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ACCOUNTING CASES

by
Drew Caruthers

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

Oxford
May 2019

Approved by

Advisor: Professor Vicki Dickinson

Reader: Dean W. Mark Wilder

2019
Carter Andrew Caruthers
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ABSTRACT
DREW CARUTHERS: Accounting Cases
(Under the direction of Victoria Dickinson)

I developed my thesis in the Accounting 420 class, which is an exclusive class for accounting majors in the Sally Barksdale Honors College at Ole Miss. The class would meet once a week for two semesters. The class period would involve us receiving accounting cases that we would work on during the class and the rest of the week. The accounting cases involve real world companies and financial statements. Each case was designed to help us figure out and learn a different accounting topic each week with a total of 12 cases. The professor, Dr. Dickinson, would grade and suggest changes to each of our cases so that they are correct for our final thesis. The following complete thesis is a combination of all 12 of the accounting cases that I have completed

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Case One

Eads Heaters, Inc. versus Glenwood Heating, Inc.

Drew Caruthers

September 6, 2017

Executive Summary

The Eads Heaters, Inc. versus Glenwood Heating, Inc. case deals with the financial analysis of the two companies. The following report will examine the statements such as: the general income statement, retained earnings, and the balance sheet for both companies. Eads Heaters and Glenwood Heating had the exact same first year transactions in Part A of the case. The companies differ in Part B of the case in the way the the adjusted entries are booked. The analysis section of this report will examine why Eads Heaters is a better company to invest in or lend money to over Glenwood Heaters.

Analysis

The analysis of Eads Heaters, Inc. versus Glenwood Heating, Inc. begins with using the chart of accounts (Appendix A, Appendix B) from the two companies to make the financial statements. This information from the financial statements will show which company should be invested in. The first financial statement that is created is the income statement for Eads Heaters (Figure 1) that shows a net income of \$70,515. The income statement for Glenwood Heating (Figure 2) has a net income of \$92,742. Glenwood Heating has a higher net income than Eads Heaters, but there are a few accounting reasons for this difference. The first reason is that while both companies had the same sales revenue, Glenwood Heating uses FIFO inventory system and

Eads Heaters uses LIFO inventory system to calculate the cost of goods sold. The next reason for the difference in net income is because of the way that the companies calculate depreciation. Glenwood Heating uses straight-line depreciation and Eads Heaters uses double-declining balance to find the depreciation on the delivery equipment. The Eads Heaters depreciation method is double the straight-line rate that Glenwood Heating uses for the delivery equipment. The double depreciation rate for Eads Heaters means that even though both companies have the same delivery equipment, Eads appears to have less net income currently and Glenwood will show less net income in the future.

Figure 1:

		Eads Heaters, Inc.		
		Income Statement		
		For Year Ended December 31, 20X1		
Sales		Debits	Credits	
	Sales Revenue		398500	
CGS				
	Cost of Goods Sold		-188800	
Gross Profit			209700	
Operating Expenses				
	Bad Debt Expense		4970	
	Depreciation Expense		41500	
	Other Operating Expenses		34200	
Net Operating Expense			80670	
Income from Operations				129030
Other Expenses and Losses				
	Interest Expense		35010	
	Income before taxes			94020
	Income Tax Expense		23505	
Net Income				70515

Figure 2:

		Glenwood Heating, Inc		
		Income Statement		
		For Year Ended December 31, 20X1		
Sales		Debits	Credits	
	Sales Revenue		398500	
CGS				
	Cost of Goods Sold		-177000	
Gross Profit			221500	
Operating Expenses				
	Bad Debt Expense	994		
	Depreciation Expense	19000		
	Rent Expense	16000		
	Other Operating Expenses	34200		
Net Operating Expense		70194		
Income from Operations				151306
Other Expenses and Losses				
	Interest Expense	27650		
	Income before taxes			123656
	Income Tax Expense	30914		
Net Income				92742

The next financial statement that is created is the statement of retained earnings. The statement of retained earnings is a crucial statement to see if someone should invest in either Eads Heaters or Glenwood Heating. The statement of retained earnings shows how much money is being paid back to the owners in the form of dividends from net income. Eads Heater's statement of retained earnings (Figure 3) shows that the company pays a \$23,200 total dividend to its shareholders. Glenwood Heating's statement of retained earnings (Figure 4) shows that it also pays a \$23,200 dividend. Eads Heater is the better company to invest in based on the statement of retained earnings because even though it has lower net income than Glenwood Heating it still pays the same dividend. This is important because it demonstrates that the Eads Heater company values its shareholders and is devoted to rewarding the shareholders.

Figure 3:

Eads Heaters, Inc.	
Statement of Retained Earnings	
For Year Ended December 31, 20X1	
Retained Earnings, January 1	0
Net Income	70515
Dividends	-23200
Retained Earnings, December 31	47315

Figure 4:

Glenwood Heating, Inc.	
Statement of Retained Earnings	
For Year Ended December 31, 20X1	
Retained Earnings, January 1	0
Net Income	92742
Dividends	-23200
Retained Earnings, December 31	69542

The balance sheet is the last financial statement that is used in this report to analyze Eads Heaters and Glenwood Heating. The balance sheet allows the analysis of the two companies with all of the assets, liabilities, and owners equity to give a general overview of the company. Eads Heaters has a balance sheet (Figure 5) with assets totaling \$703,765. Glenwood Heating has a balance sheet (Figure 6) with assets totaling \$642,632. Eads Heaters has a greater asset value with a higher equity and liability total also, but it can be seen as worth the greater liabilities and equity in the balance sheet based on the adjusted entries made. The two companies booked their rental equipment differently and had different rent terms, which is the cause of the different asset values. Eads Heaters negotiated to get an eight year rental deal and booked the rental equipment as an asset. Glenwood Heating could only negotiate a two year fixed price for the rental equipment and booked it as an expense. Eads Heaters is the better company to invest in or loan money to based on the balance sheet because it has a greater asset value and is guaranteed to have the rental equipment six years longer than Glenwood Heating.

Therefore, Eads Heaters is overall the better company to invest in or lend money to. Eads Heaters is a better company in the long run with their current depreciation method. Eads Heaters pays a higher percentage of its net income as dividends to the shareholder. The company also has guaranteed rental equipment for a span of eight years compared to Glenwood Heating's two years, which makes Eads Heater's have a higher value of assets.

Figure 5:

Eads Heating, Inc.			
Balance Sheet			
As of December 31, 20X1			
Assets			
Current Assets			
	Cash	7835	
	Inventory	51000	
	Accounts Receivable	99400	
	Allowance for Bad Debt Expense	-4970	
	Total Current Assets	153265	
Property, Plant ,and Equipment			
	Equipment	80000	
	Building	350000	
	Land	70000	
	Accumulated Depreciation Equipment	-20000	
	Accumulated Depreciation Building	-10000	
	Leased Equipment	92000	
	Accumulated Depreciation Leased Equipment	-11500	
		550500	
Total Assets			703765
Liabilities and Stockholders' Equity			
Current Liabilities			
	Note Payable	380000	
	Accounts Payable	26440	
	Interest Payable	6650	
	Total Current Liabilities	413090	
Long-term liabilities			
	Lease payable	83360	
	Total Long-term liabilities	83360	
Stockholders Equity			
	Common Stock	160000	
	Retained Earnings	47315	
	Total Equity	207315	
Total Liabilities and Equity			703765

Figure 6:

Glenwood Heating, Inc.			
Balance Sheet			
As of December 31, 20X1			
Assets			
Current Assets			
	Cash	426	
	Inventory	62800	
	Accounts Receivable	99400	
	Allowance for Bad Debt Expense	-994	
	Total Current Assets	161632	
Property, Plant ,and Equipment			
	Equipment	80000	
	Building	350000	
	Land	70000	
	Accumulated Depreciation Equipment	-9000	
	Accumulated Depreciation Building	-10000	
	Total	481000	
Total Assets			642632
Liabilities and Stockholders' Equity			
Current Liabilities			
	Note Payable	380000	
	Accounts Payable	26440	
	Interest Payable	6650	
	Total Current Liabilities	413090	
Stockholders Equity			
	Common Stock	160000	
	Retained Earnings	69542	
	Total Equity	229542	
Total Liabilities and Equity			642632

Appendix A: Eads Heaters

Eads Heaters, Inc.												
Chart of Accounts												
Part A		Assets					=	Liabilities			+	Stockholders' Equity
	Cash	A/R	Inventory	Land	Building	Equipment	Accounts payable	Note payable	Interest payable	C/S	Retained Earnings	
1	160000									160000		
2	400000							400000				
3	-420000			70000	350000							
4	-80000					80000						
5			239800				239800					
6		398500									398500	
7	299100	-299100										
8	-213360						-213360					
9	-41000							-20000			-21000	
10	-34200										-34200	
11	-23200										-23200	
12									6650		6650	
Balances	47340	99400	239800	70000	350000	80000	26440	380000	6650	160000	313450	

Eads Heaters, Inc.									
Part B									
	Cash	A/R	Allowance for Bad Debts	Inventory	Land	Building	Acc Dep Building	Equipment	
Balances: Part A	47340	99400		239800	70000	350000		80000	
Part B (1) Bad debts			4970						
Part B (2) COGS				-188800					
Part B (3) Depreciation									
Building							10000		
Equipment									
Part B (4) Equipment									
Rental payment	-16000								
Depreciation									
Part B (5) Income tax	-23505								
Balances	7835	99400	4970	51000	70000	350000	10000	80000	

Eads Heaters, Inc.					
Part B					
	Acc Dep Equipment	Leased Equipment	Interest Expense	Income Tax Expense	Acc Dep Leased Equipment
Balances: Part A					
Part B (1) Bad debts					
Part B (2) COGS					
Part B (3) Depreciation					
Building					
Equipment	20000				
Part B (4) Equipment		92000			
Rental payment			7360		
Depreciation					11500
Part B (5) Income tax				23505	
Balances	20000	92000	7360	23505	11500

Eads Heaters, Inc.								
Part B		Liabilities			+	Stockholders' Equity		
	Accounts Payable	Interest Payable	Lease Payable	Note Payable	Common Stock	Retained Earnings	Cost of Goods Sold	
Balances: Part A	26440	6650		380000	160000	313450		
Part B (1) Bad debts								
Part B (2) COGS							18880	
Part B (3) Depreciation								
Building								
Equipment								
Part B (4) Equipment			92000					
Rental payment			-8640					
Depreciation								
Part B (5) Income tax								
Balances	26440	6650	83360	380000	160000	313450	18880	

Appendix B: Glenwood Heating

Glenwood Heating, Inc.													
Chart of Accounts													
Part A	Assets						=	Liabilities			+	Stockholders' Equity	
	Cash	A/R	Inventory	Land	Building	Equipment	Accounts payable	Note payable	Interest payable	Common stock	Retained Earnings		
1	160000									160000			
2	400000							400000					
3	-420000			70000	350000								
4	-80000					80000							
5			239800				239800						
6		398500									398500		
7	299100	-299100											
8	-213360						-213360						
9								-20000			-21000		
10	-34200										-34200		
11	-23200										-23200		
12									6650		-6650		
Balances	47340	99400	239800	70000	350000	80000	26440	380000	6650	160000	313450		

Glenwood Heating, Inc.											
Part B	Assets										
	Cash	A/R	Allowance for Bad Debts	Inventory	Land	Building	Acc Dep Building	Equipment	Acc Dep Equipment	Rent Expense	Income Tax Expense
Balances: Part A	47340	99400		239800	70000	350000		80000			
Part B (1) Bad debts				994							
Part B (2) COGS				-177000							
Part B (3) Depreciation											
Building							10000				
Equipment									9000		
Part B (4) Equipment											
Rental payment	-16000									16000	
Part B (5) Income tax	-30914										30914
Balances	426	99400		994	62800	70000	350000	10000	80000	9000	16000

Glenwood Heating, Inc.							
Part B	Liabilities			+	Stockholders' Equity		
	Accounts Payable	Interest Payable	Note Payable	Common Stock	Retained Earnings	Cost of Goods Sold	
Balances: Part A	26440	6650	380000	160000	313450		
Part B (1) Bad debts							
Part B (2) COGS						177000	
Part B (3) Depreciation							
Building							
Equipment							
Part B (4) Equipment							
Rental payment							
Part B (5) Income tax							
Balances	26440	6650	380000	160000	313450	177000	

Case Two

Molson Coors Brewing Company

Drew Caruthers

September 20, 2017

Executive Summary

The Molson Coors Brewing Company case asks many questions about accounting concepts and the reasons for certain accounting processes. This report will show the questions and answer them in detail. The questions deal with the topic of the income statement, which is important because it shows all of a company's revenues, expenses and net income for the period. The income statement will reveal how the company earns income every year and irregular gains or losses.

Questions

A) What are the major classifications of an income statement?

The major classifications of an income statement are operating, non-operating, income tax, and earnings per share.

- The operating section includes revenue, expenses, cost of goods sold, and administrative or general expenses.
- The non-operating section includes other revenues and gains along with other expenses and losses. The gains and losses classification is a list of either an increase or decrease in owner's equity from not day to day operating activities.
- The income tax classification is the total tax that must be paid for all federal and state taxes
- Earnings per share is a measure of the performance over the reporting period.

B) Explain why, under U.S. GAAP, companies are required to provide “classified” income statements.

Companies must, under U.S. GAAP, disclose classified income statements because of the full disclosure principle and the understandability principle. The full disclosure principle makes accounting statements provide all of the necessary information so that all of the businesses activity is disclosed. The classified income statement allows the information to meet the requirements of the understandability quality, which requires that the information be presented so that any person with reasonable knowledge of accounting could read the statement.

C) In general, why might financial statement users be interested in a measure of persistent income?

Financial statements users are interested in the measurability of persistent income for comparability and to predict future income to decide if the user should invest in or lend to the company. The persistent income will allow users to compare that income to other companies in the same market.

D) Define comprehensive income and discuss how it differs from net income.

Comprehensive income is the change in equity of a company during a period from non-owner sources and includes gains that are unrealized. Net income includes the change in equity of a company and the equity from owners, but does not included unrealized income.

E) The income statement reports “Sales” and “Net sales.” What is the difference?

Why does Molson Coors report these two items separately?

Molson Coors reports sales to show how much of the product was sold and reports net sales to show the decrease of sales because of the excise tax.

F) Consider the income statement item “Special items, net” and information in Notes 1 and 8.

- i. In general, what types of items does Molson Coors include in this line item? Molson Coors uses the special items category to include unusual or infrequent items, restructuring expenses, and termination costs. Molson Coors has specific items for example such as natural disaster costs, intangible assets, and sale of a joint venture.
- ii. Explain why the company reports these on a separate line item rather than including them with another expense item. Molson Coors classifies these special items as operating expenses. Do you concur with this classification? Explain.

The company reports the special items on a separate line so that investors and lenders can more accurately compare the statements across the accounting periods. Molson Coors should classify the special items as operating expenses because the items would not exist if the company was not in operation.

G) Consider the income statement item “Other income (expense), net” and the information in Note 6. What is the distinction between “Other income (expense),

net” which is classified a non-operating expense, and “Special items, net” which Molson Coors classifies as operating expenses?

The income statement item “Other income(expense), net” is classified as a non-operating cost because the items that are included in other income occur outside of operation process. The category of special items consists of items that are infrequent, but occur in the operating process.

H) Refer to the statement of comprehensive income.

i. What is the amount of comprehensive income in 2013? How does this amount compare to net income in 2013?

The comprehensive income for 2013 is a loss of \$760.2 million, while net income of 2013 is a loss of \$567.3 million.

ii. What accounts for the difference between net income and comprehensive income in 2013? In your own words, how are the items included in Molson Coors’ comprehensive income related?

The income difference is because of special items, which includes items such as foreign currency transactions, pension, and owners share of income. The items in the comprehensive income statement are all special items that are irregular and nonrecurring.

J) Consider the information on income taxes, in Note 7.

i. What is Molson Coors' effective tax rate in 2013?

The effective tax rate is 12.8% because there is a tax break from the company having operations in foreign countries and following their lower tax rate.

Case Three

Pearson Plc

Drew Caruthers

October 4, 2017

Executive Summary

The Pearson Plc case has many questions regarding the calculations for Pearson Plc account receivables and explaining the accounting concepts that are involved. The case has taught me a lot about the ways to predict uncollectible receivables with allowance for bad and doubtful accounts and how to look through the footnotes of the financial statements to find this information. This case report will answer the questions asked and included charts or journal entries to demonstrate some of the answers. The case questions all fall under the category of accounts receivable, which is an important topic to learn because uncollectable receivables can change income greatly if they are not estimated accurately.

Questions

A) What is an account receivable? What other names does this asset go by?

Account receivables are open promises of the purchaser to pay for the good or service that was sold. This asset can go by the name of a trade receivable, which is a broader form of an account receivable.

B) How do accounts receivable differ from notes receivable?

Accounts receivables are oral promises to pay for a good or service, while note receivables are written promises to pay a specified amount on a certain date.

C) What is a contra account? What two contra accounts are associated with Pearson's trade receivables (see Note 22)? What types of activities are captured in each of these

contra accounts? Describe factors that managers might consider when deciding how to estimate the balance in each of these contra accounts.

A contra account on a balance sheet has the opposite normal balance of the account classification and reduces either an asset, liability, or owners' equity account. The provision for bad and doubtful debts and provision for sales returns are associated with Pearson's trade receivables, which are known as allowance for bad and doubtful accounts and allowance for sales returns under U.S. GAAP. The provision for bad and doubtful debts account is the estimated amount of accounts receivable that will not be paid and is a contra account for accounts receivable. The provision for sales returns account is the estimated amount of returned items and is a contra account for sales. Managers might want to consider the historical data for the previous amounts of the accounts and the time that the receivables have been outstanding since the longer that a receivable is outstanding the more unlikely it is that it will be paid.

D) Two commonly used approaches for estimating uncollectible accounts receivable are the percentage-of-sales procedure and the aging-of-accounts procedure. Briefly describe these two approaches. What information do managers need to determine the activity and final account balance under each approach? Which of the two approaches do you think results in a more accurate estimate of net accounts receivable?

The percentage-of-sales procedure takes a predetermined percentage and uses it on the sales that were sold on credit to estimate uncollectible receivables. The aging-of-accounts procedure estimates uncollectible receivables by sorting the receivables by the

time outstanding to determine the approximate amount that will be paid. Managers need sales that were sold on credit for the percentage-of-sales procedure and need the sales and the time that receivables have been outstanding for the aging-of-accounts procedure. I think that the aging-of-accounts procedure is a more accurate estimate because under the percentage-of-sales procedure it can be skewed since one a predetermined percentage is applied to all of the sales on credit, while the aging-of-accounts procedure categorizes all of the receivables.

E) If Pearson anticipates that some accounts will be uncollectible, why did the company extend credit to those customers in the first place? Discuss the risks that managers must consider with respect to accounts receivable.

The company does not do housecleaning for each company that pays on credit, but knows the inherent risk of having receivables not collected and plans for uncollectable accounts. Managers must know that there will always be a risk of not collecting the accounts receivable, but can look at companies' past history of paying debt to lower unpaid receivables.

F) Note 22 reports the balance in Pearson's provision for bad and doubtful debts (for trade receivables) and reports the account activity ("movements") during the year ended December 31, 2009. Note that Pearson refers to the trade receivables contra account as a "provision." Under U.S. GAAP, the receivables contra account is typically referred to as an "allowance" while the term provision is used to describe the current-

period income statement charge for uncollectible accounts (also known as bad debt expense).

- i) Use the information in Note 22 to complete a T-account that shows the activity in the provision for bad and doubtful debts account during the year. Explain, in your own words, the line items that reconcile the change in account during 2009.

The provision for bad and doubtful debts account has a first change with debt of 5 million £ that represents the exchange difference with U.S. dollars and British pounds. The 26 million £ credit is because of actual bad debt that happened in the year. The amount that was estimated to be uncollected at the beginning of the year was 20 million £ and can now be debited because that amount was already predicted to be uncollectable. The last 3 million £ credit is because of the provision for bad and doubtful debts of a company that Pearson acquired.

Provision for bad and doubtful debts	
	72 million
5 million	
	26 million

20 million	
	3 million
	76 million

ii) Prepare the journal entries that Pearson recorded during 2009 to capture 1) bad and doubtful debts expense for 2009 (that is, the “income statement movements”) and 2) the write-off of accounts receivable (that is, the amount “utilized”) during 2009. For each account in your journal entries, note whether the account is a balance sheet or income statement account.

1) Bad debt expense	26 million £	
	Provision for doubtful accounts	26 million
£		

2) Provision for doubtful accounts	20 million £	
	Accounts Receivable	20 million
£		

The bad debt expense is on the income statement. The provision for doubtful accounts is on the balance sheet. Accounts receivable is on the balance sheet.

- ii) Where in the income statement is the provision for bad and doubtful debts expense included?

The provision for bad and doubtful debts expense is included in sales and takes away from net sales

G) Note 22 reports that the balance in Pearson's provision for sales returns was £372 at December 31, 2008 and £354 at December 31, 2009. Under U.S. GAAP, this contra account is typically referred to as an "allowance" and reflects the company's anticipated sales returns.

- i) Complete a T-account that shows the activity in the provision for sales returns account during the year. Assume that Pearson estimated that returns relating to 2009 Sales to be £425 million. In reconciling the change in the account, two types of journal entries are required, one to record the estimated sales returns for the period and one to record the amount of actual book returns.

- ii)

Provision for sales returns account	
	372 million
	425 million
443 million	
	354 million

- iii) Prepare the journal entries that Pearson recorded during 2009 to capture, 1) the 2009 estimated sales returns and 2) the amount of actual book returns during 2009. In your answer, note whether each account in the journal entries is a balance sheet or income statement account.

1)	Provision for sales returns	425 million £
	Sales	425 million £
2)	Sales	443 million £
	Provision for sales returns	443 million £

Provision for sales returns is a balance sheet account. Sales is an income statement account.

- iv) In which income statement line item does the amount of 2009 estimated sales returns appear?

Provision for sales returns is taken away from sales to get net sales.

H) Create a T-account for total or gross trade receivables (that is, trade receivables before deducting the provision for bad and doubtful debts and the provision for sales returns). Analyze the change in this T-account between December 31, 2008 and 2009. (Hint: your solution to parts f and g will be useful here). Assume that all sales in 2009 were on account. That is, they are all “credit sales.” You may also assume that there were no changes to the account due to business combinations or foreign exchange rate changes. Prepare the journal entries to record the sales on account and accounts receivable collection activity in this account during the year.

Total Trade Receivables	
1,474 million	
5,624 million	
	5,216 million
	20 million
	443 million
1,419 million	

1) Total trade receivables	5,624 million £
Sales	5,624 million £
2) Cash	5,679 million £
Total trade receivables	5,679 million £

Case Five

Palfinger AG-Property, Plant, & Equipment

Drew Caruthers

November 8, 2017

Executive Summary

The following case will ask property, plant, and equipment questions based on accounting methods using the Palfinger AG company. The case ranges from property, plant, and equipment depreciation methods to what is actually classified as property, plant, and equipment. I have learned much about how different depreciation methods can effect property, plant, and equipment valuation on the balance sheet and income statement. The case assumes that the reader will have a basic understanding of accounting concepts to fully understand the problem.

Questions

- a. Based on the description of Palfinger above, what sort of property and equipment do you think the company has?

Palfinger has property they own where their manufacturing plant is located on. The company would also own manufacturing equipment, which includes welding equipment, industrial furnaces, assembly stations, and power tools.

- b. The 2007 balance sheet shows property, plant, and equipment of €149,990. What does this number represent?

This number represents the total book value of the property, plant, and equipment that Palfinger has.

- c. What types of equipment does Palfinger report in notes to the financial statements?

Palfinger reports plants and equipment, fixtures and fittings, undeveloped buildings and investments, land, prepayments and assets under construction.

- d. In the notes, Palfinger reports “Prepayments and assets under construction.” What does this sub- account represent? Why does this account have no accumulated depreciation? Explain the reclassification of €14,958 in this account during 2007.

This account represents an asset that is being build and can not be depreciated yet because it is not available of current use.

- e. How does Palfinger depreciate its property and equipment? Does this policy seem reasonable? Explain the trade-offs management makes in choosing a depreciation policy.

Palfinger depreciates its property and equipment using straight-line depreciation over the assets useful life. This policy seems reasonable because Palfinger determines the useful life of buildings, machinery, fixtures, fittings, and equipment differently. Management using straight-line depreciation has advantages of a simple method of depreciation that is easy to apply, efficient for assets that have an accurate useful life, and it's a widely accepted depreciation method so Palfinger can compare its assets to competitors in the industry. Straight-line depreciation has drawbacks of not being able to

accurately depreciate unconventional assets.

- f. Palfinger routinely opts to perform major renovations and value-enhancing modifications to equipment and buildings rather than buy new assets. How does Palfinger treat these expenditures? What is the alternative accounting treatment?

Major renovations and value-enhancing modifications are capitalized and depreciated with the asset. The alternate accounting treatment for major renovations and value-enhancing modifications is to classify them as expenses

- g. Use the information in the financial statement notes to analyze the activity in the “Property, plant and equipment” and “Accumulated depreciation and impairment” accounts for 2007. Determine the following amounts:

- i. The purchase of new property, plant and equipment in fiscal 2007.

Take PPE from December 31, 2007 and subtract PPE from December 31, 2016 to get net purchases from 2007. This should look like $149,990 - 98,130 = 51,860$. This means that the company purchased €51,860 of PPE during 2007.

- ii. Government grants for purchases of new property, plant and equipment in 2007. Explain what these grants are and why they are deducted from the property, plant, and equipment account.

The total amount for government grants in 2007 is €733. These are government grants on land, buildings, and machinery. They are deducted from the PPE because the IAS 20 states that the grants can be reported as deferred income or deducting the grant amount from the PPE.

iii. Depreciation expense for fiscal 2007.

The depreciation expense for fiscal 2007 is €12,557. This expense can be found in notes of the financial statements.

iv. The net book value of property, plant, and equipment that Palfinger disposed of in fiscal 2007.

The net book value of PPE that was disposed in 2007 is the total disposals of PPE minus the depreciation of the disposals from 2007, which is €13,799 minus €12,298. This means that the total net book value of PPE disposed in 2007 is €1,501.

- h. The statement of cash flows (not presented) reports that Palfinger received proceeds on the sale of property, plant, and equipment amounting to €1,655 in fiscal 2007. Calculate the gain or loss that Palfinger incurred on this transaction. Hint: use the net book value you calculated in part g iv, above. Explain what this gain or loss represents in economic terms.

The gain or loss of the sale of PPE is found by taking the sale price of €1,655 and

subtracting the book value of €1,501. This means that there was a gain of €154. This gain represents that the buyer paid €154, more than the book value of the PPE.

- i. Consider the €10,673 added to “Other plant, fixtures, fittings, and equipment” during fiscal 2007. Assume that these net assets have an expected useful life of five years and a salvage value of €1,273. Prepare a table showing the depreciation expense and net book value of this equipment over its expected life assuming that Palfinger recorded a full year of depreciation in 2007 and the company uses:

i. Straight-line depreciation

Year	1	2	3	4	5
Beginning Value	10,673	8,793	6,913	5,033	3,153
Depreciation Expense	1,880	1,880	1,880	1,880	1,880
Accumulated Depreciation	1,880	3,760	5,640	7,520	9,400

Ending Value	8,793	6,913	5,033	3,153	1,273
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II. Double-declining-balance depreciation

Year	1	2	3	4	5
Beginning Value	10,673	6,404	3,842	2,305	1,383
Depreciation Expense	4,269	2,562	1,537	922	110
Accumulated Depreciation	4,269	6,831	8,368	9,290	9,400
Ending Value	6,404	3,842	2,305	1,383	1,273

- j. Assume that the equipment from part i. was sold on the first day of fiscal 2008 for proceeds of €7,500. Assume that Palfinger's accounting policy is to take no depreciation in the year of sale.

- i. Calculate any gain or loss on this transaction assuming that the company used straight-line depreciation. What is the total income statement impact of the equipment for the two years that Palfinger owned it? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment (i.e. the amount from part i. i.).

The book value was €8,793 after one year minus the sale price of €7,500, which leave a loss of €1,293. To find the total income statement impact after two years that the company owned it, the depreciation expense of 1,880 must be added. This creates a total income statement impact of €3,173

- ii. Calculate any gain or loss on this transaction assuming the company used double-declining- balance depreciation. What is the total income statement impact of this equipment for the two years that Palfinger owned them? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment (i.e. the amount from part i. ii.).

The company using double-declining-balance-depreciation makes the equipment start with a value of €6,404 and with a sale price of €7500 this means that there is a gain of €1,096. To find the total impact on the income statement the depreciation expense of €4,269 must be taken away from the gain to get a total impact of €3,173.

- iii. Compare the total two-year income statement impact of the equipment under

the two depreciation policies. Comment on the difference.

The total impact on the income statement will be the same for either depreciation method. This is because even though each method has a different initial depreciation expense, this difference will account for the difference in the initial value of the asset.

Case Six

Volvo Group—Research & Development Costs

Drew Caruthers

November 22, 2017

Executive Summary

The following case asks questions based on the Volvo Group about research & development costs. The case has many questions that specifically deal with how to label certain research & development costs. The case has taught me how to do analysis on research and development costs on when to capitalize the costs under IAS 20. The case assumes that the reader will have a basic understanding of accounting concepts to fully understand the problem.

Questions

- iv. The 2009 income statement shows research and development expenses of SEK 13,193 (millions of Swedish Krona). What types of costs are likely included in these amounts?

The research costs likely include activities aimed at discovering new findings, evaluation of research, designing a product, and selection of materials used to build the new product. The development costs likely include designing new tools to build the new product, building the models, testing, design and building the machines to build product on a large scale.

- v. Volvo Group follows IAS 38—*Intangible Assets*, to account for its research and development expenditures (see IAS 38 excerpts at the end of this case). As such, the company capitalizes certain R&D costs and expenses others. What factors

does Volvo Group consider as it decides which R&D costs to capitalize and which to expense?

The Volvo Group decides to capitalize or expense R&D costs based on certain factors. The company will capitalize the costs if the development stage will generate future economic benefits, the company plans on using the asset, ability to sell the asset, and can reliably match the expenses used to develop the asset.

The company will expense the costs if the project is still in the research phase since there can not be proof of probable future economic benefits or when the asset is in development it cannot meet the requirements of an intangible asset, which are listed in the sentence before.

- vi. The R&D costs that Volvo Group capitalizes each period (labeled Product and software development costs) are amortized in subsequent periods, similar to other capital assets such as property and equipment. Notes to Volvo's financial statements disclose that capitalized product and software development costs are amortized over three to eight years. What factors would the company consider in determining the amortization period for particular costs?

The company should consider factors such as how the costs will lead to future revenue and the time period that the future revenue will last.

- vii. Under U.S. GAAP, companies must expense all R&D costs. In your opinion, which accounting principle (IFRS or U.S. GAAP) provides financial statements that better reflect costs and benefits of periodic R&D spending?

In my opinion, IFRS has a better principle for R&D costs because if a company can prove that its development can lead to future economic benefits then it should be able to capitalize the expense. However, I do understand that it can be very difficult to prove future economic benefits and match future revenue to current expenses so U.S. GAAP has ruled out capitalizing R&D completely.

viii. Refer to footnote 14 where Volvo reports an intangible asset for “Product and software development.” Assume that the product and software development costs reported in footnote 14 are the only R&D costs that Volvo capitalizes.

I. What is the amount of the capitalized product and software development costs, net of accumulated amortization at the end of fiscal 2009? Which line item on Volvo Group’s balance sheet reports this intangible asset?

The amount is the gross value of 25,148 minus the accumulated amortization of 13,379 to get a total value of 11,409.

II. Create a T-account for the intangible asset “Product and software development,” net of accumulated amortization. Enter the opening and ending balances for fiscal 2009. Show entries in the T-account that record the 2009 capitalization (capital expenditures) and amortization. To simplify the analysis, group all other account activity during the year and report the net impact as one entry in the T-account.

Product and software development	
12,381	
2602	
	3126
	448
11,409	

ix. f. Refer to Volvo's balance sheet, footnotes, and the eleven-year summary.

Assume that the product and software development costs reported in footnote 14 are the only R&D costs that Volvo capitalizes.

i. Complete the table below for Volvo's Product and software development intangible asset.

<u>(in SEK millions)</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
1) Product and software development costs capitalized during the year	2,057	2,150	1,858
2) Total R&D expense on the income statement	11,059	14,348	13,193
3) Amortization of previously capitalized costs (included in R&D expense)	2,357	2,864	2,830

4) Total R&D costs incurred during the year = 1 + 2 - 3	10,759	13,634	12,221

III. What proportion of Total R&D costs incurred did Volvo Group capitalize (as product and software development intangible asset) in each of the three years?

The proportion capitalized in 2007 is found by taking the capitalized costs of 2,357 and dividing them by the total R&D costs of 10,759 to get 21.91%. The proportion capitalized in 2008 was 21.01%. The proportion capitalized in 2009 was 23.16%.

- x. Assume that you work as a financial analyst for Volvo Group and would like to compare Volvo's research and development expenditures to a U.S. competitor, Navistar International Corporation. Navistar follows U.S. GAAP that requires that all research and development costs be expensed in the year they are incurred. You gather the following information for Navistar for fiscal year end October 31, 2007 through 2009.

- i. Use the information from Volvo's eleven-year summary to complete

the following table:

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

- ii. Calculate the proportion of total research and development costs incurred to net sales from operations (called, net sales from manufactured products, for Navistar) for both firms. How does the proportion compare between the two companies?

To get the proportion of total research and development costs to net sales the total R&D costs must be divided by the total net sales from operations. The proportions for **Volvo** are: 2007 is $10,759/276,795 = 3.89\%$, 2008 is $13,634/294,932 = 4.62\%$, and 2009 is $11,925/208,487 = 5.72\%$. The proportions for **Navistar** are: 2007 is $375/11,910 = 3.15\%$, 2008 is $384/14,399 = 2.67\%$, and 2009 is $433/11,300 = 3.83\%$. Volvo increases its R&D at a consistent rate, whereas Navistar keeps its R&D costs around the same percentage.

Case Seven

Data Analytics Case

Drew Caruthers

January 31, 2018

Executive Summary

The following case asks questions based on the program Microsoft Power BI. The case has many questions that specifically deal with how the application works and the uses for it. The case has taught me how Microsoft Power BI can offer an important advantage to accountants when analyzing and presenting data. The case assumes that the reader will have a basic understanding of accounting concepts to fully understand the problem. Microsoft Power BI is well worth the investment in the program to offer long-term returns in the efficiency and effectiveness of normal business operations.

Questions

- 1) Microsoft Power BI is a cloud based analytics service. Microsoft SQL Server professionals created a new project called Project Crescent in 2010. Project Crescent was a new program that allowed the user to create interactive visuals and reports. The program became very popular and in 2013 Microsoft renamed the program to Microsoft Power BI to include it in the Microsoft 365 package. The early versions of Microsoft Power BI used technology based on Excel add-ins Power Pivot and Power View to run the program. Microsoft Power BI is designed to be user friendly and the only resource needed to operate the program is a computer and the Microsoft Power BI application. The application will cost users per the data used, which could be free for an individual user or go up to 10GB per user for only 10 dollars a month.

2) The application Microsoft Power BI needs a user who knows what information needs to be presented and how to present that information. Microsoft Power BI can aid the business decision process greatly if used correctly. The program can display information in variety of interactive graphs and visuals, which allows the user to have different viewpoints of the information shown. Therefore, a user of this program must know the capabilities of the application so that the information can be presented in the most helpful way possible by picking certain visuals. A student like myself can gain these skills by using the free version and playing around the program to gain an understanding of it. I could then create sample presentations to future the development of my skills.

3) Scenarios

Audit

- i. Microsoft Power BI can be used for an initial overview of different data sets. The application will allow errors to be seen very easily when compared to data in previous years or average data for the year. This will be possible by using certain interactive graphs to display all of the data and looking for irregularities.
- ii. Microsoft Power BI can be used to review the controls of a company by reviewing company processes in an interactive model. This will allow auditors to look at company controls in a clearer and more efficient way.

The data that would be used is the model of the company controls that the auditors would receive.

- iii. Microsoft Power BI could also be used in audit for a more efficient way to communicate the audit results and findings. The program will allow to auditors to present certain information in a manner that anyone could understand. The data that would be used would depend on the type of company audited and the nature of the audit.

Tax

- i. Microsoft Power BI will allow for tax planners to group and show tax expenses. For example, the program would group expenses for all of an entity's property taxes and then could rank which group is the most expensive tax group. There would need to be data from the tax forms.
- ii. Microsoft Power BI can be used to by a tax planner to show the strategy used to lower taxes. The program can be used to show tax expenses compared to previous years or how the tax planner organized the company in the tax forms. This can be shown by using certain interactive visualizations and graphs. There would be data from the tax forms.
- iii. Microsoft Power BI will allow for tax planners to look for errors in massive data sets by using certain visualizations where errors would stand out. This would be more efficient than going through large data sets to verify correct information. The data would include tax filings and tax returns.

Financial Statements

- i. Microsoft Power BI will allow for company valuations to be easily explained and displayed. The program can show ratios of profitable sectors of the company and compare the company to other similar companies. The application would use data from all of the financial statements.
 - ii. Microsoft Power BI could be used in advisory to show how company operations and efficiency would change if a company switches to a new system or enterprise resource planning software. The system would need data and information from the current processes and financial statements and the data from the new potential system.
 - iii. Microsoft Power BI can also be used to suggest what products a company should focus on producing and selling based on revenue and profit. The application would analyze all of the company's product revenues and compare them. Then the system would rank and display the revenues and profits in a way that it will be easy to decide which products to focus on. The system would need data on the income statements and balance sheet.
- 4) Microsoft Power BI is a powerful and important tool that can be used to analyze data sets in a new way. This program is fairly cheap with huge benefits. Microsoft Power BI is designed to be user friendly so training on the application will not take long. The application will take large data sets that could take long

periods of time to examine and turns them into interactive visuals that can be analyzed quickly. The advantage with Microsoft Power BI is that the program will allow the user to notice and present the data in a way that will highlight certain facts or problems within the data.

The staff will be more effective and efficient in their work by using Microsoft Power BI. The staff will have another useful tool at their disposal that will aid them in business engagements. Also, Microsoft Power BI will seamlessly be put into operation since it is compatible with almost all databases and software. The application is very secure against hackers and can restrict who views the data.

Overall, Microsoft Power BI will raise the staff's business intelligence and ability. The application should be invested in my company does not want to fall behind the technological times. Microsoft Power BI will allow the staff to tell a story or highlight key points that otherwise would not have been pointed out. Microsoft Power BI should be invested in for the success and greater good of this company.

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Case Eight

Rite Aid Corporation—Long-Term Debt

Drew Caruthers

February 10, 2018

Executive Summary

The following case asks questions based on the company Rite Aid. The majority of the question focus on long-term debt accounting procedures. The case has taught me new debt terms and how to specifically handle certain debt situations. Accounting for debt can become extremely complicated and has many rules that apply to certain types of debt agreements. The case also requires a few debt calculations with total debt and effective interest rates.

Questions

A. Consider the various types of debt described in note 11, Indebtedness and Credit Agreement.

i. Explain the difference between Rite Aid's secured and unsecured debt.

Why does Rite Aid distinguish between these two types of debt?

Rite Aid has distinguished between secured and unsecured debt because if the secured debt isn't paid off, then there are assets that have already been pledged as collateral for the debt.

ii. What does it mean for debt to be "guaranteed"? According to note 11, who has provided the guarantee for some of Rite Aid's unsecured debt?

Guaranteed debt means that if the debt is not paid by the original debtor then another party will pay the debt. The Rite Aid Corporation is the guarantee for the debt.

iii. What is meant by the terms "senior," "fixed-rate," and "convertible"?

The term senior means that a certain debt is to be the highest priority to be paid off. A fixed-rate interest rate means that the interest rate does not change over the life of the loan even with changing market rates.

The term convertible means that the debt can be converted into another form such as capital in a company like part ownership or stock shares.

- iv. Speculate as to why Rite Aid has many different types of debt with a range of interest rates.

Rite Aid has different debt agreements to raise capital for different reasons. Each reason for Rite Aid needing a loan is going to have different levels of risks and payment schedules so this creates a range of different types of debt agreements.

- B. Consider note 11, Indebtedness and Credit Agreement. How much total debt does Rite Aid have at February 27, 2010? How much of this is due within the coming fiscal year? Reconcile the total debt reported in note 11 with what Rite Aid reports on its balance sheet.

Rite Aid has a total debt of \$6,370,899 at February 27, 2010, which consist of \$51,502 of short-term debt. The total debt is made up from \$6,185,633 of long-term, the short-term debt, and \$133,764 of lease obligation debt to get the total debt of \$6,370,899. The debt for Rite Aid is recorded under the liability section of the balance sheet.

C. Consider the 7.5% senior secured notes due March 2017.

- i. What is the face value (i.e. the principal) of these notes? How do you know?

The face value is \$500,000 because the carrying value of the note does not change from 2009 to 2010 so there is no discount or premium.

- ii. Prepare the journal entry that Rite Aid must have made when these notes were issued.

The journal entry to issue the note would be:

Cash	500,000	
	Note Payable	500,000

- iii. Prepare the annual interest expense journal entry. Note that the interest paid on a note during the year equals the face value of the note times the stated rate (i.e., coupon rate) of the note.

The interest expense is the face value of \$500,000 times the states rate of 7.5% to get the annual journal entry:

Interest Expense	37,500	
	Interest Payable	37,500

- iv. Prepare the journal entry that Rite Aid will make when these notes mature in 2017.

The payment of the note will decrease assets and decrease liabilities.

To remove the note from the books after it has been paid off make the journal entry:

Note Payable	500,000
Cash	500,000

D. Consider the 9.375% senior notes due December 2015. Assume that interest is paid annually.

- i. What is the face value (or principal) of these notes? What is the carrying value (net book value) of these notes at February 27, 2010? Why do the two values differ?

The face value of these notes is \$410,000 and to get the carrying value subtract the unamortized premium of \$4,049 to get the answer of \$405,951. The two values differ because the discount has not been amortized yet.

- ii. How much interest did Rite Aid pay on these notes during the fiscal 2009?

The interest can be found by multiplying the principal of \$410,000 times the rate of 9.375% to get the answer of \$38,438.

- iii. Determine the total amount of interest expense recorded by Rite Aid on these notes for the year ended February 27, 2010. Note that there is a cash and a noncash portion to interest expense on

these notes because they were issued at a discount. The noncash portion of interest expense is the amortization of the discount during the year (that is, the amount by which the discount decreased during the year).

The total interest expense can be found by adding the previously found interest payments and the discount of \$705 to get a total interest expense of \$39,143.

- iv. Prepare the journal entry to record interest expense on these notes for fiscal 2009. Consider both the cash and discount (noncash) portions of the interest expense from part *iii* above.

The journal entry for the previously found interest expense would be:

Interest Expense	39,143	
	Discount	705
	Cash	38,438

- v. Compute the total rate of interest recorded for fiscal 2009 on these notes.

The total rate of interest for 2009 can be found by dividing the interest expense of \$39,143 by the beginning carrying value of \$405,246 to get an interest rate of 9.659%.

E. Consider the 9.75% notes due June 2016. Assume that Rite Aid issued these notes on June 30, 2009 and that the company pays interest on June 30th of each year.

i. According to note 11, the proceeds of the notes at the time of issue were 98.2% of the face value of the notes. Prepare the journal entry that Rite Aid must have made when these notes were issued.

The journal entry is:

Cash	402,620		
Discount	7,380		
		Bonds Payable	410,000

ii. At what effective annual rate of interest were these notes issued?

The effective rate of interest can be found by using an excel formula program to get a rate of 10.1212%.

iii. Assume that Rite Aid uses the effective interest rate method to account for this debt. Use the table that follows to prepare an amortization schedule for these notes. Use the last column to verify that each year's interest expense reflects the same interest rate even though the expense changes. Note: Guidance follows the table.

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

- iv. Based on the above information, prepare the journal entry that Rite Aid would have recorded February 27, 2010, to accrue interest expense on these notes.

The journal entry would have to interest expense that is 8 months out of 12 months multiplied by the beginning interest expense of \$40,750. Also, there is a discount account of 8 months out of 12 months multiplied by the interest payment of \$39,975.

Interest Expense	27,167
Interest Payable	517
Discount	26,650

- v. Based on your answer to part *iv.*, what would be the net book value of the notes at February 27, 2010?

The book value on February 27, 2010 is the beginning book value of the period plus the amortized discount for two months out of the year makes an answer of \$403,137. The assets will be lower and the liabilities will be lower after this action of recording interest payments.

Case Nine

Merck & Co., Inc. — Shareholders' Equity

Drew Caruthers

February 23, 2018

Executive Summary

The following case asks questions based on the company Merck & Co., Incorporated. The majority of the question focus on accounting for stockholders' equity. The case has taught me how to navigate the stockholders' equity section of the balance sheet and in the notes. Also, the case has introduced to me new ways to find and account for different equity entries and ratios. There are different classifications of stock that can have different ownership and voting rights, which is important to learn when accounting for stockholders' equity.

Questions

a. Consider Merck's common shares.

i. How many common shares is Merck authorized to issue?

Merck is allowed to to issue 5,400,000,000 common shares.

ii. How many common shares has Merck actually issued at December 31, 2007?

Merck has actually issued 2,983,508,675 shares, which can be found in the stockholders' equity section of the balance sheet

iii. Reconcile the number of shares issued at December 31, 2007, to the dollar value of common stock reported on the balance sheet.

The dollar value of common stock on the balance sheet is \$29.8 million, which is equal to the number of common shares issues multiplied by the one cent par value.

- iv. How many common shares are held in treasury at December 31, 2007?

There are 811,005,791 common shares that are in treasury at the end of 2007.

- v. How many common shares are outstanding at December 31, 2007?

There are 2,172,502,884 common shares that are outstanding at the end of 2007 that can be found from subtracting the number of shares issued and the number of shares in treasury at the time.

- vi. At December 31, 2007, Merck's stock price closed at \$57.61 per share.

Calculate the total market capitalization of Merck on that day.

The total market capitalization for Merck on a single day can be found by multiplying the total shares that are outstanding by the stock price per share. For Merck the calculation is 2,172,502,844 times 57.61 to get an answer of \$125,157,891,147 for the total market capitalization.

- c. Why do companies pay dividends on their common or ordinary shares? What normally happens to a company's share price when dividends are paid?

Dividends are a way for companies to pay their shareholders for the original investment in the company. A company's share price usually decreases after a dividend since the dividend payment decreases the retained earnings of the company.

- d. In general, why do companies repurchase their own shares?

Treasury stock is the term for common shares that a company has repurchased. The advantage with more treasury stock is it increases the earnings per share and in most

cases will increase the stock price because it immediately improves the company's financial ratios.

e. Consider Merck's statement of cash flow and statement of retained earnings.

Prepare a single journal entry that summarizes Merck's common dividend activity for 2007.

Retained Earnings	3310.7	
	Cash	3307.3
	Dividends Payable	3.4

g. During 2007, Merck repurchased a number of its own common shares on the open market.

xi. Describe the method Merck uses to account for its treasury stock transactions.

Merck uses the cost method to account for its treasury stock options and records treasury stock journal entries at the cost to repurchase the shares.

xii. Refer to note 11 to Merck's financial statements. How many shares did Merck repurchase on the open market during 2007?

Note 11 says that Merck repurchased 26,500,000 shares on the open market in 2007.

xiii. How much did Merck pay, in total and per share, on average, to buy back its stock during 2007? What type of cash flow does this represent?

The statement of cash flows from financing activities lists that Merck paid \$1,429.7 million for treasury stock in 2007. If Merck paid \$1,429.7 million divided by the amount of stock repurchased of 26,500,000 shares means that they paid \$53.95 per share to buy back stock.

xiv. Why doesn't Merck disclose its treasury stock as an asset?

Merck does not disclose its treasury stock as an asset because it is a contra account for stockholders' equity. The treasury stock accounts for the difference in shares outstanding and shares issued.

i. Determine the missing amounts and calculate the ratios in the tables below.

For comparability, use dividends paid for both companies rather than dividends declared. Use the number of shares outstanding at year end for per-share calculations. What differences do you observe in Merck's dividend-related ratios across the two years? What differences do you observe in the two companies' dividend-related ratios?

Merck

2007

2006

Dividends paid	\$3,307.3	\$3,322.6
Shares outstanding	\$2,172.5	\$2,167.8
Net income	\$3,275.4	\$4,433.8
Total assets	\$48,350.7	\$44,569.8
Operating cash flows	\$6,999.2	\$6,765.2
Year-end stock price	\$57.61	\$41.94

Merck

2007

2006

Dividends per share	\$1.52	\$1.53
Dividend yield (dividends per share to stock price)	2.64%	3.65%
Dividend payout (dividends to net income)	1.01	.75
Dividends to total assets	.068	.075
Dividends to operating cash flows	.47	.49

Merck's dividend per share is close to the same from 2006 to 2007, but the dividend yield percentage is almost a whole percent lower in 2007. The dividend yield drop shows that even with a higher stock price, Merck wants to pay a dividend around \$1.50 per share consistently. Merck has over a \$1,000 decrease in net income from 2006 to 2007 and almost a \$4,000 increase in total assets in the same time period. Merck still has close to the same operating cash flows in 2006 and 2007.

Case Ten

State Street Corporation—Marketable Securities

Drew Caruthers

April 4, 2018

Executive Summary

The following case asks questions based on the State Street Corporation. The majority of the question focus on how to classify and value investments. The case deals with securities in the categories of trading, available-for-sale, and held-to-maturity. Each security is valued and recorded in a different way and on different financial statements. The case has taught me how to correctly account for different marketable securities. Also, the case has introduced to me new ways to value different investments based on the buyer's intentions with the investment.

Questions

- xv. Consider trading securities. Note that financial institutions such as State Street typically call these securities "Trading account assets."

In general, what are trading securities?

Trading securities are marketable investments that can be equity or debt.

Trading securities are short term investments, which is classified as held for three months.

How would a company record \$1 of dividends or interest received from trading securities?

The company would record a dividend or investment by debiting the cash account and crediting the dividend or interest income account.

If the market value of trading securities increased by \$1 during the reporting period, what journal entry would the company record?

The journal entry would include a debit to fair value adjustment and a credit to unrealized gain or loss – income account.

xvi. Consider securities available-for-sale. Note that State Street calls these, “Investment securities available for sale.”

In general, what are securities available-for-sale?

Securities available-for-sale are debt or equity investments that have an intent to sale before the maturity date. These investments are not amortized, but recorded at fair value.

How would a company record \$1 of dividends or interest received from securities available-for-sale?

A company would record dividend or interest received the same way as a trading security, by debiting cash and crediting either dividend or interest revenue.

If the market value of securities available-for-sale increased by \$1 during the reporting period, what journal entry would the company record?

The journal entry for available-for-sale securities would include a debit to fair value adjustment and a credit to unrealized gain or loss – equity account.

- xvii. Consider securities held-to-maturity. Note that State Street calls these, “Investment securities held to maturity.”

In general, what are these securities? Why are equity securities never classified as held-to- maturity?

Held-to-maturity securities are long term debt investments with an intent to hold the security and that are amortized over the life of the security.

Equity investments never mature so they will never be classified as held-to-maturity.

If the market value of securities held-to-maturity increased by \$1 during the reporting period, what journal entry would the company record?

Held-to-maturity securities are amortized and not recorded by the fair market value so a change in market value would not be recorded.

- d. Consider the “Trading account assets” on State Street’s balance sheet.

- i. What is the balance in this account on December 31, 2012? What is the market value of these securities on that date?

The balance of the account is 637 million dollars and is also the market value because the account was adjusted with the fair value adjustment account.

- ii. Assume that the 2012 unadjusted trial balance for trading account assets was \$552 million. What adjusting journal entry would State Street make to adjust this account to market value? Ignore any income tax effects for this part.

The adjusting entry would be:

Fair Value Adjustment Trading Securities	85		
		Unrealized Holding Gain or Loss – Income	85

- e. Consider the balance sheet account “Investment securities held to maturity” and the related disclosures in Note 4.

- i. What is the 2012 year-end balance in this account?

The balance for 2012 year-end is 11,379 million dollars.

- ii. What is the market value of State Street’s investment securities held to maturity?

The market value of the held to maturity investments is 11,661 million dollars.

- iii. What is the amortized cost of these securities? What does “amortized cost” represent? How does amortized cost compare to the original cost of the securities?

The amortized cost of these securities is the same as the year-end balance of 11,379 million dollars since held to maturity investments are reposted at the amortized cost. The amortized cost represents the total

discount or premium spread out over the life of the security. The amortized amount grows different from the original price as time passes.

- iv. What does the difference between the market value and the amortized cost represent? What does the difference suggest about how the average market rate of interest on held-to-maturity securities has changed since the purchase of the securities held by State Street?

The difference in amortized costs and market value represents the changing market rates. The market interest rates are decreasing because the fair value is increasing. This means that the security will have more demand since the market interest rates are going lower.

- f. Consider the balance sheet account “Investment securities available for sale” and the related disclosures in Note 4.

- i. What is the 2012 year-end balance in this account? What does this balance represent?

The 2012 year-end balance is 11,379 million dollars. This balance represents the value of the securities relative to the market since the securities are adjusted to fair market value.

- ii. What is the amount of net *unrealized* gains or losses on the available-for-sale securities held by State Street at December 31, 2012? Be sure to note whether the amount is a net gain or loss.

State Street had gains of 2,001 million dollars and losses of 882 million dollars, which nets out to a total gain of 1,119 million dollars.

iii. What was the amount of net *realized* gains (losses) from sales of available-for-sale securities for 2012? How would this amount impact State Street's statements of income and cash flows for 2012?

State Street had net gains of 101 million dollars and losses of 46 million dollars, which nets out to a total gain of 5 million dollars. Available-for-sale gains are recognized in comprehensive income on the income statement. State Street is an investment company so the gain would be seen on the operations section of the statement of cash flows.

g. State Street's statement of cash flow for 2012 (not included) shows the following line items in the "Investing Activities" section relating to available-for-sale securities (in millions): Proceeds from sales of available-for-sale securities \$

5,399 Purchases of available-for-sale securities \$60,812

i. Show the journal entry State Street made to record the purchase of available-for-sale securities for 2012.

Investment in Available-For-Sale	60,812	
	Cash	60,812

ii. Show the journal entry State Street made to record the sale of available-for-sale securities for 2012. Note 13 (not included) reports that the available-for-sale securities sold during 2012 had "*unrealized pre-tax gains of \$67 million as of December 31, 2011.*" Hint: be sure to remove the current book-value of these securities in your entry.

Cash	5,399	
Unrealized holding gain or loss	67	
	Realized gain	55
	Investment in Available-For-Sale	5,411

- iii. Use the information in part *g. ii* to determine the original cost of the available-for-sale securities sold during 2012.

The initial cost of the available-for-sale security is 5,399 million dollars minus the 55 million dollar gain to get a total cost of 5,344 million dollars.

Case Eleven

ZAGG Inc.—Deferred Income Taxes

Drew Caruthers

April 11, 2018

Executive Summary

The following case asks questions based on the company ZAGG. The majority of the question focus on how to classify income and tax. The case deals with deferred tax assets and deferred tax liabilities. I have learned the reason behind deferred tax assets and deferred tax liabilities, which occur because of the different rules in GAAP and the IRS income reporting. I have also learned a lot about the ASC 740 and all of the rules that the FASB created for deferred tax assets and liabilities. The case creates problems where I have to find and compute the deferred tax assets for ZAGG and record them with journal entries.

Questions

- i. Describe what is meant by the term book income? Which number in ZAGG's statement of operation captures this notion for fiscal 2012? Describe how a company's book income differs from its taxable income.

Book income is the amount of money that a company records on its own income statements within the rules of GAAP. ZAGG's book income can be found in the income statements stated as income before provision of income taxes in the amount of 23,898,000 dollars. Taxable income can be different than book income because the rules for taxable income are set by the IRS, which has some different rules than GAAP for recording revenue and expenses.

- ii. In your own words, define the following terms:

Permanent tax differences (also provide an example)

A permanent tax difference is when GAAP and the IRS have a different rule for classifying revenue or expense that does not lead to a future deferred asset or liability. An example is an environmental fine that is an expense in GAAP, but cannot be used for an expense under IRS rules.

Temporary tax difference (also provide an example)

A temporary tax difference is when GAAP and the IRS have a different rule for classifying revenue or expense that leads to a future deferred asset or liability, which will eventually even out the income under GAAP and the IRS. An example is depreciation methods can lead to deferred tax assets or liabilities since companies can use different methods of deprecation under IRS than they can under GAAP.

Statutory tax rate

The statutory tax rate is the tax rate that is mandated by the law.

Effective tax rate

The effective tax rate is the amount that a company actually paid and is calculated by dividing the tax expense by the total pretax income.

- iii. Explain in general terms why a company reports deferred income taxes as part of their total income tax expense. Why don't companies simply report their current tax bill as their income tax expense?

Deferred income tax expense is a liability that a company must pay in the future. Conservative accounting always presents and includes liabilities for a company's income. If a company did not have to report deferred taxes in the current tax bill, then the tax bill could be lower and misleading to investors. The deferred income tax being reported in the current tax bill lets investors know the full financial situation of a company.

The FASB released the codification ASC 740 that sets rules for reporting income taxes. The ASC 740-10 sets rules for when to recognize and how to measure current and deferred tax positions. The rule in place requires tax benefits to be more than likely than not to happen in order to be recorded. The measurement part of ASC 740-10 states that the most likely benefit amount to occur from the position should be recorded and it must be at least 50% probable.

The FASB codification ASC 740-20 sets rules for how on intraperiod tax allocation. Intraperiod tax allocation is the allocating of tax expense to different parts of the income statement. For example, tax could be allocated to continuing operations, discontinued operations, extraordinary items, other comprehensive income, or to prior period adjustments. The rules set when tax

can be allocated to each of the different items and provides guidance on when to use this method.

The FASB codification ASC 740-30 sets rules for reporting other considerations or special areas. The rule sets requirements that for different special considerations there must be certain disclosures. An example of a situation that must be disclosed is an investment in a subsidiary or a corporate joint venture arising from undistributed earnings. The ASC 740-30 also sets the rules for temporary differences related to an investment in a corporation. The rule states that investors that own less than 50 percent ownership will count it as an equity investment. If the investor owns more than 50 percent of the voting rights of the company, then it should be classified as a subsidiary.

The FASB codification ASC 740-270 creates guidance on interim reporting. This sets the rule to report items like tax exempt interest, unable to estimate income, new tax legislation effects, and change in beginning of year balance. Tax exempt interest income can be included in interest income or excluded, but must be consistent every year on how it is applied. If tax benefit or ordinary income is unable to be estimated, then the company must report the benefit in the interim period. Tax legislation effects on income may not be reported until the legislation is enacted.

Overall, the ASC 740 creates rules for reporting income and how it is taxed. This is very important because there needs to be a standard and fair system that all companies follow. Also, this allows all companies to be measured

by investors on an equal level and with the same criteria. The ASC 740 made clear guidelines on what type of income is taxable and how it should be reported on the financial statements.

- iv. Explain what deferred income tax assets and deferred income tax liabilities represent. Give an example of a situation that would give rise to each of these items on the balance sheet.

Deferred income tax assets represent a tax credit in the future because of a temporary difference in income reported with IRS and GAAP rules. In the case of a deferred income tax credit, the GAAP rules would have a higher total expense compared to IRS rules. Deferred income tax liabilities represent a tax expense in the future because of a temporary difference in income reported with IRS and GAAP rules. In the case of a deferred income tax liability the GAAP rules would have a lower total expense than the IRS rules.

A very common example of a deferred income tax asset is a carried forward loss. In this case, the loss from one of the two previous years can be combined with income to reduce the tax expense. The amount of tax credit would be the loss multiplied by the tax rate. An example of a deferred income tax liability is difference in depreciation methods under GAAP and the IRS. A company could depreciate its assets with straight-line depreciation with its

books under GAAP, but the company under the IRS uses a depreciation method that front loads the depreciation costs. This difference will create lower current income taxes, but create a liability to pay more income taxes in the future.

- v. Explain what a deferred income tax valuation allowance is and when it should be recorded.

The deferred income tax valuation allowance is an account that is used when a company can not use a deferred tax asset. It is most commonly used when carried forward losses are not used or there are expected future losses.

- vi. Consider the information disclosed in Note 8 – Income Taxes to answer the following questions:

Using information in the first table in Note 8, show the journal entry that ZAGG recorded for the income tax provision in fiscal 2012?

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

Using the information in the third table in Note 8, decompose the amount of “net deferred income taxes” recorded in income tax journal

entry in part *f. i.* into its deferred income tax asset and deferred income tax liability components.

The deferred tax asset is found by subtracting last years total deferred tax assets from this year's deferred tax assets. This will be 14,302,000 minus 6,300,000 to get a net deferred tax asset of 8,002,000. The deferred tax liability is found the same way, but just by using the deferred tax liabilities. The computation for this is 1,086,000 minus 794,000 to get a net income tax liability of 292,000.

The second table in Note 8 provides a reconciliation of income taxes computed using the federal statutory rate (35%) to income taxes computed using ZAGG's effective tax rate. Calculate ZAGG's 2012 effective tax rate using the information provided in their income statement. What accounts for the difference between the statutory rate and ZAGG's effective tax rate?

The effective rate for ZAGG is found by dividing the tax expense by the total pretax income. The computation for this is 9,393,000 divided by 23,898,000 to get an effective tax rate of 39.3%. The difference in the statutory rate and effective rate can come from changes in tax legislation or permanent differences in income because of different rule by GAAP and the IRS, which leads to different income amounts reported to each.

According to the third table in Note 8 – Income Taxes, ZAGG had a net deferred income tax asset balance of \$13,508,000 at December 31, 2012.

Explain where this amount appears on ZAGG’s balance sheet.

The net deferred income tax balance of 13,508,000 come from adding the current and non-current tax assets together. The current tax assets total 6,912,000 and the non-current tax assets total 6,596,000. There has to be a separate listing for current and non-current tax assets because it is required by GAAP.

Case Twelve

Apple Inc.—Revenue Recognition

Drew Caruthers

May 2, 2018

Executive Summary

The following case asks questions based on the company Apple. The majority of the question focus on when to recognize revenue. The case deals with different types of revenues and contracts. I have learned the strict rules of the ASC 606 that lay out the steps for recognizing revenue and when to recognize revenue in different situations. I have also learned that there can be opportunities for companies to manipulate recognized revenue for extra income reported for an accounting period. The case makes problems where I have to determine when to record revenue for certain products and contracts.

Questions

xviii. In your own words, define “revenues.” Explain how revenues are different from “gains.”

Revenue is the money that a company earns through its normal business processes. Gains are earned from irregular events and circumstances for a business. For the money earned to be classified as revenue, it has to be made from a primary business process for the company or else it will be classified as a gain.

xix. Describe what it means for a business to “recognize” revenues. What specific accounts and financial statements are affected by the process of revenue

recognition? Describe the revenue recognition criteria outline in the FASB's Statement of Concepts No. 5.

When a business recognizes revenue it means that the company has earned the money that it has been paid by providing a service or product. There are many rules and accounts that have to be kept in mind when recognizing revenue. The accounts that are affected by this process are accounts receivable when the company actually makes the sale and unearned revenue increases when the sale is made. Then when the service or products has been delivered and the customer has paid, the money goes into cash and revenue. The new revenue recognition standard from ASC 606 requires five steps to recognize revenue. The steps needed to recognize revenue are: 1) identify the contract with the customer 2) identify the obligations of the contract 3) determine the transaction price 4) allocate the price and obligations on the contract 5) recognize the revenue when the obligations have been satisfied.

xx. Refer to the Revenue Recognition discussion in Note 1. In general, when does Apple recognize revenue? Explain Apple's four revenue recognition criteria. Do they appear to be aligned with the revenue recognition criteria you described in part b, above?

Note 1 states that the "company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable, and collection is probable". Persuasive evidence of an

arrangement means that Apple has a contact with a customer. Delivery has occurred means that the product or service has been satisfied and taken to the customer. The sale price is fixed or determinable means that Apple and the customer have agreed on a price and maybe some discounts that can apply. Lastly, Apple has to determine that the collection of the payment from the customer is probable. The criteria to recognize revenue for Apple and the ASC 606 all seem to be the same except for Apple only require that the collection of the receivable be probable.

xxi. What are multiple-element contracts and why do they pose revenue recognition problems for companies?

Multiple-element contracts involve one customer, but the customer is buying more than one product or service at the same time. This poses a problem for revenue recognition because determining the fair value of multiple products in one sale would be very difficult. Also, it can be difficult to know when to recognize revenue if only one of the products is delivered, but the other type of product has not been delivered yet.

xxii. In general, what incentives do managers have to make self-serving revenue recognition choices?

Managers could have incentives like sales based salaries or revenue percentage bonuses. These incentives could cause managers to attempt to manipulate how

much revenue was recognized in a certain accounting period for more personal income for the manager.

xxiii. Refer to Apple's revenue recognition footnote. In particular, when does the company recognize revenue for the following types of sales?

i. iTunes songs sold online.

Apple records the revenues for songs sold when the song sale actually happens. Apple records the commission revenue from the song sale.

This is an acceptable method because the ASC 606 allows a business to recognize revenue when the business has actually received the payment and the service has been provided.

ii. Mac-branded accessories such as headphones, power adaptors, and backpacks sold in the Apple stores. What if the accessories are sold online?

Apple items in store require that customers pay immediately when they purchase the item. This means the Apple records the revenue immediately when the customer makes the purchase.

The same goes for online orders for customers. There can be exceptions to this if there is a large order and Apple agrees to let the customer have 30 or 60 days to make the payment. In this case, Apple would have to determine if it is probable that Apple will receive the payment to record the revenue. This

circumstance is accepted by the ASC 606 only because the revenue receivable is probable.

iii. iPods sold to a third-party reseller in India.

Apple will wait to record the revenue until the third-party reseller has received the product. This is the case because Apple will be responsible for the goods during shipment. Apple must wait to record revenue because the ASC 606 requires the product or service to be delivered for revenue to be recognized.

iv. Revenue from gift cards

Apple can record the revenue for gift cards when the customer purchases the gift card. This is possible because under ASC 606 guidelines Apple has provided the service of giving the customer credit and the customer has paid Apple.