive to make self-serving revenue recognition choices is the ability to boost revenues to consumers or investors. There comes a dilemma, however. When a company like Apple sells both hardware products like iPhones,



iPads, and MacBooks, it can be easy to determine when that revenue is recognized. When it comes to software such as iOS, it becomes more of a blurred line because of defects in certain software and allowances for returns on defective hardware. Managers would love a bonus check at the end of period because of improved collection of revenues, so they would like their revenues to look as good as they possibly can for this opportunity. A little rule-bending for managers could result in a substantial stipend.

6.

- i) iTunes songs are recognized in a very particular way. Since Apple does not specifically own the songs that are being bought, the artists can choose how much the songs are worth on iTunes. The artists pay commission to iTunes and Apple because of Apple's ability to broadcast the songs on a public outlet. Since the mode of transaction is through the Apple website, Apple pays the artists their share and keeps their commission. This revenue is recognized when the song is purchased, but Apple does not recognize the entire revenue; it only recognizes the commission that it gets from the purchase. This allocation of transaction price is established when the song is officially purchased online; thus, Apple recognizes revenue when a song is purchased.
- ii) Since Apple sells accessories both in stores and online, the revenue is recognized either at the purchase in the store or once the accessory is delivered to the customer from online. Apple recognizes this revenue because a contract has already been established and prices allocated to the purchased items.

- iii) Since the third-party seller in India is the final purchaser as far as Apple is concerned, recognition of revenue is deferred until the iPod arrives in India because Apple is liable for any damage done during transit. Once the item arrives, Apple can recognize their revenue and subtract from their deferred revenues.
- iv) A revenue from a gift card should be recognized at the purchase of the gift card. A gift card would be considered a cash equivalent when dealing with a balance sheet or a statement of cash flows. A customer can buy a gift card which would be revenue for the company, and this gift card means that the customer is hopefully going to spend the entirety of the gift card with Apple. Whether there is reasonable doubt that the whole card will be spent or not, Apple is going to record revenue from the purchase of the gift card. Apple actually might not even want the customer to spend the gift card completely. In Apple's mind, if the customer does not utilize the entire gift card, then the customer has paid for a piece of plastic and not the purchase on the iTunes store. Therefore, the smaller commission made on songs would be overshadowed by the total revenue being spent on the gift card.