

University of Mississippi

eGrove

---

Honors Theses

Honors College (Sally McDonnell Barksdale  
Honors College)

---

2019

## An Exploration of Key Accounting Concepts Through Case Studies

Morgan L. Cannon  
*University of Mississippi*

Follow this and additional works at: [https://egrove.olemiss.edu/hon\\_thesis](https://egrove.olemiss.edu/hon_thesis)



Part of the [Accounting Commons](#)

---

### Recommended Citation

Cannon, Morgan L., "An Exploration of Key Accounting Concepts Through Case Studies" (2019). *Honors Theses*. 1102.

[https://egrove.olemiss.edu/hon\\_thesis/1102](https://egrove.olemiss.edu/hon_thesis/1102)

This Undergraduate Thesis is brought to you for free and open access by the Honors College (Sally McDonnell Barksdale Honors College) at eGrove. It has been accepted for inclusion in Honors Theses by an authorized administrator of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).

AN EXPLORATION OF KEY ACCOUNTING CONCEPTS THROUGH CASE  
STUDIES

by  
Morgan Leanna Cannon

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: Dr. Victoria Dickinson

---

Reader: Dean W. Mark Wilder

©2019  
Morgan Leanna Cannon  
ALL RIGHTS RESERVED

## ACKNOWLEDGEMENTS

I am grateful for the community the University of Mississippi has so generously afforded me as I challenge myself and feel supported. To my friends and family, thank you for your encouragement throughout my academic and professional development journey. To my mentors and educators, thank you for enriching my undergraduate experience with wisdom and knowledge.

## ABSTRACT

MORGAN LEANNA CANNON: An Exploration of Key Accounting Concepts Through  
Case Studies  
(Under the Direction of Victoria Dickinson)

Accounting is a profession characterized by precision, innovation, and evolution. In an everchanging environment, it essential to ascertain a firm foundation in understanding Generally Accepted Accounting Principles as set by the Financial Accounting Standards Board. The following case studies present extensive explanations to promote the understanding of key accounting concepts, preparation and analysis of financial statements, as well as spotlights special topics in the current accounting climate. These case studies contextualize critical accounting concepts to demonstrate the connection between the principles and standards presented in academia as they are adapted in practice. The case studies were completed under the direction of Victoria Dickinson in fulfillment of requirements for the University of Mississippi's Sally McDonnell Barksdale Honors College and Patterson School of Accountancy ACCY 420 course in the 2017-2018 academic year.

## TABLE OF CONTENTS

Case 1: Home Heaters, Inc.- Financial Statements and Transactions .....	1
Case 2: Molson Coors Brewing Company- Profit and Earnings .....	17
Case 3: Pearson Company- Accounts Receivable .....	24
Case 4: Palfinger AG- Property, Plant, and Equipment .....	32
Case 5: Volvo Group- Research and Development .....	39
Case 6: Python- Data and Analytics .....	45
Case 7: Rite Aid Corporation- Debt Financing Instruments .....	52
Case 8: Merck & Co., Inc. and GlaxoSmithKline plc- Notes to Financial Statements ...	60
Case 9: State Street Corporation- Marketable Securities .....	66
Case 10: ZAGG, Inc.- Deferred Income Taxes .....	72
Case 11: Apple, Inc.- Revenue Recognition .....	81

**Case 1: Home Heaters, Inc.- Financial Statements and  
Transactions**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

6 September 2017

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 1. – Morgan Cannon

## **Executive Summary**

Home Heaters, Inc. presents two companies, Eads Heater, Inc. and Glenwood Heating, Inc. that operate under similar economic conditions and maintain identical operations throughout year 20X1. Through the comparison of additional transactions made by the two companies, Home Heaters, Inc. illustrates the effects of employing different generally accepted accounting principles (GAAP) through management accounting choices and estimates in preparing financial statements. Specifically, Home Heaters, Inc. highlights the differences in estimating uncollectible accounts receivable, in inventory methods First-In, First-Out (FIFO) and Last-In, First-Out (LIFO), in depreciating an asset using straight-line method as compared to the double-declining balance method, for an operating lease as compared to a capital lease, and in determining provisions for income taxes. The varied practices of recognition and measurement resulted in different presentations of items on financial statements. From these statements, investors and creditors may assess the resources of each company and decide whether to invest their own resources.

This case challenged me, especially in my initial attempts to produce an equivalent, accurate trial balance in Part B. However, from that challenge, I further developed and refined my investigative skills to pinpoint errors within the data. I utilized Excel functions to produce immediate feedback on my trial and error attempts to correct the trial balance. Overall, I was successful in finding the balance for each company. The time and detail demanded in this case also provided a challenging component. However, I was able to strategize and exercise time management to ensure I maintained ample time and energy necessary to complete this case to the best of my ability.



Both the learning component and challenges in execution expanded my understanding of the accounting concepts familiar to me, introduced me to new concepts, and facilitated growth in my investigative skills, problem-solving abilities, and in time management. With regards to my future career, it is clear that an increased understanding and expanded knowledge of accounting concepts will support my performance. It is also important to develop and refine the skills, especially in utilizing technology as an important tool, to support successful performance despite challenges.

### **Comparative Analysis: The Impact of Accounting Choices on Financial Statements**

#### **Income Statement**

In the first additional transaction (see Appendix B), the manager for Glenwood Heating, Inc. estimates that one percent of ending accounts receivable will be uncollectible. The manager for Eads Heater, Inc. estimates five percent of ending accounts receivable will be uncollectible. In both cases, the income statement reflects an increase in expenses that leads to a decrease in net income. Eads Heater, Inc. compared to Glenwood Heating, Inc., reflects a higher expense and suffers a relatively significant decrease in net income.

The second additional transaction (see Appendix B) indicates the results of the use of the different inventory valuation methods, FIFO and LIFO. Glenwood Heating, Inc. employs the FIFO method and, in this case, reports a lower cost of goods sold that leads to a higher net income. However, this increase in net income is also accompanied by an increase in the provisions for income tax. Eads Heater, Inc. uses the LIFO method that results in a higher cost of goods sold and a lower net income.

In the next additional transaction (see Appendix B), the managers determine the expected lives and salvage values of the building and equipment owned by each company. Glenwood Heating, Inc. uses the straight-line method to depreciate both the building and equipment and results in a stable, consistent increase in expenses annually. Eads Heater, Inc. uses the straight-line method to depreciate the building, but uses the double-declining balance method to rapidly depreciate equipment. This results in a higher increase in expenses in the earlier years, such as year 20X1.

In the fourth additional transaction (see Appendix B), the managers negotiate leases on rental equipment. Glenwood Heating, Inc. decides to enter into an operating lease and increases expenses from rent. Eads Heater, Inc. enter into a capital lease agreement and capitalizes and depreciates the leased equipment as an asset.

The final additional transaction (see Appendix B) results in different provisions for income tax based on the same rate of 25 percent for the different net incomes. Glenwood Heating, Inc. reports a higher net income than Eads Heater, Inc. and as a result, has a higher provision for income tax.

**GLENWOOD HEATING, INC.**  
**Income Statement**  
**For Year Ended December 31, 20X1**

<b>Sales</b>			
Sales Revenue			\$ 98,500
Net Sales			<u>98,500</u>
<b>Cost of Goods Sold</b>			<u>77,000</u>
<b>Gross Profit</b>			<u>21,500</u>
 <b>General Expenses</b>			
Bad Debt Expense	94		
Depreciation Expense Building	0,000		
Depreciation Expense Equipment	0,000		
Rent Expense	6,000		
Other Operating Expenses	<u>4,200</u>	<u>0,194</u>	
<b>Income from Operations</b>			<u>51,306</u>
<b>Other Expenses and Losses</b>			
Interest Expense			<u>7,650</u>
Income Before Income Tax			<u>23,656</u>
Income Tax			<u>0,914</u>
<b>Net Income for the Year</b>			<u><u>\$ 2,742</u></u>

**EADS HEATER, INC.**  
**Income Statement**  
**For Year Ended December 31, 20X1**

<b>Sales</b>			
Sales Revenue			\$ 98,500
Net Sales			<u>98,500</u>
<b>Cost of Goods Sold</b>			<u>88,800</u>
<b>Gross Profit</b>			<u>9,700</u>
 <b>General Expenses</b>			
Bad Debt Expense	,970		
Depreciation Expense Building	0,000		
Depreciation Expense Equipment	0,000		
Depreciation Expense Leased Equipment	1,500		
Other Operating Expenses	<u>4,200</u>	<u>0,670</u>	
<b>Income from Operations</b>			<u>29,030</u>
<b>Other Expenses and Losses</b>			
Interest Expense			<u>5,010</u>
Income Before Income Tax			<u>4,020</u>
Income Tax			<u>3,505</u>
<b>Net Income for the Year</b>			<u><u>\$ 0,515</u></u>

**Statement of Retained Earnings**

In the first additional transaction (see Appendix B), the percent estimates from management for uncollectible accounts receivable decrease the net income that contributes to retained earnings for each company.

The second additional transaction (see Appendix B), contributes to a higher net income for Glenwood Heating, Inc. and a lower net income for Eads Heater, Inc.

The next additional transaction (see Appendix B) reduces net income through expenses from depreciation. Eads Heater, Inc. net income is reduced more significantly relative to the reduction in Glenwood Heating, Inc. due to their use of the double-declining balance method to allocate depreciation expense to equipment.

In the fourth additional transaction (see Appendix B), Glenwood Heating, Inc. reduces their net income from the rental expense in the operating lease and Eads Heater, Inc. reduces their net income by depreciating the leased equipment in the capital lease.

The final additional transaction (Appendix B) reduces net income after tax for both companies and contributes less to retained earnings.

<b>GLENWOOD(HEATING,(INC. Statement(of(Retained(Earnings For(Year(Ended(December(31,(20X1</b>	
Retained(Earnings,(January(1	\$#####
Add:#Net#income	<u>#####2,742</u>
Less:#Dividends	<u>#####23,200</u>
<b>Retained(Earnings,(December(31</b>	<u><u>\$#####9,542</u></u>

EADS(HEATER,(INC. Statement(of(Retained(Earnings For(Year(Ended(December(31,(20X1	
Retained(Earnings,(January(1	\$#####
Add:#Net#income	<u>#####0,515</u>
Less:#Dividends	<u>#####2,200</u>
Retained(Earnings,(December(31	<u><u>\$#####7,315</u></u>

### Balance Sheet

In the first additional transaction (see Appendix B), the managers for Glenwood Heating, Inc. and Eads Heater, Inc. estimate ending accounts receivable that will be uncollectible. In both cases, the balance sheet reflects a reduction in accounts receivable that reduces total current assets. For Eads Heater, Inc., the reduction of accounts receivable significantly reduced total current assets as compared to Glenwood Heating, Inc.

The second additional transaction (see Appendix B) by Glenwood Heating, Inc. and Eads Heater, Inc. indicates a higher inventory value from the FIFO method employed by Glenwood Heating, Inc. and a lower inventory value from the LIFO method used by Eads Heater, Inc.

The next additional transaction (see Appendix B) results in the reduction of total assets reported by both companies. Total assets in Eads Heater, Inc. represent a higher reduction from the valuation method for accumulated depreciation on equipment.

The fourth additional transaction (see Appendix B) results in a reduction in cash for Glenwood Heating, Inc. For Eads Heater, Inc., the capital lease agreement recognizes the leased equipment as an asset less accumulated depreciation and records the interest and principle payments as liabilities.

The last additional transaction (see Appendix B) does not affect the balance sheet.

GLENWOOD HEATING, INC.			
Balance Sheet			
December 31, 20X1			
<b>Assets</b>			
<b>Current Assets</b>			
Cash	\$	426	
Accounts Receivable		99,400	
Less: Allowance for Bad Debts			994
Inventory		62,800	
<b>Total Current Assets</b>			<u>161,632</u>
<b>Property, Plant, and Equipment</b>			
Land		70,000	
Building		350,000	
Less: Accumulated Depreciation- Building			10,000
Equipment		80,000	
Less: Accumulated Depreciation- Equipment			<u>9,000</u>
<b>Total Property, Plant, and Equipment</b>			<u>481,000</u>
<b>Total Assets</b>			<u><u>\$ 642,632</u></u>
<b>Liabilities and Stockholders' Equity</b>			
<b>Current Liabilities</b>			
Accounts Payable			26,440
Interest Payable			6,650
Current Portion of Note Payable			<u>20,000</u>
<b>Total Current Liabilities</b>			<u>53,090</u>
<b>Long-Term Liabilities</b>			
Note Payable (20 years, 7%)			<u>360,000</u>
<b>Total Liabilities</b>			<u>413,090</u>
<b>Stockholders' Equity</b>			
Common Stock		160,000	
Retained Earnings		<u>69,542</u>	
<b>Total Stockholders' Equity</b>			<u>229,542</u>
<b>Total Liabilities and Stockholders' Equity</b>			<u><u>\$ 642,632</u></u>

**EADS HEATER, INC.**  
**Balance Sheet**  
**December 31, 20X1**

<b>Assets</b>			
<b>Current Assets</b>			
Cash	\$ 7,835		
Accounts Receivable	99,400		
Less: Allowance for Bad Debts		4,970	
Inventory	<u>51,000</u>		
<b>Total Current Assets</b>			<u>153,265</u>
 <b>Property, Plant, and Equipment</b>			
Land	70,000		
Building	350,000		
Less: Accumulated Depreciation- Building		10,000	
Equipment	80,000		
Less: Accumulated Depreciation- Equipment		20,000	
Leased Equipment	92,000		
Less: Accumulated Depreciation- Leased Equipment		11,500	
<b>Total Property, Plant, and Equipment</b>			<u>550,500</u>
<b>Total Assets</b>			<u><u>\$ 703,765</u></u>
 <b>Liabilities and Stockholders' Equity</b>			
<b>Current Liabilities</b>			
Accounts Payable		26,440	
Interest Payable		6,650	
Current Portion of Note Payable		20,000	
Current Portion of Lease Payable		<u>9,330</u>	
<b>Total Current Liabilities</b>			<u>62,420</u>
 <b>Long-Term Liabilities</b>			
Note Payable (20 years, 7%)		360,000	
Lease Payable (8 years, 8%)		<u>74,030</u>	
<b>Total Long-Term Liabilities</b>			<u>434,030</u>
<b>Total Liabilities</b>			<u>496,450</u>
 <b>Stockholders' Equity</b>			
Common Stock		160,000	
Retained Earnings		<u>47,315</u>	
<b>Total Stockholders' Equity</b>			<u>207,315</u>
<b>Total Liabilities and Stockholders' Equity</b>			<u><u>\$ 703,765</u></u>

## **Recommendations for Investors and Creditors**

Based on the information provided by the financial statements, investors and creditors would need to weigh several factors concerning the resources, claims to resources, and changes to resources in each company to make decisions about investing or lending their own resources. Investors and creditors would have to rely largely on this information given the absence of enough information from which they could assess the amounts, timing, and uncertainty of future cash inflows. Based on this criteria, investors and creditors considering Glenwood Heating, Inc. should consider the higher net income, higher retained earnings, and choice to enter into an operating lease, among other items indicated on the financial statements. Investors and creditors considering Eads Heater, Inc. should consider the higher balance of cash, assess the appropriateness of depreciation and allowance methods, and consider the capital lease, among other items indicated on the financial statements. Overall, the investors and creditors should weigh their resources and the consider the context of their potential contribution against the key indicators mentioned above in deciding whether either company is a suitable candidate, specifically for their type and magnitude of investing, lending, or other form of crediting.



## Appendices

### Appendix A: Part A

#### First Year Transactions

HOME HEATERS, INC. First Year Transactions						
		Assets				
Accounts	Cash	Accounts Receivable	Inventory	Land	Building	Equipment
1	\$ 160,000					
2	400,000					
3	(420,000)			70,000	350,000	
4	(80,000)					80,000
5			239,800			
6		398,500				
7	299,100	(299,100)				
8	(213,360)					
9	(41,000)					
10	(34,200)					
11	(23,200)					
12						
<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>

HOME HEATERS, INC. First Year Transactions							
		Liabilities			+	Stockholders' Equity	
Accounts	Accounts Payable	Note Payable	Interest Payable		Common Stock	Retained Earnings	
1					\$ 160,000		
2		400,000					
3							
4							
5	239,800						
6						398,500	
7							
8	(213,360)						
9		(20,000)				(21,000)	
10						(34,200)	
11						(23,200)	
12			6,650			(6,650)	
<b>Balances</b>	<b>\$ 26,440</b>	<b>\$ 380,000</b>	<b>\$ 6,650</b>		<b>\$ 160,000</b>	<b>\$ 313,450</b>	

## Trial Balance A

HOME HEATERS, INC.		
Trial Balance A		
	Debits	Credits
Cash	\$ 47,340	
Accounts Receivable	99,400	
Inventory	239,800	
Land	70,000	
Building	350,000	
Equipment	80,000	
Accounts Payable		26,440
Note Payable		380,000
Interest Payable		6,650
Common Stock		160,000
Dividend	23,200	
Sales		398,500
Other Operating Expenses	34,200	
Interest Expense	27,650	
<u>Total</u>	<u>\$ 971,590</u>	<u>\$ 971,590</u>

## Appendix B: Part B

### Glenwood Heating, Inc.- Additional Transactions

GLENWOOD HEATING, INC.								
Additional Transactions								
Assets								
Transaction	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation - Building	Equipment
Balances: Part A	\$ 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 Building							(10,000)	
Part B (4) Equipment								
Rental Payment	(16,000)							
Part (B) 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>

  

Assets		Liabilities			Stockholders' Equity	
Transaction	Accumulated Depreciation - Equipment	Accounts Payable	Note Payable	Interest Payable	Common Stock	Retained Earnings
Balances: Part A		\$ 26,440	\$ 380,000	\$ 6,650	\$ 160,000	\$ 313,450
Part B (1) Bad Debts						(994)
Part B (2) COGS						(177,000)
Part B (3) Depreciation Building						(10,000)
Part B (4) Equipment	(9,000)					(9,000)
Rental Payment						(16,000)
Part (B) Income Tax						(30,914)
<b>Balances</b>	<b>\$ (9,000)</b>	<b>\$ 26,440</b>	<b>\$ 380,000</b>	<b>\$ 6,650</b>	<b>\$ 160,000</b>	<b>\$ 69,542</b>

## Eads Heater, Inc.- Additional Transactions

EADS HEATER, INC. Additional Transactions									
Assets									
Transaction	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Accumulated Depreciation - Building	Equipment	Accumulated Depreciation - Equipment
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									
Rental Payment	(16,000)								
Depreciation									
Part (B) Income Tax	(23,505)								
Balances	\$ 7,835	\$ 99,400	\$ (4,970)	\$ 51,000	\$ 70,000	\$ 350,000	\$ (10,000)	\$ 80,000	\$ (20,000)

  

Assets			Liabilities				Stockholders' Equity	
Transaction	Leased Equipment	Accumulated Depreciation- Lease	Accounts Payable	Note Payable	Interest Payable	Lease Payable	Common Stock	Retained Earnings
Balances: Part A			\$ 26,440	\$ 380,000	\$ 6,650		\$ 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	92,000					92,000		
Rental Payment						(8,640)		(7,360)
Depreciation		(11,500)						(11,500)
Part (B) Income Tax								(23,505)
Balances	\$ 92,000	\$ (11,500)	\$ 26,440	\$ 380,000	\$ 6,650	\$ 83,360	\$ 160,000	\$ 47,315

## Glenwood Heating, Inc. Trial Balance B

GLENWOOD HEATING, INC.		
Trial Balance B		
	Debits	Credits
Cash	\$ 426	
Accounts Receivable	99,400	
Allowance for Bad Debts		994
Inventory	62,800	
Land	70,000	
Building	350,000	
Accumulated Depreciation- Building		10,000
Equipment	80,000	
Accumulated Depreciation- Equipment		9,000
Accounts Payable		26,440
Interest Payable		6,650
Note Payable		380,000
Common Stock		160,000
Dividend	23,200	
Sales		398,500
Cost of Goods Sold	177,000	
Other Operating Expenses	34,200	
Bad Debt Expense	994	
Depreciation Expense- Building	10,000	
Depreciation Expense- Equipment	9,000	
Rent Expense	16,000	
Interest Expense	27,650	
Provision for Income Tax	30,914	
<b>Total</b>	<b>\$ 991,584</b>	<b>\$ 991,584</b>

## Eads Heater, Inc. Trial Balance B

EADS HEATER, INC.		
Trial Balance B		
	Debits	Credits
Cash	\$ 7,835	
Accounts Receivable	99,400	
Allowance for Bad Debts		4,970
Inventory	51,000	
Land	70,000	
Building	350,000	
Accumulated Depreciation- Building		10,000
Equipment	80,000	
Accumulated Depreciation- Equipment		20,000
Leased Equipment	92,000	
Accumulated Depreciation- Leased Equipment		11,500
Accounts Payable		26,440
Interest Payable		6,650
Note Payable		380,000
Lease Payable		83,360
Common Stock		160,000
Dividend	23,200	
Sales		398,500
Cost of Goods Sold	188,800	
Other Operating Expenses	34,200	
Bad Debt Expense	4,970	
Depreciation Expense- Building	10,000	
Depreciation Expense- Equipment	20,000	
Depreciation Expense- Leased Equipment	11,500	
Interest Expense	35,010	
Provision for Income Tax	23,505	
<b>Total</b>	<b>\$ 1,101,420</b>	<b>\$ 1,101,420</b>

## **Case 2: Molson Coors Brewing Company- Profit and Earnings**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

20 September 2017

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 2. – Morgan Cannon

## **Executive Summary**

Molson Coors Brewing Company presents a profitability and earnings persistence scenario that facilitates the exploration of specific income statement items and their impact on company performance reporting. The case investigates income statement classification, U.S. G.A.A.P. requirements, measurement of persistent income, and comprehensive income concepts. The case also examines the reporting process: distinguishing sales from net sales, the nature of special items and other income, comprehensive income from net income, and calculating the effective tax rate.

The analysis employed challenged me to discern the nature and purpose of financial statement line items from other components in order to assess the overall presentation of company performance by Molson Coors as well as the potential impact of this reporting on financial statement users. This case prompted research aside from the information disclosed by Molson Coors, and sparked discussion among group members to clarify and reinforce ideas and interpretations drawn from the questions.

Overall, this case challenged my group to explore a complex series of financial statements and notes to understand and assess the meaning of new accounting concepts applied contextually. From this case, I expanded my understanding of financial statement components, their subtle distinctions, and impacts on users.



## Analysis- Profitability and Earnings Persistence

### Major Classification on an Income Statement

**Operating Section.** This section of the income statement reports the revenues and expenses of the company's main operations.

- a. Sales or Revenue: A subsection that presents the sales, discounts, allowances, returns and other information related to sales or revenue. It concludes at the net amount of sales revenue.
- b. Cost of Goods Sold: A subsection that represents the cost incurred on the goods sold that contribute to the sales. By subtracting the cost of goods sold from net sales, a company may report gross profit.
- c. Selling Expenses: A subsection that lists expenses that result from the company's sales efforts.
- d. Administrative or General Expenses: A subsection that reports the expenses of general administration. These expenses combined with selling expenses are subtracted from gross profit to report income from operations.

**Nonoperating Section.** This section of the income statement reports the revenues and expenses that result from secondary or atypical activities of the company.

Special gains and losses that are unique are normally shown in this section.

- a. Other Revenues and Gains: A subsection that lists the revenues recognized or gains incurred as a result of nonoperating transactions, net of any related expenses. These revenues and gains are added to income from operations and contribute to income before income tax.

- b. **Other Expenses and Losses:** A subsection that lists the expenses or losses incurred from nonoperating transactions, net of any related incomes. These expenses and losses are subtracted from income from operations and contribute to income before income tax.

**Income Tax.** This section reports federal and state taxes applicable to income from continuing operations. Income tax is subtracted from income before income tax to report net income for the year.

**Discontinued Operations.** This section presents material gains or losses resulting from the disposition of a component of a business.

**Noncontrolling Interests.** This section represents the allocation of income to noncontrolling shareholders.

**Earnings per Share.** This section provides a measure of performance over the reporting period. Earnings per share indicates the earnings available to ordinary shareholders.

### **U.S. G.A.A.P. and Classified Income Statement Requirements for Companies**

U.S. companies are required to provide classified income statement in accordance with GAAP in order to provide sufficient details for users to discern information, form good judgements, and make decisions. By providing more insight on the nature of totals from subtotals, users are able to easily read and understand the financial information reported through a simplified, transparent presentation. This method of organization supports the full disclosure principle that seeks to provide financial reports with sufficient detail and also enhance understandability. Such presentation of information should improve the quality of reporting and increase user confidence.

## **Financial Statement Users and the Measure of Persistent Income**

Financial statement users may be interested in a measure of persistent income because users, such as investors and creditors, have a critical and immediate need for information that provides any indication of future cash inflows and represents management's ability to protect and enhance assets. From a measure of persistent income, they may predict and anticipate the company's ability to provide a return on the investment of capital providers. Other users may consider these measures for internal assessments, as in the case of management, or in voluntary disclosures to attract capital resources, among other considerations.

## **Comprehensive Income and Net Income Defined**

Comprehensive income describes all of the changes in equity that result from transactions and other events from nonowner sources during a period. Comprehensive income, therefore, excludes investments by owners and distributions to owners. Companies typically include all of the revenues, expenses, gains, and losses recognized during a period in net income. In an effort to preserve net income as an item that is not misleading, FASB identifies certain transactions that are recorded as comprehensive income. For example, gains and losses recorded at fair value fluctuate, and as a result are better kept separate from net income. Comprehensive income bypasses the income statement. Companies are able to approach other comprehensive income by displaying each component either with a one statement or two statement approach.

## **Income Statement- Sales and Net Sales Reporting**

Molson Coors Brewing Company reports sales less excise taxes applicable to beer shipments to present net sales a separate line in the consolidated statements of operations

to illustrate the reduction of sales. In the notes, the company explains that sales taxes collected from customers are recognized as a liability subsequently reduced when the taxes are remitted to the tax authority. The company reports these components to provide a faithful representation of sales. These line items provide detailed insight to the impact of excise taxes on sales.

### **Special Items- Notes to Consolidated Financial Statements**

Molson Coors Brewing Company presents as special items the charges incurred or benefits realized that are not indicative of core operations that include: infrequent or unusual items, impairment or asset abandonment-related losses, restructuring charges and other atypical employee-related costs, or the fees on termination of significant operating agreements and gains (losses) on disposal of investments. These items are described as not necessarily non-recurring and are separated from other income items because of this nature. I agree that this classification is appropriate since they indicate these items as infrequent and unusual, yet possibly recurring. Due to their unique nature, these items are somewhat indicative of future cash inflows, and therefore should be considered as operating expenses, but maintain the separate line, so that the user may form judgements concerning the nature of income from operations.

### **Distinction between Other Income (expense), net and Special Items, net**

Molson Coors describes other income as gains, losses, revenues, and expenses that result from activities not directly related to brewing and selling beer. They include items such as gains or losses on foreign exchange and on sales of nonoperating assets, among others. Other income differs from special items in that other income items are nonrecurring, whereas special items are described as not necessarily nonrecurring. This

distinction is made to indicate the nature of these transactions and events, and their overall impact on income from operations as compared to income before taxes. Separating these items influences the judgements users may form concerning the company's past and present performance as indicated by other income items that are not expected to reoccur, from the cash flows and company performance indicated by special items that may be expected to reoccur in the future.

### **Comprehensive Income Distinguished from Net Income**

The amount of comprehensive income in 2013 is \$706.20 (in millions). The amount of net income in 2013 is \$567.30 (in millions). Comprehensive income exceeds the amount of net income for 2013. The difference between each total for 2013 results from the distinction between the transaction approach to net income (revenues less expenses) and comprehensive income, that summarizes the change in net equity throughout the period from nonowner sources. The items included in Molson Coors' comprehensive income are related as losses, gains, reclassifications, and adjustments to items that are not already factored into net income.

### **Calculation of Effective Tax Rate**

Income Tax Expense from Continuing Operations/ Income from Continuing  
Operations Before Income Taxes

$$\frac{\$ \ 84.00}{\$ \ 654.50} = 12.8\% \text{ Effective Tax Rate}$$

\$ 654.50

### **Case 3: Pearson Company- Accounts Receivable**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

27 September 2017

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 3. – Morgan Cannon

## **Executive Summary**

Pearson Company presents accounts receivable and selected financial statements and notes that facilitates the exploration of accounts receivable terminology, the use of contra accounts for uncollectible accounts and sales returns, methods of estimating uncollectible accounts and sales returns, risks and credit extension. Analysis employed investigates changes in balances reflected in T-accounts and presents related journal entries.

The analysis employed challenged me to discern United Kingdom terminology and interpret their use in financial statements and related notes. Because of this unique scenario and presentation, I was able to gain insight on differences between reporting in the United States and the United Kingdom. This challenge prompted extensive research and resulted in the expansion of my knowledge of international reporting.

Overall, this case was valuable in illustrating accounts receivable and related contra accounts in an international context. This increased my understanding of changes in these accounts and the associated impact on financial statements.

## **Analysis of Accounts Receivable**

### **Accounts Receivable**

Accounts receivable represents the sales a company makes on credit as a current asset recognized with the revenue from a sale. Accounts receivable represents the amount which customers are expected to pay with cash within the current operating cycle of a company or one year, whichever is longer. Trade receivables refers to the same types of accounts and presents the amounts to be collected in exchange for the sale of merchandise or performance of services in the near future.

### **Accounts Receivable and Notes Receivable**

Accounts receivable refers to the amounts to be collected resulting from sales or performances for customers, whereas notes receivable refers to amounts to be collected concerning crediting. Notes receivable refers to a written promissory note that represents a loan for the borrower and is recognized as an asset by the lender. Notes receivable may be categorized as a current asset for the portion of the payment that is expected to be received within the near future, and the lender may consider the remaining portion of the notes receivable as an investment. Additionally, notes receivable are often interest-bearing, whereas accounts receivable are not.

### **Contra Accounts and Trade Receivables**

A contra account reduces the type of account it corresponds to by maintaining the normal balance opposite of that type of account. Pearson's presents two contra asset accounts that reduce the amount of total trade receivables: allowance for doubtful accounts and allowance for sales returns. Allowance for doubtful accounts reflects the estimated, and later actual accounts written-off, that are anticipated and/or considered



uncollectible to reduce trade receivables. Allowance for sales returns reflects the estimated, and later actual sales returns, that are anticipated and/or eminent. These accounts essentially establish provisions and expectations for customers who will not pay as well as for unsatisfied customers who make returns. Management may consider several factors when determining an estimate for allowance for doubtful accounts, such as the history of collections in prior periods and the general economic environment. Management may consider several factors when determining an estimate for allowance for sales returns, such as the history of sales returns in prior periods and the general economic environment.

### **Estimating Uncollectible Accounts: Percentage-of-Sales and Aging-of-Accounts**

The percentage-of-sales approach to estimating uncollectibles considers the past portion of uncollectible accounts in relation to total sales as a percentage. This method then utilizes this percentage to forecast future allowances for doubtful accounts. It is an income statement approach because it is computed using sales. The aging-of-accounts approach to estimating uncollectibles considers the timing of unpaid accounts and assigns a corresponding percentage to the groups of accounts based on how past due customers are. This method strives to present the best estimate and truest value for uncollectible accounts. For the percentage-of-sales method, the company would not need to identify specific accounts, but would need to evaluate the history of uncollectibles from prior periods. For the aging-of-accounts method, the company would need to identify specific accounts and categorize these accounts to assign a reasonable, estimated percentage to indicate to what extent accounts are past due. Of the two approaches, I think the aging-of-accounts method provides the most accurate estimate since it subdivides accounts and

assigns different percentages, however, this method may require more resources and take more time to estimate since it relies on and references specific accounts.

### **Uncollectible Accounts and Risk Management**

Although Pearson anticipates some accounts to be uncollectible, it is necessary to establish the provision and assume some risk in order to maximize sales potential.

Managers must risk some accounts in order to make sales because companies are unlikely to have the resources and time to discern and assess the credit history of customers.

Managers should estimate risks, and then take on risks based on the nature of their company's financial position and performance.

### **Account Activity in Allowance for Doubtful Accounts**

#### **Changes in Allowance for Doubtful Accounts.**

£ in millions	Allowance for Doubtful Accounts	
Beginning Balance		72
Exchange Differences in Currency	5	
Estimated Bad Debts on Income Statement		26
Actual Bad Debts	20	
Bad Debts Acquired from Business Combination		3
Ending Balance		76

The change in allowance for doubtful accounts from the beginning of 2009, (72), to the end of 2009, (76), results from a difference in exchange rates for currency, estimated bad debts described as income movements, actual bad debts written-off described as utilized, and bad debts acquired from business combination which is simply the acquired control of another business.

**Journal Entries Recorded by Pearson (£ in millions).**

Bad Debts Expense	26	Income Statement
Allowance for Doubtful Accounts	26	Balance Sheet

*To record bad debts expense*

Allowance for Doubtful Accounts	20	Balance Sheet
Accounts Receivable	20	Balance Sheet

*To write-off accounts receivable*

**Inclusion of Allowance for Doubtful Accounts in the Income Statement.**

Allowance for doubtful accounts is included in operating expenses on the consolidated income statement.

**Account Activity in Allowance for Sales Returns**

**Changes in Allowance for Sales Returns.**

£ in millions	Allowance for Sales Returns and Allowances	
Beginning Balance		372
Estimated Sales Returns		425
Actual Sales Returns	443	
Ending Balance		354

The change in allowance for sales returns and allowances from the beginning of 2009, (372), to the end of 2009, (354), results from the estimated sales returns and the actual sales returns that occurred.

**Journal Entries Recorded by Pearson (£ in millions).**

Sales Returns and Allowances	425	Income Statement
Allowance for Sales Returns and Allowances	425	Balance Sheet

*To record estimated sales returns*

Allowance for Sales Returns and Allowances	443	Income Statement
Accounts Receivable	443	Balance Sheet

*To record actual sales returns*

**Inclusion of Allowance for Sales Returns in the Income Statement.**

Estimated sales returns are included in sales (net) on the consolidated income statement.

**Analysis of Gross Trade Receivables**

**Changes in Trade Receivables.**

£ in millions	Accounts Receivable (Gross)	
Beginning Balance	1,419	
Credit Sales and Estimated Sales Returns	5,978	
Cash Collections		5,460
Write-Offs		20
Actual Sales Returns		443
Ending Balance	<u>1,474</u>	

**Journal Entries Recorded by Pearson (£ in millions).**

Accounts Receivable	5,978	Balance Sheet
Sales		5,978 Income Statement

*To record sales on account*

Cash	5,460	Balance Sheet
Accounts Receivable		5,460 Balance Sheet

*To record accounts receivable collections*

## **Case 4: Palfinger AG- Property, Plant, and Equipment**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

1 November 2017

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 4. – Morgan Cannon

## **Executive Summary**

Palfinger AG presents a property, plant, and equipment scenario that facilitates the exploration of concepts such as balance sheet representation, prepayments and assets under construction, and renovating and value-enhancing expenditures, among others. The case closely examines depreciation methods, the impact of depreciation methods on financial statements, as well as the effect of accumulated depreciation on gains and losses on the sales of assets.

This case challenged me to discern the nature property, plant, and equipment items in a manufacturing context internationally. This case prompted research aside from the information disclosed into International Financial Reporting Standards, among other resources used to understand subtle differences in components reported in the financial statements.

Overall, this case challenged my group to explore a complex series of financial statements and notes to understand and assess the meaning of new accounting concepts concerning property, plant, and equipment applied contextually. From this case, I expanded my understanding of the items included in reporting, impacts, subtle international differences, and depreciation methods associated with property, plant, and equipment.

## **Analysis of Property, Plant, and Equipment**

### **Property, Plant, and Equipment Description- Palfinger AG**

Palfinger AG, serves construction, transport, agriculture and forestry, recycling, and haulage industries by manufacturing hydraulic lifts, among other loading and handling solutions. Based on their clientele and production, property, plant, and equipment for this company likely includes their land, plants, heavy machinery, fixtures, and fittings.

### **Property, Plant, and Equipment Balance Sheet Representation**

As described in IAS 16, included in the balance sheet, property, plant, and equipment reports the non-current assets that have substance, are held for use in the production of goods or delivery of services or for administrative use, and are expected to be used for more than one accounting period. Depending on the nature of the company's business, the value of property, plant, and equipment can vary from high to low in comparison to a company's total assets. Because Palfinger AG is a manufacturer, one can anticipate a significant investment in items reported as property, plant, and equipment. Palfinger AG reports property, plant, and equipment at € 149,990. This number represents the company's land and buildings, plants and machinery, as well as fixtures, fittings, and equipment.

### **Equipment Reported in Notes to Financial Statements**

Equipment typically refers to items used in delivery, office, machinery, furniture and fixtures, furnishings, factory equipment, among other similar fixed assets. Palfinger reports equipment in the notes to financial statements to include items such as fixtures,



fittings, and equipment. Typically, these items are described as moveable, have no permanent connection to buildings or utilities, and are depreciable.

### **Prepayments and Assets Under Construction**

Palfinger reports Prepayments and Assets Under Construction to describe the value allocated to assets that are incomplete and unavailable for use, and therefore, not depreciable. This account reports the costs allocated to construction in progress that includes costs and expenses such as labor, materials, and indirect costs assigned. Depreciation is applicable once the asset is available for use upon completion of construction. This summons the movement of the asset from the Prepayments and Assets Under Construction account to an account such as Land and Buildings. At the beginning of 2007, € 14,958 is reclassified to Prepayments and Assets Under Construction because the project involved has been completed and is considered investment property. This indicates the asset is available for use and is now depreciable.

### **Depreciation of Property and Equipment**

Palfinger AG utilizes the straight-line depreciation method over the useful lives of assets. The useful life is determined from the economic and technical lives the company anticipates for the asset. The use of the straight-line method to allocate an equal depreciation expense annually, appears reasonable assuming this method most accurately reflects the annual wear or pattern of use in operations.

An alternative method management may consider is the double-declining balance which allocates a higher expense in the earlier years of use to best mirror actual use of the machine. Management should utilize the method that best represents actual depreciation annually, as well as consider the impact of higher depreciation expenses on net income.

The double-declining balance method will report lower income in early years and higher income in later years, whereas straight-line depreciation will have an equal impact on income annually.

### **Renovating and Value-Enhancing Expenditures**

Palfinger AG elects to perform major renovations and value-enhancing modifications to equipment and buildings as opposed to purchasing new assets. Palfinger treats these expenditures as investments that are capitalized and depreciated over their new or original useful lives. In the event of a disposal, the difference realized between the carrying amount and net realizable value appears in the income statement in other operating income or expenses. An alternative accounting treatment to renovating and value-enhancing expenditures is to report these improvements as expenses. Perhaps, this option would be appropriate in the extent the renovation does not prolong its useful life or enhance its use.

### **Analysis of Activity in Property, Plant, and Equipment and Accumulated Depreciation and Impairment Accounts**

From an analysis of the activity in the financial statements for property, plant, and equipment as well as accumulated depreciation and impairments, it is determined that Palfinger reports € 61,444 for purchases, or additions, of new property, plant, and equipment in 2007. Government grants for purchases of new property, plant, and equipment in 2007 are reported at € 733. These grants are transfers of resources to an entity by government in return for the company's compliance in the past or future with certain conditions related to its operating activities. These grants are deducted from property, plant, and equipment at their carrying amount at fair value to be released to the

income statement over the useful life in a similar manner to depreciation. Depreciation expense for 2007 is reported at € 12,557. The net book value of the property that Palfinger AG disposed, which is the acquisition cost of the asset less accumulated depreciation, is indicated at € 13,799 - € 12,298 = € 1,501.

### Statement of Cash Flows- Proceeds on Sale of Property, Plant, and Equipment

Palfinger AG reports proceeds on the sale of property, plant, and equipment as € 1,655 in 2007. The gain incurred in this transaction is € 154. The net realizable value of € 1,501 plus the gain of € 154 equals the proceeds reported in the Statement of Cash Flows. In economic terms, this loss indicates a decrease in net income from a non-operational, incidental, and/or peripheral transaction.

### Depreciation of Equipment- Straight-Line Depreciation and Double-Declining

#### Balance

Straight-Line Depreciation						
Year	Depreciation Expense	Accumulated Depreciation	Accum.Dep. Balance	Net Book Value		
				€	10,673.00	
2007	€ 1,880.00	€ 1,880.00	€ 1,880.00	€	8,793.00	
2008	1,880	1,880	3,760		6,913	
2009	1,880	1,880	5,640		5,033	
2010	1,880	1,880	7,520		3,153	
2011	1,880	1,880	<b>9,400</b>		<b>1,273</b>	
Calculation: Straight-Line Depreciation Rate 1,880/9,400 = 20% x Net Book Value; (in thousands of Euros)						

Double-Declining Balance Depreciation						
Year	Depreciation Expense	Accumulated Depreciation	Accum.Dep. Balance	Net Book Value		
				€	10,673.00	
2007	€ 4,269.20	€ 4,269.20	€ 4,269.20	€	6,403.80	
2008	2,562	2,562	6,831		3,842	
2009	1,537	1,537	8,368		2,305	
2010	922	922	9,290		1,383	
2011	110	110	<b>9,400</b>		<b>1,273</b>	
Calculation: Straight-Line Depreciation Rate 20% x 2 x Net Book Value; (in thousands of Euros)						

### **Equipment Sold and Accounting Policies**

In Palfinger's transaction on the sale of equipment at an acquisition cost of € 10,673, the company would realize a loss of € 1,293 if using straight-line depreciation, or a gain of € 1,096 if using double-declining balance depreciation. Cash proceeds of € 7,500 are added to an accumulated straight-line depreciation expense for 2007 of € 1,880, then subtracted from the cost of equipment at € 10,673 to indicate a loss of € 1,293. Cash proceeds of € 7,500 are added to an accumulated double-declining balance depreciation expense for 2007 of € 4,296, then subtracted from the cost of equipment at € 10,673 to indicate a gain of € 1,096. The combined income statement impact will be identical for both depreciation methods.

## **Case 5: Volvo Group- Research and Development**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

17 November 2017

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 5. – Morgan Cannon

## **Executive Summary**

Volvo Group presents an exploration of concepts related to research and development costs, including recognition of types of costs included in research and development amounts, consideration of various factors in deciding whether to capitalize these costs as intangible assets subject to amortization or immediately expense them, key differences between U.S. GAAP and IFRS reporting of research and development expenditures, and identification of important figures denoted in financial statements and related notes. This case also closely examines Volvo Group's research and development expenditures capitalized compared to total research and development expenditures, as well as, total research and development costs as a proportion of net sales compared with an industry competitor.

I found this case provided a great challenge in the analysis of financial statements and related notes in pursuit of relevant amounts. This case prompted further research into International Financial Reporting Standards (IAS 38), and U.S. GAAP in an effort to discern subtle differences between their requirements for the reporting of research and development costs.

Overall, this case facilitated an exploration of research and development costs and related concepts that expanding my working knowledge of reporting those costs and the associated implications on financial statements.

## **Analysis of Research and Development Costs**

### **Research and Development Costs**

Volvo, a supplier for commercial vehicles, reports research and development expenses of SEK 13,139 (in millions of Swedish Krona). Research and development expenditures are made to support the development of new products and the discovery of new knowledge for the purpose of enabling the development of products, processes, and/or services.

Costs typically included in this amount are for expenditures for the basic and applied research conducted to support innovating products, processes, and/or services as well as development costs incurred after related research has commenced. Volvo applies International Accounting Standard (IAS) 38 to report their research and development expenses, and features expenditures for the development of new products, production systems and software given these are functions of new products or software prior to development.

### **Research and Development Capitalization and Expensing**

Volvo operates in compliance with IAS 38 that requires expenditures for the development of new products, production systems and software be reported as intangible assets if these expenditures are fairly certain to result in future financial benefits for the company. The items reported as intangible assets are then amortized based on their acquisition value over the useful life of the assets. Further requirements for items to be reported as intangible assets and capitalized, rather than expensed, include the ability to prove the technical functionality of a new product or software prior to its development. That is, the expenditures are capitalized only during the industrialization phase of product

development. As a result, other research and development expenses are charged to income as they are incurred.

### **Amortization Period for Research and Development Capitalization**

Volvo reports that it estimates the useful lives of capitalized product and software development costs from three to eight years. In determining the useful life for research and development assets that vary in nature, the company should consider similar assets within the industry for which their estimates may be comparable with. This supports an appropriate allocation of costs across periods when amortizing the asset. The company should also apply the useful life consistently with regard to other assets.

### **U.S. GAAP and IFRS: Research and Development Costs**

The U.S. Generally Accepted Accounting Principles (GAAP) requires companies expense all research and development costs. International Financial Reporting Standards (IFRS), however, requires companies expense all research costs but capitalize and amortize development costs once the asset being developed can be identified as an intangible investment able to be marketed or sold based on its technical and commercial feasibility. Essentially, IFRS capitalizes and amortizes successful efforts of research and development. The GAAP approach reduces the subjectivity and risk of management estimations and net income distortion. However, some argue that it is inappropriate to expense development costs when material investments in research and development are not recognized as operating investments in net income, yet impact the long-term cash flow generation of a company. Because of this, IFRS appears to better reflect costs and benefits periodically of research and development expenditures.



## Reporting Research and Development Costs as Intangible Assets

Volvo reports product software and development as an intangible asset at SEK 11,409 net of accumulated amortization, SEK 13,739, at the end of fiscal year 2009. This item is included in the assets section of Volvo's Balance Sheet for 2009 with the line item "intangible assets".

SEK \$ millions	Capitalized Product and Software Development, Net
Beginning Balance	12,381
Amortization Y 2009	3,126
Other amounts capitalized, Net Adjustment	2,602
Ending Balance	448
	11,409

## Product and Software Development as an Intangible Asset

Navistar International Corporation			
(in US \$ millions)	2007	2008	2009
Total R&D Costs Incurred During the Year			
Expensed on the Income Statement	375	384	433
Net Sales, Manufactured Products	11,910	14,399	11,300
Total Assets	11,448	10,390	10,028
Operating Income Before Tax	(73)	191	359

Volvo Group			
(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

The proportion of total research and development costs incurred that Volvo capitalized as the product and software development intangible asset is approximately 97% for 2007, 95% for 2008, and 96% for 2009.

**Journal Entries Recorded by Volvo (SEK in millions).**

Research and Development Expense 208,487

A/P 208,047

*To record R&D costs incurred during the year*

Amortization Expense 3,126

Products and Software 3,126

*To record amortization in 2009*

**Comparison of Research and Development Expenditures with Competitor Navistar International Corporation**

Volvo Group's proportion of total research and development costs incurred to net sales from operations is approximately 4% for 2007, 5% for 2008, and 6% for 2009.

Navistar International Corporation's proportion of total research and development costs incurred to net sales from manufactured products is approximately 3% for 2007, 3% for 2008, and 4% for 2009. From this, it appears that Volvo's proportion increases annually, however, Navistar's remains more consistent.

## **Case 6: Python- Data and Analytics**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

31 January 2018

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 6. – Morgan Cannon

## **Executive Summary**

Researching Python as a data analytics tool sheds light on a relevant, well-developed programming language utilized in companies as they technologically advance. In learning more about Python, it is easy to recognize the features and advantages that distinguish its use over other programming languages. Python allows companies to integrate a variety of systems into a central management model, is a platform for cost-saving documentation, and is deemed user friendly and adaptable from other programming languages.

This case provided a challenge as I am not as familiar with the wide range of programming languages and their features. However, after researching, it became clear that Python is a tool that can advance the public accounting profession through its use in-house or by clients to render services more effectively and efficiently.

Overall, this case challenged me to utilize credible resources, dissect reviews and success stories, and understand programming language as a tool relevant and critical to firms as they seek success in a future shaped by technological advance. It appears that utilizing and understanding this program can enhance the scope and quality of services provided by public accounting firms.

## **Python and Business Applications**

Python is an extensible programming language that supports the definition of functions, various application domains, web and internet development, computation, teaching, software development, among other business applications. Python was first developed in the early 1980's and became more popularized in the 1990's and early 2000's. Python supports the integrations of data systems in a timely and efficient manner, while also maintaining a user-friendly interface. With these diverse features, Python allows language to be modified by users to meet dynamic needs and purposes in business functions. Essentially, Python supports the clients of public accounting firms, as well as the firms themselves, in protecting, verifying, gathering, and modeling data so that it is made useful to support business decision making. Python does not require a sophisticated, underlying technical support structure as it is easily downloaded through open-source software.

## **Training and Expertise**

Python emphasizes how experienced programmers will find the language adaptable and user-friendly. In order to use this tool effectively, users should familiarize themselves with programming language, specifically, learn basic data structure and simple algorithms. This will allow the user to efficiently analyze data so that it may become for useful for business decision making. Although the nature of coding may seem intimidating, Python provides its users with beginner's guides, tutorials, textbooks, among other resources. Users may also consult open source courseware, libraries, and docs to learn more about Python. Students may learn Python in Management Information

Systems coursework or will be provided the tools and develop the skills to adapt to Python from experience with other programming languages.

## **Python and Public Accounting Services**

### **Auditing**

In the auditing service line, the use of Python by the client would promote data validation and valuation. This would allow the public accounting team to be more efficient in evaluating the data to ensure and attest to the information's security, completion, and accuracy. Python would also afford our firm the opportunity to integrate systems which may prove useful to purchase and utilize in-house for our clients that depend on a variety of systems for data storage.

The use of Python in the audit service line by either the client or by our firm would also promote quality control. This would promote efficiency in detecting anomalies and inconsistencies as we filter through a variety of data systems and information critical to our audit certification.

The use of Python would not only facilitate effective audit practices to benefit both our client and team, but also would provide tangible benefits through cost-effectiveness. Python has provided a return on investment for many companies in the form of documentation cost-effectiveness. Our firm may also recognize the benefits of accessibility and understandability that electronic documentation provides.

### **Tax Planning**

As mentioned earlier, Python may provide exceptional cost savings in documentation. This type of documentation will prove beneficial for tax planning, filing,

and advisory as it will be easily accessible and understandable to assess past performances and provide estimates for future endeavors.

Python also provides benefits for clients with a variety of data systems or those whom utilize various systems globally. Python will facilitate the integration of these systems to allow our firm to access and assess their information efficiently and consistently.

For our clients, Python will provide a useful platform for maintaining time sheets. The detailed record keeping of such data lends information critical to an establishing an effective tax plan or estimating tax implications for the future.

### **Financial Statement Analysis, Valuation, and Advisory**

For analysis, valuation, and advisory, Python would promote data modeling, project management, and business information tools to aid our firm in assessing their past and present financial performances and consider such in making decisions concerning the future.

Our firm would be able to draw critical information quickly from business information tools, such as Customer Relationship Management (CRM) and Enterprise Resource Planning (ERP) to utilize in identifying the strengths and weaknesses of the firm. This platform would improve our firm's ability to make relevant assumptions and recommendations in a timely manner.

Overall, the integration a variety of systems, data modeling, and project management featured through Python would allow our firm to be more efficient in our analysis of data relevant to financial statements and allow for critical analysis to be performed timely.

## **Return on Investment**

By utilizing this programming tool, our team will be able to understand, organize, and evaluate the condition of data from our clients that is useful in auditing, tax, and advisory functions. Python supports data integration and modeling in a variety of systems to allow firms to centralize information for management, and as a result, allow our evaluations and services rendered more efficiently. This tool will equip our staff to better service clients and therefore should be acquired. Staff should require minimum training if they have had prior programming experience or may utilize the free tutorials and guides on Python's website. By utilizing this tool and increasing performance efficiency, the firm may be able to increase its service capacity and expand to work with more clients.



## Works Cited

“Welcome to Python.” *Python*, Python Software Foundation, 2018, [www.python.org](http://www.python.org)

“Business Success Stories.” *Python*, Python Software Foundation, 2018, [www.python.org](http://www.python.org)

“Documentation.” *Python*, Python Software Foundation, 2018, [www.python.org](http://www.python.org)

Matthes, Eric H. “Introduction to Python.” *Introduction to Python: An open resource for students and teachers*, 2017, [introtopython.org/](http://introtopython.org/).

## **Case 7: Rite Aid Corporation- Debt Financing Instruments**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

15 February 2018

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 7. – Morgan Cannon

## **Executive Summary**

Rite Aid provides a challenge to discern critical components of the notes to financial statements concerning debt financing instruments. Rite Aid prompts external exploration of concepts crucial to the proper accounting and recording of debt. This case provides the opportunity to learn more about different types of debt and the impact of a variety of debt on a company's total debt. The case not only guides us through long-term debt concepts, but also facilitates an in-depth look at currently maturing portions of debt as well as a variety of debt instruments.

This case challenged me to master the presentation of notes through both the Balance Sheet as well as through accounting entries. It also required me to delve into notes and quickly discern the most relevant, important information available concerning specific debt instruments. From external research, I strengthened my working knowledge of debt features and characteristics that prioritize debt or afford its creditors certain rights.

Overall, this case was enriching as it enhanced my understanding of currently maturing portions of debt, lease financing, and long-term debt through a detailed, guided look into specific debt possessed by Rite Aid. I anticipate this knowledge and exposure to such concepts will enhance my skills as I enter professional practice.

## **Types of Debt: Rite Aid Indebtedness and Credit Agreement**

### **Secured vs. Unsecured Debt**

Secured bonds are supported by pledged collateral, whereas unsecured debt is not backed by collateral and is characterized by high risk and high rewards, in the form of a high interest rate. Rite Aid distinguishes between these two types of debt in their notes to consolidated financial statements by first listing secured debt, then guaranteed unsecured debt, unsecured, unguaranteed debt, and finally, discloses its lease financing obligations. Rite Aid separates these items to emphasize the risks associated with each type of debt financing. It appears especially important to creditors holders to know how their future repayments, return, and claim to assets rank among other outstanding debt. For this, Rite Aid highlights each type of debt and the extent to which it has pledged collateral to creditors.

### **Guaranteed Debt**

Rite Aid distinguishes its guaranteed debt to communicate and illustrate to creditors and other interested parties that a portion of their total debt is backed by a third party in the event of default by the borrower, in this case, Rite Aid. Rite Aid discusses the guaranteed debt in the notes and reveals that a portion of their debt is guaranteed substantially by all of their wholly-owned subsidiaries under the senior secured credit facility and mentions that some of the senior notes are secured on a second priority basis by the same collateral as the senior secured credit facility. Rite Aid highlights senior notes due in 2015 and 2017 as unsecured debt also guaranteed by its subsidiaries.

### **Debt-Related Terminology: Senior, Fixed-Rate, and Convertible**

Senior debt takes priority over unsecured, junior in the company's capital structure and this feature benefits creditors whose debt is awarded the distinction in terms of risk but typically reduces the reward. Senior debt holders may, however, have an influence over additional debt the company considers taking on. This feature allows creditors the opportunity to help mitigate risk in their best interests, that is, the priority and security behind their repayment and return. The fixed-rate distinguishes debt from floating rates as it establishes a predetermined, constant return or coupon rate for creditors. For investors, this provides a benefit in the form of certainty. The convertible feature for debt allows the investor to convert their debt into other securities of the company for a specified time following the issuance of such debt. This convertible feature is usually based on a fixed, set amount of securities and is activated by the investor.

### **Variety of Debt Instruments**

Rite Aid displays many different types of debt with a range of interest rates in an effort to mitigate and offset their rates of risk and return. Although market risk is inherent, the company can work to reduce the overall risk by utilizing a variety of debt instruments. It is also to the company's advantage to utilize debt financing instruments as the interest is tax deductible.

## Specific Debt Financing

### Current Portion of Debt

At February 27, 2010, Rite Aid has both \$6,185,633 long-term debt and \$133,764 lease obligations that contribute to a total debt of \$6,370,899. In addition to long-term debt and lease obligations, the company also has currently maturing portions of long-term debt at \$51,502. These amounts are reconciled with Rite Aid's Balance Sheet.

### 7.5% Senior Secured Notes due March 2017

The face value of the 7.5% senior secured note due in March of 2017 is \$500,000 because note 11. Indebtedness and Credit Agreement reveals that there is no change in the value of the note between years 2009 and 2010. This indicates the note was issued at par, with no discount or premium.

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

*To record the issuance of note*

Interest Expense	\$37,500
Cash or Interest Payable	\$37,500

*To record interest accrued or paid annually*

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

*To record the maturity of note*

### **9.375% Senior Notes due December 15**

The face value of this note is parenthetically disclosed by Rite Aid at \$410,000. The carrying value of these notes at February 27th, 2010 is the face value of \$410,000 less the unamortized discount of \$4,049 which represents the allocation of the discount received by Rite Aid in purchasing the note until its maturity date. The carrying value, therefore, is \$405,951. The face value and carrying value of the note differ because the purchase price, that leads to a discount or premium, differs from the face value of the note, essentially, its value at maturity.

In 2009, Rite Aid paid \$38,438 in interest on the note. This is found by multiplying the face value of \$410,000 by the coupon/stated rate 9.375%. Rite Aid records interest expense in excess of cash paid to represent the amortization of the discount on the note. The discount is amortized on a straight-line basis, which essentially means that the entire discount on the note is allocated equally to each time period until the note matures. The difference between the carrying value of the note each year indicates the discount amortized, which is represented in Rite Aid's notes to consolidated financial statements as both the difference between the accounting for the note in 2009 and 2010, as well as between the unamortized discount noted parenthetically. Therefore, the noncash portion attributed to interest expense for 2009 is \$705. This renders a total interest expense of \$39,143.

Interest Expense	\$39,143
Discount on N/P	\$705
Cash	\$38,438

*To record interest expense for fiscal 2009*

The effective rate of interest recorded for fiscal 2009 on these notes is computed by dividing the interest expense of \$39,143 by the beginning of period carrying value in 2009 of \$405,246 (shown in the notes). The effective rate is approximately 9.66%.

**9.75% Senior Notes due June 2016**

Rite Aid issued these notes on June 30, 2009 and pays interest on these notes on June 30th of each year. According to Note 11, the proceeds of the notes at the time of issue were 98.2% of the face value of the notes. The 98.2% is applied to the face value of the note which represents cash proceeds. The difference between face value and cash proceeds is the discount.

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

*To record the issuance of notes*

These notes are issued at an effective annual interest rate of 10.1212%. This is found by inputting the present value of \$402,620, future value \$410,000, 7 years, and payments of \$39,975 into a financial calculator, then solving for I/Y.



RITE AID				
Amortization Schedule for 9.75% Note due June 2016				
Date	Cash	Interest Exp	Disc Amortization	CV
6/30/09				\$ 402,620.00
6/30/10	\$ 39,975.00	\$ 40,750.00	\$ 775.00	\$ 403,395.00
6/30/11	\$ 39,975.00	\$ 40,828.44	\$ 853.44	\$ 404,248.44
6/30/12	\$ 39,975.00	\$ 40,914.82	\$ 939.82	\$ 405,188.26
6/30/13	\$ 39,975.00	\$ 41,009.94	\$ 1,034.94	\$ 406,223.20
6/30/14	\$ 39,975.00	\$ 41,114.69	\$ 1,139.69	\$ 407,362.89
6/30/15	\$ 39,975.00	\$ 41,230.04	\$ 1,255.04	\$ 408,617.93
6/30/16	\$ 39,975.00	\$ 41,357.07	\$ 1,382.07	\$ 410,000.00

Interest Expense	\$27,167
Discount on N/P	\$517
Interest Payable	\$26,650

*To record the accruing of interest*

The net book value of notes at February 27, 2010 \$403,137.

## **Case 8: Merck & Co., Inc.- Notes to Financial Statements**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

23 February 2018

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 8. – Morgan Cannon

## **Executive Summary**

Merck & Co., Inc. provides a challenge to analyze components of the notes to financial statements, balance sheet, income statement, and statement of cash flows.

Merck & Co., provokes the exploration of common shares and their impact on a company's value and specifically, the market value of their shares. This case provides the opportunity to learn more about treasury shares, authorized, issued, and common shares outstanding.

This case challenged me learn to utilize the information provided in notes to better understand the financial statements. The external research component has strengthened my ability to gather information concerning the theory behind stock prices and their reaction to stock buybacks.

Overall, this case was very informative and enhanced my ability to review and understand the financial statements of accounting companies.

## **Common Shares**

Merck & Co., Inc. is authorized to issue 5,400,000,000 shares of common stock, with a one cent par value. This is according to their consolidated balance sheet under Stockholders' Equity. At December 31, 2007, Merck has actually issued 2,983,508,675 shares. The company reports \$29,800,000.00 as the dollar value assigned to common stock and this is reported on the balance sheet. At December 31, 2007, there are - 811,005,791 common shares held in treasury valued at \$28,174,700. The number of outstanding shares at this time is 2,172,502,884. Also, on this day, Merck's stock price closed at \$57.61 per share. When applied to the number of shares outstanding, this indicates a market capitalization of \$125,157,891,147.24 for Merck on December 31, 2007.

## **Dividends and Common Shares**

Companies use dividends associated with the company's stock to attract investors since it will likely provide an incentive for them to invest in the company's stock in hopes to generate a return on their investment. A dividend payment can signal the company's strength to induce further investment from current shareholders or attract additional investors. It can also indicate management confidence in the future earnings forecasted. This confidence makes the stock appear more attractive. There are also tax benefits associated with dividends. When a company pays dividends, their overall value decreases their wealth by the total payout, which would lead one to conclude there would be a reduction in stock value. However, this is not always the case. Companies often use business models to indicate the effect of dividends on their market price. The issuance of dividends could in fact, increase the value of shares on the market.

## Repurchase of Shares by Company

Companies typically repurchase their own shares to reduce the number of outstanding shares on the market. The company can essentially reinvest in itself with excess cash used to purchase treasury stock. The number of shares outstanding decreases and this can cause an increase in demand from investors since stock will be more limited in supply. It can also be used by a company in hopes of raising prices for outstanding stock when it is currently undervalued.

### Common Dividend Activity- Merck & Co., Inc.

The following journal entry indicates common dividend activity for Merck's common dividend activity for 2007. The numbers below were compiled from the Statement of Retained Earnings when compared with the Statement of Cash Flows for 2007. (In Millions)

Retained Earnings	3,110.7
Dividends Payable	3.4
Cash	3307.3

#### *Declaration of Common Shares*

No Entry

#### *Date of Record*

Dividends Payable	3.4
Cash	3.4

#### *Date of Payment*

### **Common Dividend Activity- Merck & Co., Inc.**

Merck accounts for its treasury stock transactions using the cost method, as noted on its Balance Sheet. The use of this method indicates that Merck accounts for its stock repurchases based on the purchase, or market price. In 2007, Merck purchased 26,500,000 shares on the open market. Merck paid \$1,429,700,000.00 to purchase these stocks at an average price of \$53.95 per stock. This represents a reduction of cash that was spent purchasing the stocks. An asset is a resource that represents future economic value. With this in mind, treasury would not be considered an asset, but instead, a direct reduction of Stockholders' Equity.

### **Repurchase of Shares by Merck & Co., Inc.**

The following table represents the dividend activity of Merck for year 2007.

<b>Merck (\$)</b>	<b>2007</b>
Dividends paid	3,307.30
Shares outstanding	2,172,502,884
Net income	3,275.40
Total assets	48,350.70
Operating cash flows	6,999.20
Year-end stock price	57.61
Dividends per share	1.52
Dividend yield (dividends per share to stock price)	2.64%

Dividend payout (dividends to net income)	100.97%
Dividends to total assets	6.84%
Dividends to operating cash flows	47.25%

## **Case 9: State Street Corporation- Marketable Securities**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

4 April 2018

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 9. – Morgan Cannon



## **Executive Summary**

State Street Corporation provides a guided exploration of debt and equity securities, classifications, valuations, and subsequent market value adjustments. The case required the understanding of and use of a variety of financial statements, related notes, and disclosures to piece together marketable securities transactions. I not only strengthened my working knowledge of marketable security transactions, presentations, and valuation adjustments, but learned these concepts contextualized in financial services.

This case challenged me to adjust to understand the differences in language and presentation because of the distinct nature of the financial services industry. It became evident rather quickly that there are a number of subtle differences in how companies in this industry describe their accounts and structure statements, for instance, their statement of cash flows (operating).

Overall, I enjoyed this case and was enlightened by the learning outcomes in the financial services context. I have a deep understanding of the distinctions between securities categorized as trading, available-for-sale, and held-to-maturity.

## **Trading Securities**

Trading securities are one of three categories in which companies qualify securities. Trading securities includes both debt and equity securities that the company, in this case, State Street, intends to sell in the near future, often in three months or less, to generate a profit from anticipated increases in the market price of securities. The trading securities are represented on the balance sheet at fair value and as a current asset. To record interest or dividends received from trading securities, companies recognize a receivable or cash while also recognizing revenue. To recognize increases in market value subsequent to the purchase of the security, companies record an unrealized holding gain or loss which is charged to income using a fair value adjustment account. For instance, to record an increase in market value, the company would make the following entry:

Fair Value Adjustment

Unrealized Holding Gain- Income

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

## **Available-For-Sale Securities**

Available-for-sale securities are made up of equity or debt instruments that are not classified as trading or held-to-maturity. It is essentially the catch-all category. This classification includes investments that may be classified as current assets or long-term assets. Like trading securities, companies record interest or dividends received from available-for-sale securities with a receivable or cash while also recognizing revenue. These securities also require a fair value adjustment to recognize subsequent unrealized holding gains and losses following the initial purchase of the securities. This category

differs from trading in that the fair value adjustments are charged to equity and flow to other comprehensive income, as opposed to income. For instance, to record an increase in market value, the company would make the following entry:

Fair Value Adjustment

Unrealized Holding Gain- Equity

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

### **Held-To-Maturity Securities**

Held-to-maturity securities exclusively describe debt securities that a company intends to hold until maturity rather than sell. Equity securities are never classified as held-to-maturity because they do not have a maturity date. Common held-to-maturity securities are bonds. The company must be capable as well as intentional to categorize securities as held-to-maturity. Held-to-maturity securities also differ from trading and available-for-sale securities in how they are recorded. These securities are recorded at the amortized cost. An increase in market value is not recognized until it is realized through unexpected sale or at maturity. No journal entry is needed until that time.

### **Trading Account Assets on Balance Sheet**

State Street reports its trading securities as trading account assets in their balance sheet. At December 31, 2012, the balance in this account is \$637 million. This is the market value of these securities on that date as adjustments for changes in fair value have been made. If in 2012 the unadjusted trial balance for trading account assets is \$552 million, then State Street would make the following adjusting entry to adjust the account to market:

(in millions)

Fair Value Adjustment 85

Unrealized Holding Gain- Income 85

*To adjust the market value of trading securities*

### **Investment Securities Held-To-Maturity and Related Disclosures**

State Street indicates the 2012 year-end balance of the investment securities held-to-maturity account as \$11,379 million. The market value for these securities is indicated parenthetically at \$11,661 million. The amortized cost of the securities represents adjustments for amortization subsequent to the acquisition of the securities. The amortized cost is represented by the account balance, \$11,379 million. The original cost would be found in a statement of cash flows. The difference between market value and amortized cost represents unrealized holding gains and losses and indicates that the value of the securities has risen and in considering the relationship of these securities to the stock market, interest rates must be increasing.

### **Investment Securities Available-For-Sale and Related Disclosures**

The year-end balance for 2012 in the investment securities available for sale account is \$109,682 million. This balance represents the fair value of securities. The net amount of unrealized gains on available-for-sale securities held by State Street at December 31, 2012 is \$1,119 million. This was found by subtracting \$882 from \$2001 million. The amount of net realized gain is \$55 million, which was found by subtracting \$46 million from \$101 million. This realized gain would be recognized in income and would be subtracted in the operating section of the statement of cash flows.

### **Statement of Cash Flows and Investment Activities**

The investing activities section related to available-for-securities in the statement of cash flows for State Street in 2012 indicates proceeds from sales at \$5,399 million and purchases of these securities at \$60,812. The journal entry to record the sale of these securities in 2012 is made as follows:

(in millions)

Cash	5,399
Unrealized Holding Gain	67
Investments in AFS	5,411
Realized Gains on AFS	55

*To record the sale of available-for-sale securities*

The original cost of the available-for-sale securities sold during 2012 is \$5,344 million.

This was found by adjusting the cash proceeds with the realized gain.

## **Case 10: ZAGG, Inc.- Deferred Income Taxes**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

11 April 2018

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 10. – Morgan Cannon

## **Executive Summary**

ZAGG, Inc. provides a guided exploration of deferred income taxes. The case is based on a company that is a market leader in the production and sale of mobile device accessories. This case provides insight on concepts underlying deferred income tax accounting and promotes the interpretation of three primary disclosures provided in the income tax footnote to financial statements. The case also emphasizes the magnitude of differences between book and tax income and asset values through the breakdown of deferred income tax asset and liability related information. The case also strives to unpack the purpose of a deferred income tax asset valuation allowance.

The case challenged me to understand how changes in income tax rates impact deferred income tax assets and liabilities. I learned more about the permanent differences and temporary differences that arise from book income and taxable income in a current period with future obligations or considerations. I also increased my working knowledge of tax rates impact on analyzing components of deferred tax items such as income tax expense, income taxes payable, as well as deferred tax assets and deferred tax liabilities.

Overall, this case shed light on the detail and deep concepts surrounding the recording of and valuation of deferred tax liabilities and deferred tax assets. I was further enlightened to trace the components of deferred income tax implications to both financial statements and in the notes to financial statements.

## **Book Income and the Statement of Operation**

Book income refers to the pre-tax financial income that is reported by companies in accordance with U.S. GAAP and on an accrual basis. It is the income reported by companies, or other entities on the financial statements. Book income is indicative of a company's wealth and is used primarily by investors and creditors to anticipate the timing and certainty of the firm's cash flows. Income is distinguished in this context so that entities may discern differences between this financial income and taxable income. Taxable income is reported in accordance with the Internal Revenue Code (IRC). Taxable income is generally calculated using the modified cash basis approach and aids entities in computing tax due to the U.S. government. The differences in book income and taxable income must be reconciled to adjust properly for revenue and expense items, among others, that exclusively effect one or the other types of income. These differences can be temporary or permanent in nature. Temporary differences tend to reverse in a future period, while permanent differences never reverse. On ZAGG's statement of operations for fiscal year 2012, the book income is reflected in the line described as income before provision for income taxes.

## **Tax Differences and Tax Rates**

As mentioned above, tax differences may be permanent or temporary in nature. A permanent tax difference occurs when the tax expense, arising from book income, differs from tax payable owed based on taxable income. This difference does not reverse over time. In contrast, temporary differences arise between pretax book income and taxable income that are eventually reversed and eliminated. These differences don't differ because of obligation and reporting in the case of permanent differences, but instead,



result because of timing differences. For example, rent income is recognized by accrual basis when revenue is earned, and the performance obligation is satisfied, whereas, taxable income in this case reflects the cash received as soon as advanced payment is made by the customer. The differences are eventually reversed when revenue is earned and is reported in book income, but not in taxable income again.

Not only do tax differences vary, but tax rates also vary. The statutory tax rate used by an entity differs from the effective tax rate used by an entity. The statutory tax rate is the percentage rate of tax imposed by law, whereas the effective tax rate is the percentage tax rate based on income actually paid after consideration is made for tax breaks, such as deductions, exemptions, credits, etc. Permanent differences, discussed above, cause a difference between the statutory tax rate and the effective tax rate, however, this difference does not lead to deferred taxes since it is permanent. The effective rate will be higher or lower on the books than on the tax return. With temporary differences, a deferred tax liability is increased when book income is higher than actual taxable income. When book income is less than taxable income, a deferred tax asset is created.

### **Deferred Income Taxes**

Companies report deferred income taxes, a liability as it is an amount owed in the future, as part of their total income tax expense as opposed to reporting income tax expense on their current tax bill. The current tax bill represents income taxes payable because for tax purposes, income that is subject to taxation in the current year differs from income reported in financial or book income for that same year. While income taxes payable represents the tax due for that current year based on the effective tax rate, income

tax expense has two components. It includes the current tax expenses, which is the amount of income taxes payable for the current period, as well as the deferred tax expense. The deferred tax expense is the increase in the deferred tax liability from the beginning of the accounting period to the end of the accounting period. Thus, income tax expense does not represent the actual tax paid to the government within the accounting period, but rather, is representative of cash and noncash, both current and deferred items, from an accrual perspective.

Financial Accounting Standards Board Codification (ASC) 740 describes the basic approach for deferred taxes as follows. The income tax expense for the current year not only represents what is currently due, but also the change in cumulative future tax consequences with items that are reported currently in book income and in the future in taxable income. The ASC indicates that the current portion due and deferred tax amounts are computed separately, then summed to equal the total tax provision. Regardless of the reporting in the tax return, income tax expense matches the components of pretax book income with the related tax effects of the current year.

The calculation of tax expense is centered on the balance sheet. The tax consequences (liabilities) or assets are represented there as the temporary differences. Also represented there are the current amounts due for taxes represented as income taxes payable. On the income statement, income tax expense or benefit is computed by combining the income taxes payable for refundable with the change in deferred income taxes. Difference circumstances determine whether to add or subtract the change in deferred income taxes. In the case of an increase in a deferred tax liability, an entity

would add this increase to income taxes payable. In contrast, an entity would subtract an increase in a deferred tax asset.

In addition to financial statement presentations, companies should disclose the significant components of income tax expense as it is attributed to continuing operations. Instead of simply reporting income tax expense on the income statement in total, companies should distinguish between the current amounts owed and the deferred future taxable amounts also represented in the balance sheet. Companies can also make this distinction in the notes to financial statements.

### **Deferred Income Tax Assets and Liabilities**

Deferred income tax assets and deferred income tax liabilities represent the implications of temporary differences discussed above. Deferred income tax liabilities are the deferred tax consequences that are attributed to future taxable amounts. It represents the increase in taxes payable expected to occur in future years based on anticipated tax rates. The deferred income tax liability results from the taxable temporary differences that exist at the end of the current year. The cumulative difference between the book income and taxable income at the end of the current year as compared to the beginning of the year, after the tax rate is applied, is the deferred tax liability.

Companies are also able to calculate deferred tax liabilities by preparing a schedule that illustrates the annual, temporary differences between future taxable amounts. This is particularly helpful in the case of complex circumstances. Tax rates are applied to future taxable amounts which indicates the individual deferred tax liabilities each year, which, when totaled, indicate the deferred tax liability at the end of the current year.

An example of a deferred income tax liability is when book income exceeds taxable income, such as in the case of depreciation. Although companies often use straight-line depreciation for financial reporting, tax laws require the use of modified accelerated cost recovery to allocate depreciation to assets. When straight-line depreciation expense is lower than MACRS, resulting in a higher book income, the temporary difference is recorded, and a deferred tax liability indicates the tax obligation the company expects to hold in future years.

Deferred tax assets are recognized as deductible temporary differences. This represents the increase in tax benefits in future years as a result of the deductible temporary differences that exist at the end of the current year. Deferred tax assets are calculated by applying the appropriate tax rate to the future deductible amount for each year. Companies may also calculate deferred tax assets for the current year by taking the difference between the book income and taxable income and applying the tax rate. Adjustments must be made for changes in tax rates.

A deferred tax benefit arises from the increase in deferred tax asset from the beginning of an accounting period to the end of an accounting period. It is the negative component of income tax expense as it reduces it. Similar to the deferred tax liability, companies report the income taxes payable as a liability on the balance sheet, along with the deferred tax asset. The income tax expense is once again distinguished by current portions of expense and is reduced by the deferred amount, because it is a benefit.

### **Deferred Income Tax Valuation Allowance**

Companies recognize deferred tax assets with all related deductible temporary differences. To reduce a deferred tax asset, companies use a valuation allowance based

on appropriate evidence. If it is more likely than not that the company will not realize some portion or the entire deferred tax asset, then a valuation account reduction should be used. More likely than not describes the level of likelihood that is more than 50 %. The allowance to reduced deferred tax asset to expected realizable value, a contra asset account, is credited while income tax expense increases through a debit. This valuation account is represented on the balance sheet as a direct reduction of deferred tax assets, which provides deferred tax assets, net.

**Income Tax Provision, Net Deferred Income Taxes, and Reconciled Tax Rates**

ZAGG recorded an entry for the income tax provision in fiscal year 2012 as follows:

(in thousands)

Income Tax Expense	9,393	
Deferred Tax Asset	8,293	
		Income Tax Payable
		17,686

*To record the income tax provision for 2012*

ZAGG reports income tax expense as the total provision for 2012 in the components of income tax note to financial statements. This section also lists the total deferred tax asset. This total is matched against the payable represented on ZAGG’s balance sheet. Below, the entry to further decompose the amount of net deferred income taxes is listed to distinguish between the deferred income tax asset and deferred income tax liability components of net deferred tax assets.

Income Tax Expense	9,393	
Deferred Tax Asset	8,002	
Deferred Tax Liability	291	
		Income Tax Payable
		17,686

*To record the income tax provision for 2012*

The deferred tax asset for ZAGG if the net increase in deferred tax assets from 2011 to 2012. \$6,300 from 2011 deferred tax assets is subtracted from \$14,302 from 2012 deferred tax assets to indicate a net increase of \$8,002. The same comparison is used to calculate the deferred tax liabilities. \$1,086 from 2011 deferred tax liabilities is subtracted from \$794 in 2012 deferred tax liabilities to indicate a net decrease in deferred tax liabilities of \$292. There is a minor rounding complication in the calculation.

The effective tax rate for ZAGG is 2012 is found using information from their income statement. Income tax expense of \$9,393 is divided by income before provisions of \$23,898 to indicate an effective tax rate of 39.3%. The difference between the 35% statutory tax rate and the effective tax rate of 39.3% is 4.3%. This difference is attributed to the permanent differences between tax expense and tax payable.

ZAGG had a net deferred income tax asset balance of \$13,508 at December 31, 2012. This appears on the balance sheet under current assets as deferred income tax assets at \$6,912 and in noncurrent assets at \$6,596 for a total of \$13,508.

## **Case 11: Apple, Inc. – Revenue Recognition**

Morgan L. Cannon

University of Mississippi

Accounting 420

Dr. Dickinson

27 April 2018

On my honor, I pledge that I have neither given, received, nor witnessed any  
unauthorized help on Case 11. – Morgan Cannon

## **Executive Summary**

Apple provides the contextualization for revenue recognition through 10-K filings and sheds light on the new ASC 606 revenue recognition standard. This case facilitates the comparison of revenues and gains, a critical assessment of Apple's revenue recognition policies, a deeper look into multiple-element contracts and associated accounting complexities, as well as management's role and temptation in applying these revenue recognition standards. This case also closely examines the application of the new ASC 606 standard to specific products and services Apple provides to its customers, third-party wholesalers, resellers, and value-added resellers through design, manufacturing, marketing, and retail worldwide.

I found this interesting in how I was able to clearly compare and distinguish the differences between the former accounting revenue recognition standards prescribed by FASB and the new ASC 606 standard. The contextualization of this case enhanced this challenge as I was to discern when Apple should recognize revenue for in store sales, music sales, for gift cards, online product sales, and in the case of a third-party seller.

Overall, this case facilitated an exploration of revenue recognition standards and related criteria that expanding my working knowledge of reporting the sales of products and rendering of services.



## **Revenues and Gains**

Revenues are the proceeds derived from normal business activity through sales, services, or similar business transactions. From a technical perspective, revenues are the inflows of assets for an entity that enhance its wealth and are used to offset liabilities; revenues stem from the production of goods, delivery of goods, rendering of services, and other similar activities as part of the entity's ongoing, main operations.

Similarly, gains enhance assets but are recognized net of existing liabilities as part of stockholders' equity. Gains occur as a result of incidental or peripheral transactions, unlike revenues that are derived from ongoing, typical operations. Gains arise as a result of transactions, events, and circumstances during a period excluding those that result from revenues or investments by owners themselves. Gains may be representative of an appreciation of an asset in excess of its market price in sales proceeds, or an increased value realized from selling something for more than it was originally purchased for, among other scenarios.

## **Revenue Recognition and ASC 606**

Describe the process of revenue recognition and specific criteria: Effective for public companies as of December 2017, and for non-public companies in December 2018, revenue from contracts with customers adopts an asset-liability approach. With this, companies recognize revenue based on the asset or liability that results from the contract elements established with a customer. The Financial Accounting Standards Board (FASB) is pushing companies to focus more on the changes in assets and liabilities over the duration of the contract and seek to bring an increased discipline to measuring and reporting revenue through recognition, rather than distinguishing between earned and

realized. Contracts with customers provide the information relevant to making these timing and performance judgements and distinctions because they indicate the terms and measurement of consideration, as well as outline the promises for performances to be made and when they are expected to be met.

The most recent revenue recognition standard (ASC 606) represents the change in a policy that reshapes the principle of revenue recognition. The standard promotes the recognition of revenue as it is indicated through the transfer of promised goods or services to customers in an amount that is representative of the consideration that each company expected to receive in exchange for proceeds, goods, or services, etc.

This revenue recognition standard denotes 5 critical steps to recognizing revenue through contracts with customers. The first step involves the careful identification of elements of the contract as it is established with the customer. Revenue guidance is applied, in this case, to the following criteria: the contract maintains commercial substances, the parties both approve the contract, the rights of each party have been established through the contract, the payment terms are clearly identifiable, and it is probable that consideration will be collected. The second step identifies the performance obligations featured in the contract. A performance obligation is simply a promise to render a product or service that is clearly distinguishable and benefits the customer. The reporting party must indicate items and services to be combined versus those that represent individual, separate performance obligations. The next step requires the determination of the transaction price. The transaction price is the amount of consideration expected to be received by the reporting party. It may be a fixed price, variable price, involve the time value of money, represent a noncash transaction, and

could be consideration paid or payable to the customer. Variable consideration represents pricing that is based on the expected outcome of future events. Time value of money is typically considered if the contract has a significant financing component. Noncash consideration represents the fair value of something received. Consideration may also be the reduction of an amount owed by the customer. The fourth step inspires the allocation of transaction price to the performance obligations in the contract. Companies allocate the transaction price to products or services using their relative fair values through the proportional approach or using the best measure of fair value available based on actual market pricing or estimates. The final step recognizes revenue when the performance obligation is satisfied by the reporting party. This step indicates that the customer has taken control of the good or service. Indication of this transfer of control may occur when a company has the right to pay for the asset, has transferred legal title to the asset, has transferred physical possession of the asset, or when customer has taken on the significant risks and rewards or ownership along with acceptance of the asset.

Contract assets and liabilities are presented in two ways: as unconditional rights and conditional rights. The unconditional rights describe the receipt of consideration because the company has satisfied all of its performance obligations. Conditional rights indicate that additional performance obligations remain although one or more of the performance obligations may have already been satisfied.

### **Apple and Revenue Recognition**

Apple notes in their most recent 10-K filing, November 2017, that the company plans to adopt the new ASC 606 revenue recognition standard in the first quarter of 2019 and will utilize the cumulative retrospective transition method. Apple mentions that they

expect this transition will not have a material impact on the amount and timing of revenue recognized in their consolidated financial statements. Currently, the company recognizes revenue according to the ASU 2014 and 2016 standards and govern the recognition of such revenue based on the amount the entity expected to be entitled to collect when products are transferred to customers.

Clearly, Apple's disclosure and description of the revenue recognition standards it currently applies are not nearly as detailed or technical as those prescribed in the ASC 606 standard. However, Apple makes it clear how and when they will transition to the use of this new standard, as well as describes its expected impact on financial statements.

### **Multiple-Element Contracts**

A multiple element contract is characterized by its inclusion of any combination of services, software, hardware, and other products or financing arrangements into a single, deliverable arrangement. This single contractually binding agreement is challenging in nature because the reporting company must identify and distinguish between a variety of performance obligations as well as allocate transaction pricing. The main issue that is perpetuated by these contracts exists because FASB struggles to standardize recognition criteria across multiple, sub contracts. It is often a challenge for reporting companies to determine and allocate value appropriately to these goods and services, but it even more so a challenge for FASB to be prescriptive for complex, unique contracts.

### **Management and Revenue Recognition**

Managers may be tempted to employ earnings management tactics for revenue recognition to produce financial reports and ratios that depict a false, positive image of

the company's current business activities and financial position. Earnings management is essentially a series of strategies employed by managers to maximize their self-seeking interests in taking advantage of the judgement and application involved with utilizing accounting rules, in this case, to inflate revenues. Management may experience pressure from senior level officers, investors, or their own ambitions to increase earnings to boost their bonuses and company image.

### **Various Revenue Recognition Scenarios**

The following provides an examination the ASC 606 revenue recognition prescribed to a variety of products, services, and circumstances in Apple's context. For iTunes songs sold online, Apple would recognize the revenue from the sale as soon as the customer had access to and the ability to control and listen to the song. This of course follows after the customer simultaneously remits payment in consideration of the agreement to purchase a song, at which time the customer's payment is processed and the transfer of control is complete. For Mac branded accessories such as headphones, power adaptors, and backpacks sold in the Apple stores, Apple would recognize revenues as it has traditionally in various retail settings. The customer simultaneously agrees to enter a contract when payment is made in consideration of the product, at which time Apple instantly delivers the physical product to the customer. For the accessories are sold online, Apple would not recognize revenue until control passed to the customer upon receipt of the product; this indicates the performance obligation has been satisfied. In each of these circumstances, revenue is recognized once Apple has fulfilled its performance obligations. When Apple sells iPods sold to a third-party reseller in India, the nature of the performance obligation depends on the contract. Finally, Apple

recognizes revenue from gift cards when customers initially purchase the gift card for use; that is the performance obligation in this case. Otherwise, Apple would not recognize revenue for gift cards that are lost and/or never or somewhat redeemed.

Unearned Revenue- Gift Cards      XX

    Revenue                                      XX

*To record revenue*