

University of Mississippi
eGrove

Honors Theses

Honors College (Sally McDonnell Barksdale
Honors College)

2018

The Fundamentals of Accounting: A Series of Case Reports

William Swede Umbach

University of Mississippi. Sally McDonnell Barksdale Honors College

Follow this and additional works at: https://egrove.olemiss.edu/hon_thesis

 Part of the [Accounting Commons](#)

Recommended Citation

Umbach, William Swede, "The Fundamentals of Accounting: A Series of Case Reports" (2018). *Honors Theses*. 960.
https://egrove.olemiss.edu/hon_thesis/960

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.

THE FUNDAMENTALS OF ACCOUNTING: A SERIES OF CASE REPORTS

by
William Swede Umbach

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 2018

Approved by

Advisor: Dr. Victoria Dickinson

Reader: Dean Mark Wilder

© 2018

William Swede Umbach

ALL RIGHTS RESERVED

ABSTRACT

SWEDE UMBACH: The Fundamentals of Accounting: A Series of Case Reports (Under the direction of Victoria Dickinson)

The Patterson School of Accountancy encourages students to participate in an internship before graduating. These internships occur in the spring of senior year which conflicts with the traditional schedule for completing a thesis. The Sally McDonnell Barksdale Honors College allows accounting students to enroll in this alternative thesis track led by Dr. Vicki Dickinson. Dr. D is the most passionate professor I have encountered in the accounting school and her class was the single most enriching course in all of my major studies. She led a comprehensive study of technical accounting using this set of cases while also setting us up to network with our future employers. The following body of work required a complete knowledge of accounting and the theories and laws behind it. I can now properly account for a transaction and then follow it all the way to the final financial statements. In addition, I can research and explain our accounting regulation. These are both demonstrated on many occasions in this thesis. The following collection of cases represents my growth from a curious student into the employed accounting major that I am today.

TABLE OF CONTENTS

CASE 1: Comparison of Glenwood and Eads Heating Companies.....	1
CASE 2: Income Statement Presentation.....	11
CASE 3: Preparing Financial Statements.....	16
CASE 4: Fraud Schemes.....	21
CASE 5: Inventory Impairment.....	26
CASE 6: WorldCom, Inc.....	30
CASE 7: Restructuring a Business Line.....	34
CASE 8: Shareholder's Equity.....	39
CASE 9: Stock-Based Compensation.....	43
CASE 10: Revenue Recognition.....	48
CASE 11: Deferred Income Taxes.....	53
CASE 12: Leases.....	57

**Case 1: Comparison of Glenwood Heating, Inc. and
Eads Heaters, Inc.**

Executive Summary:

Our first case was an absolute train wreck. This is no way to begin a research thesis, but it does well to illustrate the foundational role this case plays in my education. As I write this introduction, I completed this case nearly two years ago. My knowledge of technical accounting then does not compare to what it is now. At that time, this case was overwhelming. Dr. Dickinson was open about the fact that it would dominate our time for the next two weeks. This case required us to perform the entire process. It simulates keeping the books for these two companies over the course of a year and then consolidating that information into actual financial statements. The following discussion both displays my comprehensive understanding of these companies' accounting methods and represents a significant learning curve in my education.

Profitability Analysis:

In order to decide which measurements would be the base of my decision, I focused on ratios that take into account the numbers that are the most different between the two companies; net income and cost of goods sold. Gross margin, profit margin, earnings per share, and return on assets are all measures of profitability that take net income and cost of goods sold into account and will therefore indicate which of the two companies' decisions are more profitable.

As an investor, earnings per share is one of the most basic and intuitive measures of which company is the better investment. Glenwood's operations indicate \$21.73 per share while Eads shows \$14.79 per share. Based on this measure alone, Glenwood's stock would be significantly more appealing to the investor than Eads's.

Profit margin, like earnings per share, takes net income into account. Glenwood has a profit margin of 23.27% while Eads's is 17.70%. This tells me that a higher percentage of Glenwood's income comes from sales which is indicative of more efficient, profitable operations.

The gross margin highlights the effect of different inventory costing methods between the two companies (FIFO for Glenwood and LIFO for Eads) and shows the percentage of profit generated from sales. Glenwood's gross margin is 55.58% and Eads is 52.82%. The percent difference is small, but the difference will likely grow as the companies move into their second and third years of operations.

After earnings per share, return on assets is the most telling ratio in my analysis. Glenwood's 14.43% is several points higher than Eads's 10.02%. This tells me that after one year of operations, Glenwood's management is using its assets more efficiently to create profit.

Financial Statements Analysis:

A. **Income Statement:** Net income is the most important figure here. Glenwood's is greater due to their inventory costing choice, a more slowly accumulating depreciation method, and a smaller allowance for doubtful accounts. These decisions account for the difference in net income; however, that does not mean that Glenwood is necessarily the best investment. In fact, I believe this is the strongest case against Glenwood, as Eads's choices all show greater conservatism.

- B. Statement of Changes in Stockholder's Equity:** Once again, this statement emphasizes the difference in net income. A greater net income equals greater retained earnings for Glenwood which means they have more money available for creating profit in the future. Retained earnings is an important measure because it shows how much money a company has to work with after it has covered all of its expenses.
- C. Balance Sheet:** The balance sheet did not weigh heavily on my decision, as it is more of a report on where every element of the company is at a certain point in time as opposed to the other statements which better reflect performance over time. The balance sheets for these two companies show the effect of the decisions made concerning equipment in question number four of part B. This is why Eads's total assets and total liabilities plus equity are greater.
- D. Statement of Cash Flows:** In my opinion, neither of these companies show sufficient available cash. However, Glenwood's \$426 of remaining cash is concerning. As the investor, I decided that Glenwood's long-term profitability outweighs its inability to cover short-term costs. That said, I think Eads should have more cash available as well. Based on the relative size of transactions for these companies, \$7,835 is not likely to cover a breakdown on the \$80,000 of equipment they own. This is alarming for a manager, but as an investor, I have to hope that Glenwood's greater profitability will allow it to overcome this with the start of year two operations.

Income Statements:

Glenwood Heating, Inc			Eads Heaters, Inc		
Income Statement			Income Statement		
For year ended Dec 31, 2016			For year ended Dec 31, 2016		
Net Sales		\$ 398,500	Net Sales		\$ 398,500
Cost of Goods Sold		(177,000)	Cost of Goods Sold		(188,800)
Gross Profit on Sales		221,500	Gross Profit on Sales		209,700
Administrative Expenses			Administrative Expenses		
Bad Debt Expense	994		Bad Debt Expense	4,970	
Depreciation Expense	19,000		Depreciation Expense	41,500	
Rent Expense	16,000		Other Operating Expenses	34,200	(80,670)
Other Operating Expenses	34,200	(70,194)	Income from Operations		129,030
Income from Operations		151,306	Interest Expense		(35,010)
Interest Expense		(27,650)	Income Before Taxes		94,020
Income Before Taxes		123,656	Income Tax Expense		(23,505)
Income Tax Expense		(30,914)	Net Income		\$ 70,515
Net Income		\$ 92,742			

Statement of Changes in Stockholder's Equity:

Glenwood Heating, Inc			
Statement Changes in Stockholder's Equity			
For year ended Dec 31, 2016			
	Total	Retained Earnings	Common Stock
Beginning Balance	\$ 160,000	-	\$ 160,000
Net Income	92,742	69,542	
Dividends		(23,200)	
Ending Balance	\$ 252,742	46,342	\$ 160,000

Eads Heaters, Inc			
Statement Changes in Stockholder's Equity			
For year ended Dec 31, 2016			
	Total	Retained Earnings	Common Stock
Beginning Balance	\$ 160,000	-	\$ 160,000
Net Income	70,515	47,315	
Dividends		(23,200)	
Ending Balance	\$ 230,515	24,115	\$ 160,000

Balance Sheets:

Glenwood Heating, Inc			
Classified Balance Sheet			
December 31st, 2016			
Current Assets:			
Cash		\$ 426	
Accounts Recievable	\$ 99,400		
Less: Allowance for Doubtful Accounts	(994)	98,406	
Inventory		62,800	
Total Current Assets			\$ 161,632
Poperty, Plant, and Equipment:			
Land		70,000	
Building	350,000		
Less: Accumulated Depreciation-Building	(10,000)	340,000	
Equipment	80,000		
Less: Accumulated Depreciation-Equipment	(9,000)	71,000	
Total Property, Plant, and Equipment			481,000
Total Assets			\$ 642,632
Liabilities and Stockholder's Equity			
Current Liabilities:			
Accounts Payable		\$ 26,440	
Interest Payable		6,650	
Notes Payable		380,000	
Total Liabilities			\$ 413,090
Stockholder's Equity			
Common Stock		160,000	
Retained Earnings		69,542	
Total Stockholder's Equity			229,542
Total Liabilities and Stockholder's Equity			\$ 642,632

Eads Heating, Inc			
Classified Balance Sheet			
December 31st, 2016			
Current Assets:			
Cash		\$ 7,835	
Accounts Recievable	\$ 99,400		
Less: Allowance for Doubtful Accounts	(4,970)	94,430	
Inventory		51,000	
Total Current Assets			\$ 153,265
Poperty, Plant, and Equipment:			
Land		70,000	
Building	350,000		
Less: Accumulated Depreciation-Building	(10,000)	340,000	
Equipment	80,000		
Less: Accumulated Depreciation-Equipment	(20,000)	60,000	
Leased Equipment	92,000		
Less: Accumulated Depreciation-Leased Equipn	(11,500)	80,500	
Total Property, Plant, and Equipment			550,500
Total Assets			\$ 703,765
Liabilities and Stockholder's Equity			
Current Liabilities:			
Accounts Payable		26,440	
Interest Payable		6,650	
Lease Payable		83,360	
Note Payable		380,000	
Total Liabilities			\$ 496,450
Stockholder's Equity			
Common Stock		160,000	
Retained Earnings		47,315	
Total Stockholder's Equity			207,315
Total Liabilities plus Equity			\$ 703,765

Statement of Cash Flows:

Glenwood Heating, Inc		
Statement of Cash Flows		
For the year ended December 31, 2016		
Cash Flows from Operating Activities:		
Net Income		\$ 92,742
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:		
Bad Debt Expense	994	
Depreciation Expense	19,000	
Inventory	(62,800)	
Accounts Receivable	(99,400)	
Accounts Payable	26,440	
Interest Payable	6,650	
Net Cash Provided by Operating Activities		16,374
Cash Flows from Investing		
Land	70,000	
Equipment	80,000	
Building	350,000	
Net Cash Used by Investing Activities		500,000
Cash Flows from Financing Activities		
Issuance of Common Stock	160,000	
Issuance of Note Payable	380,000	
Payment of Cash Dividends	23,200	
Net Cash Provided by Financing Activities		516,800
Net Increase in Cash		\$ 426

Eads Heating, Inc.		
Statement of Cash Flows		
For the year ended Dec 31, 2016		
Cash Flows from Operating Activities:		
Net Income		\$ 70,515
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:		
Bad Debt Expense	4,970	
Depreciation Expense	41,500	
Inventory	(51,000)	
Accounts Recievable	(99,400)	
Accounts Payable	26,440	
Interest Payable	6,650	
Net Cash Provided by Operating Activitie		(325)
Cash Flows from Investing:		
Land	(70,000)	
Equipment	(80,000)	
Building	(350,000)	
Net Cash Used by Investing Activities		(500,000)
Cash Flows from Financing Activities:		
Issuance of Common Stock	160,000	
Issuance of Note Payable	380,000	
Payment on Leased Equipment	(8,640)	
Payment of Cash Dividends	(23,200)	
Net Cash Provided by Financing Activities		508,160
Net Increase in Cash		\$ 7,835

Conclusion:

After recording all transactions for the first year of operations and identifying the net effect of the different accounting choices made by Glenwood Heating, Inc. and Eads Heaters, Inc., it is clear that Glenwood is the better investment. I made this decision by using several measures of each company's profitability (such as earnings per share and profit margin) and by looking at each company's financial statements themselves to determine which one is in a better position for future success.

The statement of cash flows highlights Glenwood's lack of conservatism in their operations. Eads's more conservative choices for inventory costing and depreciation may benefit them somehow in the future but based only on the information from the first year of operations, Glenwood is still more profitable. As long as uncollectable accounts do not far exceed the estimate, I do not anticipate Glenwood having any issues. The implications of the analysis of the profitability of these two companies is undeniable. Glenwood's higher earnings per share and return on assets reveal a clear winner for the investor.

Case 2: Totz & Doodlez Income Statement

Executive Summary:

This case coincided with our study of income statements in intermediate accounting. We had a lengthy discussion on this topic in intermediate but our focus was restricted to a technical perspective. In the study of these two companies, we are asked to research accounting standards regarding income statements and answer theoretical questions that cannot be obtained from the textbook. The result is a comprehensive understanding of the income statement and the principles that influenced these companies' treatment of this important financial statement.

Totz and Doodlez: Income Statement Presentation

Totz's profitability has soared since fiscal year 2015. They clearly put a lot of thought into the opening of Doodlez in-store art studio, and in fiscal year 2016, profits are at new highs. Totz cannot wait to release the new numbers to present and potential investors, but they must be sure to convey to people the influence of Doodlez on the value of their current or potential investment. I have consulted the intermediate accounting text and referenced the FASB Codification for authoritative guidance in order to provide the correct presentation of Totz's net sales, gross profit, gain on sale of corporate headquarters, and a class action settlement.

1. Net Sales

Totz has enjoyed significant increases in net sales, from \$74.5 million to \$86.5 or 16.1 percent, as a result of new business venture Doodlez. All users of Totz's financial statements will take notice of such an increase, so it is important that the income statement shows exactly where Totz has achieved this growth in sales. The Codification offers guidance to support this. Rule 225-10-S99-2 addresses which line items should

appear on the income statement, “The purpose of this rule is to indicate the various line items which, if applicable, and except as otherwise permitted by the Commission, should appear on the face of the income statements filed for the persons to whom this article pertains (see § 210.4–01(a)).” It goes on to say that a source of income that constitutes less than ten percent of the total may be combined in the total. “If income is derived from more than one of the subcaptions described under § 210.5–03.1, each class which is not more than 10 percent of the sum of the items may be combined with another class. If these items are combined, related costs and expenses as described under § 210.5–03.2 shall be combined in the same manner.” Doodlez is responsible for a more than sixteen percent increase to total sales, so it clearly constitutes as least 10 percent of the total and must have its own line item.

2. Gross Profit

Like net sales, there are significant increases in gross profit from the previous year. Also like net sales, Codification rule 225-10-S99-2 offers authoritative guidance on how to present this. Shortly after the rule addresses separation of sales from different sources, it addresses the presentation and separation of costs related to a second major source of revenue (Doodlez in our case). “State separately the amount of (a) cost of tangible goods sold, (b) operating expenses of public utilities or others, (c) expenses applicable to rental income, (d) cost of services, and (e) expenses applicable to other revenues.” When Totz creates its income statement, I think it should have two different calculations of gross profit. I recommended separate listing of Totz’s sales revenue and Doodlez’s service revenue in part one. In addition, the company should subtract cost of goods sold from sales revenue to calculate a gross profit from sales. Then, it should subtract service-

related costs from service revenue to calculate a gross profit from services. Then combine the two and show a total gross profit. This separation will allow users to see which segment of the business is most profitable and will easily explain Totz's recent uptick in profits. I think that this presentation also benefits the business in that it is a way for Totz to present to potential investors their recent growth by adding the new section to the income statement.

3. Gain on Sale of Corporate Headquarters

Since Totz's gain on sale of corporate headquarters is not the result of a discontinued operation, Codification rule 360-10-45-5, or the most recent pending update to this rule, instructs us to include the gain in income from continuing operations before taxes, "A gain or loss recognized (see Subtopic 610-20 on the sale or transfer of a nonfinancial asset) on the sale of a long-lived asset (disposal group) that is not a discontinued operation shall be included in income from continuing operations before income taxes in the income statement of a business entity. If a subtotal such as income from operations is presented, it shall include the amounts of those gains or losses." Totz does present a subtotal for operating income in its income statement, so based on this rule, the gain on sale of headquarters must be included in that subtotal.

4. Class Action Settlement

A class action settlement, to me, would be an extraordinary item. Accounting Standards Update number 2015-01 says that, in an attempt to simplify income statements, "extraordinary item" is no longer an acceptable line item "The Board is issuing this Update as part of its initiative to reduce complexity in accounting standards (the Simplification Initiative) ... This Update eliminates from GAAP the concept of

extraordinary items.” So in accordance with this update, Totz should list the settlement in the nonoperating section, but as a class action settlement, not as an extraordinary item. Codification rule 225-20-45-16 appears to support the decision to present the settlement as is, “A material event or transaction that an entity considers to be of an unusual nature or of a type that indicates infrequency of occurrence or both shall be reported as a separate component of income from continuing operations.” I believe this presentation to be beneficial. Totz has just sued to ensure that their products are completely natural and won. This shows a social-market orientation and a dedication to preserving quality for its customers. Investors will love to see this on Totz’s income statement.

**Case 3: Rocky Mountain Chocolate Factory, Inc.—
Preparing Financial Statements**

Executive Summary:

Rocky Mountain Chocolate Factory, like case one, is involved and requires a complete understanding of the activities of the company. I took a listing of all the events that happened at the company over the course of a year and transposed that information into a general journal. In addition to producing all the major financial statements from the general journal, I display an understanding of how economic events can influence these statements. In order to complete the financial statements, this case required an understanding of the linkages between the balance sheet and the income statement. The following section includes Rocky Mountain's completed general journal, trial balance, income statement, and balance sheet. I significantly increased my understanding of the major financial statements after completing this case.

	Beginning Balance	Purchase inventory	Incur Factory wages	Sell inventory for cash and on account	Pay for inventory	Collect receivables	Incur SG&A (cash and receivable)	Pay wages	Receive franchise fee	Purchase PPE	Dividend declared and paid	All other transactions	Unadjusted trial balance	Adjust for inventory count	Record depreciati on	Wage accrual	Pre-closing balance	Closing entry	Post-closing balance
Cash and cash equivalents	1,253,947			17,000,000	-8,200,000	4,100,000	-2,000,000	-6,423,789	125,000	-498,832	-2,403,458	790,224	3,743,092				3,743,092		3,743,092
Accounts receivable	4,229,733			5,000,000		-4,100,000						-702,207	4,427,526				4,427,526		4,427,526
Notes receivable, current	0											91,059	91,059				91,059		91,059
Inventories	4,054,611	7,500,000	6,000,000	-14,000,000								-66,328	3,498,283	-216,836			3,281,447		3,281,447
Deferred income taxes	369,197											92,052	461,249				461,249		461,249
Other	224,378											-4,215	220,163				220,163		220,163
Property and Equipment, net	5,253,598									498,832		132,859	5,885,289		-698,580		5,186,709		5,186,709
Notes receivable, less current p	124,452											139,198	263,650				263,650		263,650
Goodwill, net	1,046,944											0	1,046,944				1,046,944		1,046,944
Intangible assets, net	183,135											-73,110	110,025				110,025		110,025
Other	91,057											-3,007	88,050				88,050		88,050
Accounts Payable	1,074,643	7,500,000			-8,200,000							503,189	877,832				877,832		877,832
Accrued salaries and wages	423,789		6,000,000					-6,423,789				0	0				646,156		646,156
Other accrued expenses	531,941						3,300,000					-2,885,413	946,528				946,528		946,528
Dividend payable	598,986										3,709		602,694				602,694		602,694
Deferred income	142,000								125,000			-46,062	220,938				220,938		220,938
Deferred income taxes	827,700											66,729	894,429				894,429		894,429
Common stock	179,696											1,112	180,808				180,808		180,808
Additional paid-in capital	7,311,280											315,322	7,626,602				7,626,602		7,626,602
Retained earnings	5,751,017										-2,407,167	0	3,343,850				3,343,850		3,343,850
Sales	0			22,000,000								944,017	22,944,017				22,944,017		-22,944,017
Franchise and royalty fees	0											5,492,531	5,492,531				5,492,531		-5,492,531
Cost of sales	0			14,000,000								693,786	14,693,786	216,836			14,910,622		-14,910,622
Franchise costs	0											1,499,477	1,499,477				1,499,477		-1,499,477
Sales & marketing	0						1,505,431					0	1,505,431				1,505,431		-1,505,431
General and administrative	0						2,044,569					-261,622	1,782,947				2,422,147		-2,422,147
Retail operating	0						1,750,000					0	1,750,000				1,756,956		-1,756,956
Depreciation and amortization	0											0	0				698,580		-698,580
Interest income	0											-27,210	-27,210				-27,210		27,210
Income Tax Expense	0											2,090,468	2,090,468				2,090,468		-2,090,468

Rocky Mountain Chocolate Factory, Inc				
	Unadjusted Trial Balance		Adjusted Trial Balance	
	Debit	Credit	Debit	Credit
Cash and cash equivalents	\$ 3,743,092		\$ 3,743,092	
Accounts receivable	4,427,526		4,427,526	
Notes receivable, current	91,059		91,059	
Inventories	3,498,283		3,281,447	
Deferred income taxes	461,249		461,249	
Other	220,163		220,163	
Property and Equipement, net	5,885,289		5,186,709	
Notes receivable, less current po	263,650		263,650	
Goodwill, net	1,046,944		1,046,944	
Intangible assets, net	110,025		110,025	
Other	88,050		88,050	
Accounts Payable		877,832		877,832
Accrued salaries and wages		0		646,156
Other accrued expenses		946,528		946,528
Dividend payable		602,694		602,694
Deferred income		220,938		220,938
Deferred income taxes		894,429		894,429
Common stock		180,808		180,808
Additional paid-in capital		7,626,602		7,626,602
Retained earnings		3,343,850		3,343,850
Sales		22,944,017		22,944,017
Franchise and royalty fees		5,492,531		5,492,531
Cost of sales	14,693,786		14,910,622	
Franchise costs	1,499,477		1,499,477	
Sales & marketing	1,505,431		1,505,431	
General and administrative	1,782,947		2,422,147	
Retail operating	1,750,000		1,756,956	
Depreciation and amortization	0		698,580	
Interest income		27,210		27,210
Income Tax Expense	2,090,468		2,090,468	
	\$ 43,157,439	\$ 43,157,439	\$ 43,803,595	\$ 43,803,595

Rocky Mountain Chocolate Factory, Inc.			Section K	
Income Statement				
For the year ended February 28, 2010				
Revenues			Transaction:	Type of cash flow:
Sales		\$ 22,944,017		
Franchise and royalty fees		5,492,531	1	operating
Total revenues		28,436,548	2	operating
Costs and Expenses			3	operating
Cost of sales		14,910,622	4	operating
Franchise costs		1,499,477	5	operating
Sales & marketing		1,505,431	6	operating
General and administrative		2,422,147	7	operating
Retail operating		1,756,956	8	operating
Depreciation and amortization		698,580	9	investing
Total costs and expenses		22,793,213	10	financing
Operating Income		5,643,335	11	-
Other income (expense)			12	operating
Interest income		27,210	14	operating
Income before Income Taxes		5,670,545	15	-
Income Tax Expense		2,090,468		
Net Income		\$ 3,580,077		

Rocky Mountain Chocolate Factory, Inc			
Balance Sheet			
February 28, 2010			
Assets		Liability and Stockholder's	
Current Assets		Current Liabilities	
Cash and Cash Equivalents	\$ 3,743,092	Accounts payable	\$ 877,832
Accounts receivable, less allowance for doubtful accounts	4,427,526	Accrued salaries and wages	646,156
Notes receivable, current	91,059	Other accrued expenses	946,528
Inventories, less reserve for slow moving inventory	3,281,447	Dividend payable	602,694
Deferred income taxes	461,249	Deferred income	220,938
Other	220,163	Total current liabilities	3,294,148
Total current assets	12,224,536		
Property and equipment, net	5,186,709	Deferred income taxes	894,429
Other Assets			
Notes receivable, less current portion	263,650	Stockholder's Equity	
Goodwill, net	1,046,944	Common Stock	180,808
Intangible assets, net	110,025	Additional paid-in capital	7,626,602
Other	88,050	Retained earnings	6,923,927
Total other assets	1,508,669	Total stockholder's equity	14,731,337
Total Assets	\$18,919,914	Total liabilities and stockholder's equity	\$18,919,914

Case 4: Fraud Schemes

Executive Summary:

Fraud schemes proved to be an incredibly relevant case. I took an audit accounting class shortly after and then completed an audit internship after that. Audit accounting deals with the study of fraud schemes and how best to prevent them. While my audit class was not enlightening, my internship certainly was and is highly relatable to this case. The following section represents the foundation of my understanding of the principles of audit accounting.

Potential Fraud Scheme	Internal Control
The store only has one credit card machine located in between the two cash registers.	<u>Documentation</u> - Transactions could get mixed up between the two cash registers: have a credit card machine for each cash register. Running two different purchases at the same time could allow for an employee to steal money: have proper documentation for theft prevention. If the credit card machine fails, there is no way to track transactions/ inflow or outflow of money: have an alternate system of documentation in addition to the credit card machine and two cash registers.
Every single employee has their own access code to both registers, increasing the risk of possible errors or discrepancies during transactions.	<u>Access Controls</u> - Limit the number of workers with access to the registers and/or assign employees to certain registers that they can use. Check the accounting software to identify any variances under specific users.
Employees can steal inventory.	<u>Physical Audits</u> - The store should perform a physical inventory count once a month (or after a certain period of time) and compare physical inventory with recorded inventory.
Employees could alter the amount of cash removed from the cash registers so that the amount of money on the receipts and the amount removed from the register do not match up.	<u>Reconciliations</u> - Reconcile the register tape with the store sales receipts. The amount of cash and credit sales should equal the amount of the register and store sales receipts. Also take a physical count of money totals in each cash register at the end of each day.
Lucy has the ability to incorrectly record the daily sales and take money from the register.	<u>Separation of Duties</u> - One employee should monitor Lucy while she records daily sales. Another employee should evaluate Lucy's documentation for any errors. Alternatively, one employee should record the sales and another employee should prepare the bank deposits.
Electronic cash registers could be hacked from an outside source. No employee has a key to the register, leaving it vulnerable to outside access.	<u>Access Controls</u> - More security is required for the cash registers. Additional passwords and theft protection software is needed. Lucy and Kayla should have keys to the registers for managerial duties. Each time one of them opens a register, another employee must be present to monitor their activity.
Lucy has the ability to steal from the store when dealing with small customer issues. She is able to	<u>Separation of Duties</u> - One employee should deal with the customer issue while another employee issues the refund or new product.

falsify refunds for customers that do not exist.	
Because the clerks have full authority to perform all types of transactions, they are able to create fake returns and steal money from the register.	<u>Physical Audits</u> - Performing regular physical inventory examinations would help prevent employees from stealing from the store. Only authorize certain employees to perform certain transactions.
Every single employee works on Saturday; each has the ability to collude with another employee on this day.	<u>Separation of Duties</u> - Each employee needs to rotate shifts and work with different employees every day of the week that he/she works.
Lucy has her own locked office. She could conceal fraudulent behavior more easily than the other employees. Her office is located in the back of the store away from other employees and customers.	<u>Access Controls</u> - Lucy should have video or other surveillance installed in her office. She should have windows that allow visible access into her office. Kayla should have a key to Lucy's office to monitor her actions.
Lucy prepares the bank deposits and records daily sales.	<u>Separation of Duties</u> - Kayla should examine and approve bank deposits and daily sales before they are completed in order to minimize fraud.
Advertising expenses could have been overstated and an employee could have pocketed the extra funds.	<u>Documentation</u> - Employees should be required to document every single transaction to the exact dollar amount that pertains to advertising and promotion. Kayla should check these transactions with the physical product.
Clerks are able to use coupons every time they purchase inventory from the store and can steal the difference from the register.	<u>Authority Approval</u> - Lucy or Kayla should be the only ones that can approve discounts and coupons with a unique code. If there is a large number of coupons, the coupons should be required to be scanned in before the sale and collected to show the customer the total that he/she owes.
As seen in the anonymous note left on her desk, Kayla leaves her office unlocked. Employees can steal money or inventory from her office.	<u>Access Controls</u> - Kayla should install office doors that automatically lock when they shut. This would prevent anonymous people from walking undetected into Kayla's office. Alternatively, Kayla should practice locking her door every time she leaves her office.
Employees are able to steal cash from the register during the day	<u>Access Controls</u> - Employees should be required to close out their cash box at the end of their shift at a particular register. This would show who is responsible

without Kayla knowing exactly which employee stole the cash.	if money goes missing. Employees should be required to only work on one register during his/ her shift, and each cash register should only be used by one employee each shift.
--------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Additional Potential Fraud: If Kayla (the owner) is a potential suspect.

Kayla, acting as the owner of her store, also has the opportunity to steal from herself. Her ownership position would offer a good cover-up for committing fraud. She has her own office in the back of the store that only she has access to. She also has ultimate authority over the perpetual inventory records and inventory orders, she pays bills, handles payroll, takes deposits to the bank, and reconciles bank statements. She could easily steal from her business if she wanted to because she does not separate her powers, nor does she have anyone check all of the bank reconciliations that she deposits herself. Although Lucy prepares the bank deposits, Kayla could make new ones and deposit those without any approval or oversight from other employees. She also has overall control over the internal accounting system, so she could easily adjust the inventory, deposits, sales, returns, etc. in order for her to steal whatever she wants. As mentioned earlier, Kayla also has her own locked office in the back where she could hide the evidence of her theft and conspire to steal more.

Case 5: Inventory Impairment

Executive Summary:

Inventories are an incredibly complex topic within accounting. Inventory has a massive influence on net income, perhaps greater than anything else after sales. Since so much of the bottom line depends on the inventory calculation, there is great incentive for companies to manipulate the way their inventories are accounted for. The following case shows inventory from purchase to manufacturing and the accounting procedures for all of these events.

1. Raw materials inventory includes all costs of the actual materials required for production that have not been processed yet. This might include purchase of steel or plastic or whatever raw materials are needed for production. Work-in-process inventory includes the cost of any materials added during production, the cost of labor in production, as well as a proportional share of overhead. Finished goods inventory includes the cost of all goods that are fully processed but not yet sold.
2. Inventories are reported net of an estimated allowance of obsolete or unmarketable inventory. This allowance takes into account current inventory count, sales trends, historical experience, and management's prediction of the market in order to report a more accurate level of inventory.
3.
 - a. Inventory is reported net. Allowance for obsolete or unmarketable inventory appears on that same line item in the assets section of the balance sheet, although not stated separately and included in the amount reported for inventory.
 - b. Gross inventory is the net amount (found on the balance sheet) plus the corresponding year's balance for allowance for obsolete and unmarketable inventory. Gross inventory for 2011 is \$243,870 and \$224,040 for 2012.
 - c. The entire reserve for obsolete inventory is attributable to finished goods because this is where goods are likely to become obsolete.
4. Reserve for obsolete inventory:

Provision:

Allowance for obsolete inventory	13,348	
Finished Goods Inventory		13,348

Write-off:

Write off/Disposal	11,628	
Allowance for obsolete inventory		11,628

5. T-accounts:

Raw Materials		Work in Process	
46,976		1,286	
577,909		126,000	
	126,000	455,416	
	455,416		582,083
43,469		619	

Finished Goods	
184,808	
582,083	
	585,897
	13,348
167,646	

Accounts Payable	
571,545	
	39,012
	577,909
	45,376

Cost of Sales	
-	
585,897	
585,897	

- a. Cost of goods sold in the current year: \$585,897
 - b. Cost of goods manufactured: \$582,083
 - c. Cost of raw materials transferred to work-in-process in the current year: \$455,416
 - d. Cost of raw materials purchased in the current year: \$577,909
 - e. Cash disbursed for raw material purchases during the current year: \$571,545
6. Inventory turnover ratio is found by dividing the year's cost of sales by average inventories, net. In 2011, the company had cost of sales of \$575,226 and average inventories of \$250,831 for a turnover ratio of 2.29. In 2012, the company had cost of sales of \$585,897 and average inventories of \$222,402 for a turnover ratio of 2.63.
7. Inventory holding period is a measure of how many days it takes a company to sell its inventory. Simply put the inventory turnover ratio in terms of days by dividing 365 days by the ratio. The inventory holding period in the prior year is

159.39 days (365 divided by 2011 turnover ratio 2.29). In the current year, it is just 138.78 days (2012 inventory turnover ratio is 2.63). This year's inventory turns over approximately 20.61 days faster, so the company is becoming more efficient in its inventory management.

8. The reserve for obsolete inventory has a balance of \$13,348. Of total inventory (\$180,994), obsolete goods make up about 7.4%. The first question for both an analyst and an investor would be- why did these goods go obsolete? Followed by- what is a solution to decrease our obsolete goods? And is that solution cost-effective?

Case 6: WorldCom Inc

Executive Summary:

WorldCom represents the most significant accounting event in my lifetime. For anyone going into the field of public accounting, it is vital to understand the formative events in the field and this is one of them. I had always been interested on my own, but never willing to dive this deep. The following case required us to essentially create a case against the accounting methods employed by Arthur Andersen and WorldCom and back it up with actual FASB regulation. In the end, I gained an understanding of FASB standards surrounding the capitalization of assets as well as the constant temptation felt by management to manipulate financial statements.

a. **SCON No. 6 on assets and expenses:**

FASB concept statement number 6 defines assets as something with a possible future economic benefit meaning something expected to earn revenue for the entity. Expenses are outflows of money, by expense of asset or incurrence of liability, that are necessary to continue with normal, daily operations.

In general, whether the item will yield revenue in the future is the deciding factor for whether to expense or capitalize the cost. As it relates to this case, we must determine what costs were capitalized, and what the rationale for capitalizing them is. I would point out that the definition does not specify in physical terms what an asset must be, but it does imply in its definition that it is something that can stand alone after its acquisition for some period. Costs related to local telephone network access charges do not represent an item that can stand alone for any amount of time. Sullivan might contend that these line costs are an investment in access to that area that will lead to revenues. However, they do not generate revenues, they simply allow revenue to take place in the future. The costs do not result in any actual asset, so they must be expensed.

b. **Treatment of costs after their capitalization:**

When a cost is capitalized, it means to pay the cost with cash or credit and then establish an asset in the amount of the cost. That asset will only produce revenue

for the company for a certain length of time, called its useful life, so it must only stay on the books that long. To do this, the company determines the useful life of the asset, then considers the total value of that asset and calculates how much of it is “used up” or depreciated each period of the asset’s life. That amount is debited as an expense each period along with a reduction of the asset.

When a company decides to capitalize a cost rather than expense it, an asset is created on the balance sheet. In theory, the asset will produce revenue to match or exceed the amount it depreciates each period, maintaining balance in the accounting equation. On the income statement, capitalizing a cost takes away a massive expense which falsely inflates net income.

c. Line costs:

WorldCom reported 14.739 billion in line costs in 2001. These line costs consist mainly of charges paid to local telephone networks to complete calls. In my words- line costs are a group of expenses that may or may not relate to an actual line, but purposely kept vague so that these costs can be excluded without detection.

d. Line cost transactions:

These costs relate to charges paid to local telephone networks to complete calls. The transactions that gave rise to these costs were routine and likely unknown by the local telephone networks themselves. WorldCom falsely treated these costs as an asset and capitalized them to avoid the expense in the current year and inflate the bottom line. These costs do not meet my definition of an asset.

e. Journal entry:

Line Costs	3.055 billion	
Accounts Payable		3.055 billion

These costs appeared in the property, plant, and equipment section of the balance sheet, spread amongst transmission equipment; communication equipment; furniture, fixtures, and other; and construction in process. They appear in the investing section of the statement of cash flows.

f. 2001 Depreciation Expense:

Quarter	Incurred	Depreciation	Portion for year
1	771,000,000	35,045,454.55	35,045,454.55
2	610,000,000	27,727,272.73	20,795,454.55
3	743,000,000	33,772,727.27	16,886,363.64
4	931,000,000	42,318,181.82	10,579,545.45
2001 Depreciation Expense			83,306,818.18

Depreciation Expense	83,306,818.18	
Accumulated Depreciation		83,306,818.18

g. Restated Net Income:

Income before taxes	\$ 2,393,000,000
Add: Depreciation, 2001	83,306,818
Deduct: Improperly capitalized line costs	(3,055,000,000)
Loss before tax, restated	(578,693,182)
Income tax benefit	202,542,614
Minority interest (noncontrolling)	35,000,000
Net loss, restated	\$ (341,150,568)

WorldCom reported a net income of over 1.5 billion for what should have been a 340-million-dollar loss. Yes, the difference in net income is material.

Case 7: Targa Company—Accounting for Restructuring a Business Line

Executive Summary:

The following analysis provides instruction for accounting for Targa Company as it proceeds with a relocation of its business line and termination of certain employees. The codification gives relevant guidance on this topic in sections 420-10 and 720-45. The employee benefit is not recognized until incurred, meaning \$3,000,000 of benefit will be listed on the balance sheet for the current year. The additional \$50,000 will not appear until next year when that cost is incurred. The costs of relocating and retraining the employees at the new plant has been incurred and should appear as a liability on the balance sheet for the year 20X1.

(1) Accounting for Employee Benefits

Targa is restructuring its Armor Track business line and needs to terminate a number of employees in the research and development department. Guidance for this situation is found in Codification section 420-10-25-4:

“An arrangement for one-time employee termination benefits exists at the date the plan of termination meets all of the following criteria and has been communicated to employees (referred to as the communication date):

- a. Management, having the authority to approve the action, commits to a plan of termination.
- b. The plan identifies the number of employees to be terminated, their job classifications or functions and their locations, and the expected completion date.
- c. The plan establishes the terms of the benefit arrangement, including the benefits that employees will receive upon termination (including but not limited to cash payments), in sufficient detail to enable employees to determine the type and amount of benefits they will receive if they are involuntarily terminated.
- d. Actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.”

The communication date of their arrangement is December 27, 20X1 when the Director of Human Resources sent the internal memo informing employees of the new policy. Targa’s arrangement meets these criteria, as George Axeswinger indicated that the plan is coming from management. The plan identifies an approximate 120 to 125 engineering, facility management, and operational management employees at the Brooklyn Park, Minnesota plant to be terminated. The expected completion date is January 31, at which time affected employees will receive a total benefit of 12-weeks’ pay. The official nature of the memo, along with the words from the CEO, indicate that this plan is unlikely to change or be withdrawn.

Section 420-10-25-9 outlines the treatment of the benefit in the financial statements. Targa should recognize the total benefit of \$3,000,000 as a liability on the balance sheet at December 31. It should expense the liability ratably over the future through the completion date of January 31, 20X2. The additional benefit of \$50,000 for the facility manager should be recognized upon closure of the facility.

“As indicated in paragraph 420-10-30-6, if employees are required to render service until they are terminated in order to receive the termination benefits and will be retained to render service beyond the minimum retention period, a liability for the termination benefits shall be measured initially at the communication date based on the fair value of the liability as of the termination date, and shall be recognized ratably over the future service period.”

(2) Accounting for Retraining and Relocation Costs

In addition to the employee benefit liability, Targa must account for the costs of relocating and retraining employees. The relocation cost of \$500,000 is essentially a disposal cost. Section 420-10-25-1 advises recognition of the liability when it is incurred. The relocation cost will appear on the balance sheet as a liability on December 31, 20X1.

“A liability for a cost associated with an exit or disposal activity shall be recognized in the period in which the liability is incurred, except as indicated in paragraphs 420-10-25-6 and 420-10-25-9 (for a liability for one-time employee termination benefits that is incurred over time). In the unusual circumstance in which fair value cannot be reasonably estimated, the liability shall be recognized initially in the period in which fair value can be reasonably estimated (see paragraphs 420-10-30-1 through 30-3 for fair value measurement guidance).”

The staff training costs of \$1,500,000 are treated similarly. They are incurred before year-end, so they must be included on the balance sheet as a liability for 20X1. They will be expensed on the income statement in the following year. Sections 420-10-25-14 and 15 spell this out.

“Other costs associated with an exit or disposal activity include, but are not limited to, costs to consolidate or close facilities and relocate employees.”

“The liability shall not be recognized before it is incurred, even if the costs are incremental to other operating costs and will be incurred as a direct result of a plan. A liability for other costs associated with an exit or disposal activity shall be recognized in the period in which the liability is

incurred (generally, when goods or services associated with the activity are received).”

In addition to section 420-10 on disposal costs, section 720-45-55 describes a business process reengineering. Staff training costs are accounted for the same under either classification.

“The following table sets forth the accounting for typical components of a business process reengineering/information technology transformation project based on whether the item should be:

- a. Expensed as incurred in accordance with the guidance contained in this Subtopic
- b. Expensed as incurred in accordance with internal-use software guidance contained in Subtopic 350-40
- c. Capitalized in accordance with internal-use software guidance contained in Subtopic 350-40
- d. Capitalized as part of the cost of acquiring a fixed asset in accordance with a company's existing policy.

(Note that letters in the grid refer to the corresponding guidance listed above.)

Steps	Third Party		Internal	
	Expense	Capitalize	Expense	Capitalize
Business process reengineering and information technology transformation:				
Preparation of request for proposal	a		a	
Current state assessment	a		a	
Process reengineering	a		a	
Restructuring work force	a		a	
Preliminary software project stage activities:				
Conceptual formulation of alternatives	b		b	
Evaluation of alternatives	b		b	
Determination of existence of needed technology	b		b	
Final selection of alternatives	b		b	
Application development stage activities:				
Design of chosen path, including software configuration and software interface		c		c
Coding		c		c
Installation to hardware		c		c
Testing, including parallel processing phase		c		c
Data conversion costs:				
a. Costs to develop or obtain software that allows for access of old data by new system		c		c
b. All other data conversion processes	b		b	
Training	b		b	
Post-implementation/operation stage activities:				
Training	b		b	
Application maintenance	b		b	
Ongoing support	b		b	
Acquisition of fixed assets:				
Purchase of new computer equipment, office furniture, or work stations		d	N/A	N/A
Reconfiguration of work area—architect fees and hard construction costs		d		d ”

The table above lists training costs under “post-implementation stage”. They are to be expensed as incurred as described in the excerpt “b.”. Whether the retraining costs are determined to be part of disposal or part of a business process reengineering, they are accounted for the same and listed on the balance sheet as a liability when they are incurred.

Case 8: Merck & Co., Inc.- Shareholder's Equity

Executive Summary:

The following report is an analysis of Stockholder's Equity using a pharmaceutical company based in New Jersey, Merck & Co., Inc., as an example. This case includes an analysis of stockholders' equity disclosures, as well as the specifics of Merck & Co.'s own stockholders' equity disclosures. After answering questions on the specifics of Merck & Co.'s stockholders' equity section, this report offers an explanation and discussion of why companies pay dividends and repurchase their own stock. Finally, there are a number of equity and dividend-related ratios that are used to compare the equity sections of Merck & Co. in 2006 and 2007.

a. Consider Merck's common shares.

- i. How many common shares is Merck authorized to issue?
 - 5,400,000 shares authorized
- ii. How many shares has Merck actually issued at 12/31/07?
 - 2,983,508,675 shares
- iii. Reconcile number of shares issued at 12/31/07 to the dollar value of common stock reported on the balance sheet.
 - The 2,983,508,675 shares issued multiplied by par value \$0.01 equals the \$2,983,508,675 dollar value found on the balance sheet.
- iv. How many ordinary shares are held in treasury at December 31, 2007?
 - 811,005,791
- v. How many common shares are outstanding at December 31, 2007?
 - 2,172,502,884
- vi. Calculate the total market capitalization of Merck on December 31, 2007.
 - 125,157,891,147.24

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?

Companies pay dividends on their common shares in order to honor a promise to the investor first and foremost. When they pay dividends, it may actually lower the stock price as some future earnings are being liquidated out. Paying of dividends is typically positive and shows that the company has the cash to cover its dividend obligation. However, the company may have different reasons for paying certain types of dividends. In some situations a company may pay a cash

dividend instead of a stock dividend if they are out of growth opportunities, because otherwise they would reinvest the dividends in the company.

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

If a company believes its shares are undervalued, it may buy up treasury stock which decreases the shares outstanding and raises the stock price. In addition, they may do this to increase their ownership stake and avoid a hostile takeover.

e. Consider Merck's statement of cash flow and statement of retained earnings. Prepare a single journal entry that summarized Merck's common dividend activity for 2007.

Retained Earnings	3310.7	
Dividends Payable		3.4
Cash		3307.3

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

- i. Describe the method Merck uses to account for its treasury stock transactions.
 - Cost method
- ii. Refer to note 11- how many shares did Merck repurchase on the open market during 2007?
 - 26.5 million shares
- iii. 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?
 - They paid \$1,429.7 million or \$53.95 per share. This is a financing cash flow.
- iv. Why doesn't Merck disclose its treasury stock as an asset?
 - Treasury stock, by definition, is not an asset. But beyond that, Merck may receive a cash benefit from the sale of their treasury stock one day but this is not actual income and will not make it into the financial statements as income.

- i. **What differences do you observe in Merck's dividend-related ratios across the two years?**

	2007	2006
Dividends paid (<i>in millions</i>)	3,307.3	3,322.6
Shares outstanding	2,172,502,884	2,167,785,445
Net income (<i>in millions</i>)	3,275.4	4,433.8
Total assets (<i>in millions</i>)	48,350.7	44,569.8
Operating cash flows (<i>in millions</i>)	6,999.2	6,765.2
Year-end stock price	57.61	41.94
Dividends per share	1.52	1.53
Dividend yield (dividends per share to stock price)	0.03	0.04
Dividend payout (dividends to net income)	1.01	0.75
Dividends to total assets	0.07	0.07
Dividends to operating cash flows	0.47	0.49

As far as Merck's dividend-related ratios, dividends per share decreased slightly from 2006 to 2007. The dividend yield had a similarly small decrease. There was a significant increase in dividend payout, as net income (the denominator) went down significantly. Dividends to total assets remained the same as the amount of dividends and total assets did not vary materially from 2006 to 2007. There was a small decrease in dividends to operating cash flows, as there was a slight rise in operating cash flows in 2007.

Case 9: Xilinx, Inc.—Stock-Based Compensation

Executive Summary:

The following report includes a study of Xilinx, Inc.'s use of stock-based compensation. This case analyzes stock-based compensation as a whole, as well as three different forms used by Xilinx including stock options, restricted stock units, and an employee stock purchase plan. This case explains the terms related to stock-based compensation disclosures, the differences in forms of stock-based compensation, as well as the accounting for such costs. There is an outline of the key information related to stock-based compensation in Xilinx's 2013 financial report. Finally, I compare the trends in "The Last Gap for Stock Options" to trends revealed in the financial report.

a. Explanation of stock option plan and incentive it provides to employees:

Xilinx uses a stock compensation plan in which they grant employees options to purchase stock at a set price, pending their continued service to the firm. The company records payment with stock options at fair value with a debit to compensation expense and a credit to additional paid-in-capital. The company issues common stock when the holder exercises the option. Plans like this one incentivize employees to stay with the company until the exercise date. The exercise date is often many years down the road. At the same time, their stock compensation could be extremely valuable at the exercise date, creating a great incentive for employees.

b. Comparison of stock options and RSUs:

Restricted Stock Units are another form of stock compensation with some minor differences. Like stock options, the employee must fulfill the vesting requirements before they are given any stock. Unlike a stock option, a RSU may be paid in shares or in a cash equivalent of the number of shares used to value the unit. Companies might offer both of these options in case the employee does not want to assume the risk of the stock price never going above the exercise price. Options are the option to buy, whereas the holder of an RSU receives shares upon vesting regardless of stock price.

c. Explanation of terms in Notes 2 and 6:

Grant date is the day the company pays the employee with stock compensation. The exercise price is the price at which the employee has the right to buy the stock after some point in the future. The vesting period is the time between the grant date and when the option becomes exercisable. Expiration date is the date at which the holder loses the option to buy at the exercise price. Options/RSUs granted are the amount of options with which the company has paid employees. Options exercises are the options that have passed the vesting period and been

exercised by their holder. Options forfeited or cancelled are options that have been voided in some way- either by expiration or the employee leaving.

d. Explanation of employee stock purchase plan, incentives it provides, and differences between that and incentives of stock options and RSUs:

The company's stock purchase plan is another way for the company to incentivize employees with stock compensation. Employees receive a 24-month purchase right with essentially 4 different purchase opportunities. A large percentage of employees participate (78%) which allows the company to offer the shares at 85% of market price. The employee can immediately turn around and sell for a 15% profit. This is different from other plans because they are a shorter period of time. Another difference is that the purchase plan is treated much like a payroll deduction. Qualified employees can choose to have a portion of their paycheck put in a fund for this purchase plan. This fund is nontaxable, and it allows the employee to accumulate the fund in anticipation of a purchase period.

e. Accounting for stock-based compensation:

For all types of stock-based compensation, Xilinx, Inc. records the cost of compensation as "Compensation Expense" on the grant date based on the grant-date fair value of the award. This grant date fair value is determined using the Black-Scholes option pricing model. The exercise price of the stock is the NASDAQ market price on the grant date. Like stock options and restricted stock, the employee stock purchase plan is also considered compensatory and therefore included in stock-based compensation expense. This expense is recorded over the service period of the award, also known as the vesting period. The company uses straight-line method of recognition for compensation expense. When stock options are exercised or cancelled, tax assets for options with multiple vesting dates are eliminated on a first-in, first-out basis.

f. Details of stock-based compensation from Xilinx annual report:

- i. 2013 stock -based compensation expense: \$77,862,000
- ii. Compensation expense is included in line items cost of revenues, research and development expense, and selling, general and administrative expense on the statement of income. This is because compensation expense is given to all employees including factory workers (COGs), scientists (research and development expense), and managers (selling, general and administrative expense). Therefore, the cost of stock-based compensation is allocated among these three expenses proportionate to the workers in each category receiving compensation.

- iii. 2013 expense is an increase in cash flows of 77,862,000. It appears in the operating cash flows section listed under “stock-based compensation”.
- iv. Xilinx’s 2013 stock-based compensation expense results in a reduction to income taxes. By recording the cost of stock-based compensation against income, Xilinx has fewer earnings before tax, and therefore is able to pay less income tax. It is probable that Xilinx would compensate employees at an amount comparable to the stock-based compensation anyways, so this treatment is favorable to Xilinx from an income tax perspective.
- v. Journal entries to record 2013 stock-based compensation expense as well as the income tax effect/benefit.

12/31/2013 Cost of Revenues	6,356	
Research and Development Expense	37,937	
Selling General and Admin Expense	33,569	
PIC - stock options		77,862
<i>To record stock-based compensation expense.</i>		
12/31/2013 Deferred Tax Asset	22137	
Income Tax Expense		22137
<i>To record tax effect of stock-based compensation.</i>		

i. Wall Street Journal article titled “Last Gap for Stock Options”.

- i. The article mentions a trend of companies steering away from stock options as compensation for employees to restricted stock. This trend was prompted by the financial crisis, which left many people with options that would never reach their exercise price. These worthless options caused companies to look for a form of stock-based compensation that could guarantee a certain level of value for the holder. In addition, because restricted shares are worth more to start, companies give out fewer of them than options, which means less dilution of holdings for shareholders. For the company, new accounting standards require that stock options be reported as an expense, and companies have quit the practice to avoid having to record this compensation against income. Accounting for restricted stock is less complex which also makes it more attractive to the for the company. As for the employees’ preference- I think they would want restricted stock. It should be noted that stock options are potentially much more powerful in terms of generating wealth. An increase in stock

price has a more dramatic effect on an option than restricted stock. In addition, the holder of an option has more control over tax consequences than does the holder of restricted stock. Despite all that, the only form an employee can count on is restricted stock, which is why an employee would choose an RSU first.

- ii. The data on Xilinx's use of options versus restricted stock on pages 62 and 63 of the financial report mirrors the trends discussed in this "Last Gap for Stock Options". Xilinx granted 2,345 stock options in 2010, but have steadily declined each year, granting just 92 two years later. At the same time, there is a consistent increase in restricted stock granted for 2010 through 2013, from 2,043 granted in 2010 up to 5,239 in 2012.

Case 10: Revenue Recognition

Executive Summary:

This case was topical as we completed it during the time that a new revenue recognition principle was rolled out. This is an extremely important concept in accounting as revenue is a basis metric of a company's success. The incentives to manipulate revenue are vast. The AICPA saw a need to redefine the standard for revenue recognition and this case displays a comprehensive understanding of that concept.

Part I:

Background:

Week 1: a college student walks into the Bier Haus on campus and orders a large plastic cup of beer. The bartender takes the order and says it will cost \$5. The student hands the bartender \$5. The bartender then pours the beer into a large cup and hands it to the student. The student rushes off to ACCY 304.

Requirements:

1. Read ASC 606-10-05-04, 606-10-25-1 and 606-10-25-30.
2. How does each step in the five-step revenue model apply to this transaction?

Step 1: The contract was identified after the student ordered the beer and agreed to pay the cost of \$5.

Step 2: The performance obligation is established when the customer pays his \$5. This obligates the bartender to pour and serve the beer. The performance obligation is satisfied when the bartender hands over the beer.

Step 3: The customer requests a beer, and the bartender responds with the transaction price. In this case, the menu may establish the transaction price, or the bartender may say it costs \$5.

Step 4: This contract includes just one performance obligation. Allocate the entire \$5 to the contract, as the contract is 100% complete.

Step 5: In this case, revenue is recognized immediately. Once the student runs off to ACCY 304, the performance obligation has been satisfied and payment has been received. Bier Haus will recognize the entire \$5 on that date.

3. Prepare the journal entry to record the transaction.

Cash	5.00	
Sales Revenue		5.00

Part II:

Background:

Week 2: the same student goes into the Bier Haus and orders a large beer in an Ole Miss thermal beer mug as part of a “drink on campus” campaign. The student plans to use this mug daily for refills rather than using plastic cups. The bartender pours the beer into the mug and delivers it to the student. The bartender then collects \$7 from the student. Standalone selling prices are \$5 for the beer and \$3 for the mug, so the student got a bargain on the combined purchase. The student takes the beer in the new mug and enjoys it while reading the codification.

Requirements:

1. Read ASC 606-10-25-19 to 22 and 606-10-32-31 to 32.
2. How does each step in the five-step revenue model apply to this transaction?

Step 1: Just like part one, the contract is identified when the customer orders a beer.

Step 2: The performance obligation is established when the customer places the order and pays \$7. This obligates the bartender to pour and serve a beer in an Ole Miss thermal beer mug. It also obligates the bartender to refill the beer mug in the future.

Step 3: The transaction price in this scenario is \$7.

Step 4: In this case, the individual performance obligations have a different total cost than the transaction price (effect of the discount). Using a total cost of 7, and relative costs of 3 and 5 for the mug and beer respectively, cost allocated to the mug is \$2.62 and \$4.38 to the beer.

Step 5: Revenue is recognized immediately on the day the bartender makes the sale.

3. Prepare the journal entry to record the transaction.

Cash	7.00	
Sales Revenue - beer		4.38
Sales Revenue - mug		2.62

Part III:

Background:

Week 3: the same student goes into the Bier Haus bringing in his beer mug and orders a large beer and a pretzel. Standalone selling prices are \$5 for the beer and \$2 for the pretzel. The bartender tells the student they are out of pretzels. The bartender then offers the student the large beer and a coupon for two pretzels (its typical business practice) for \$7. The student pays the \$7 to the bartender. The bartender gives the student a coupon for two pretzels. The bartender pours the beer into the beer mug and hands it to the student. The student then takes the beer and the coupon and heads to the dorm to study for the upcoming Intermediate accounting exam. The Bier Haus sells a coupon for two pretzels for \$3.50. To increase visits, these coupons can be redeemed any date after the date of

purchase. The Bier Haus has limited experience with these coupons but, so far, these coupons have always been redeemed.

Requirements:

1. Read ASC 606-10-25-2 to 6.
2. How does each step in the five-step revenue model apply to this transaction?

Step 1: In the end, the contract in this situation is for the bartender to fill a beer mug and provide 2 pretzels sometime in the future for \$7.

Step 2: The performance obligation satisfied when the bartender fills and serves the beer and hands the customer a pretzel coupon. Note that the bartender is still obligated to provide a pretzel in the future.

Step 3: The transaction price is \$7 for a refill and a coupon for 2 pretzels.

Step 4: To allocate the transaction price, we must determine the individual performance obligation cost. The beer is \$5. The coupon is \$2, but actually costs \$3.50. Based on performance obligation costs, \$4.12 should be allocated to the beer and \$2.88 to the coupon.

Step 5: Recognize revenue for the beer now, since that obligation is satisfied when the sale is complete. Do not recognize revenue for the pretzel, as the performance obligation has not yet been satisfied.

3. Prepare the journal entry to record the transaction.

To record the beer sale immediately:

Cash	5.00	
Sales Revenue		5.00

To record pretzel sale at redemption:

Cash	2.00	
Discount	1.50	
Sales Revenue		3.50

Part IV:

Background:

Week 4: the same student goes into the Bier Haus and orders two pretzels. The bartender takes the order and asks for a \$4 payment. The student hands the bartender the coupon. The bartender reviews the coupon, determines its validity, and accepts it as payment. The bartender gives the student the two pretzels. The student then heads off to share the pretzels with a classmate from ACCY 420.

Requirements:

1. How does each step in the five-step revenue model apply to this transaction?

Step 1: The contract is for the bartender to provide the customer with two pretzels. This contract was previously established when the bartender sold the coupons.

Step 2: The performance obligation is satisfied when the bartender brings the customer two pretzels.

Step 3: The transaction price is \$4.

Step 4: There are no performance obligations other than for the bartender to provide the pretzels. This costs \$4 so all \$4 is allocated.

Step 5: The bartender recognizes revenue from the sale of the coupon at this date.

2. Prepare the journal entry to record the transaction.

Cash	2.00	
Discount	1.50	
Sales Revenue		3.50

Case 11: ZAGG Inc.—Deferred Income Taxes

Executive Summary:

The following report includes a study of ZAGG, Inc.'s use of deferred income taxes. This case identifies ZAGG's book income within the financial statements and then differentiates between book and taxable income. This case defines key terms associated with tax differences and rates and analyzes how companies report deferred income taxes. It differentiates tax assets and liabilities and explains a valuation allowance situation. Finally, this case details the information in Note 8—Income Taxes including journal entries for those transactions.

- a. 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 the company's book income differs from its taxable income.**

Book income is the amount of net income the company reports on the income statement. It is basically total revenues minus total expenses in accordance with GAAP. It is also called financial income, income before income taxes, or in the case of ZAGG, "Income before provision for income taxes". ZAGG's book income is \$23,898,000. Taxable income is often different from book income, and is used to calculate the income tax expense. Certain exemptions and deductions are considered in taxable income that may not appear on the income statement.

- b. Define the following:**

- i. Permanent tax differences (and example)**

A permanent tax difference refers to an expense that will not be eligible for any type of tax break or deduction. Most costs incurred in the basic operation of business fall under this category. For example, a company has a capital expenditures of \$5,000 for the year (capital expenditures typically do not qualify for deductions). This means there is a permanent tax difference of \$5,000 between book income and taxable income for the period.

- ii. Temporary tax difference (and example)**

A temporary tax difference refers to income recognized under the cash-basis of accounting (commonly used for tax purposes AKA in calculation of taxable income) that is not yet earned under GAAP, or accrual-basis of accounting. For example, the cost of an asset (e.g. depreciation) may be deducted faster for tax purposes than it is expensed on the financial statements. If a company recognizes \$10,000 depreciation for taxable income but has \$8,000 depreciation expense on the financial statements, that is a temporary tax difference of \$2,000.

iii. Statutory tax rate

Statutory tax rate is the tax rate imposed by legal standards.

iv. Effective tax rate

Effective tax rate is the average rate a company actually pays in income taxes. This is calculated by comparing actual net income to income before provision for income tax.

c. 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?

A company reports deferred income taxes because they are important to the investor and may provide information as to whether the deferred taxes are advantageous or disadvantageous for the company.

d. 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.

A deferred tax asset represents the increase in taxes refundable (or saved) in future years as a result of deductible temporary differences existing at the end of the current year. For example, a company may go ahead and book an expense as a result of pending litigation. It cannot yet recognize the expense until the result of the litigation is known, so taxable income is lower than pretax book income which creates a future tax asset or a deferred tax asset.

A deferred tax liability represents the increase in taxes payable in future years as a result of taxable temporary differences existing at the end of the current year. Refer to the depreciation example in part *ii*. The temporary tax difference of \$2,000 multiplied by the tax rate equals the deferred tax liability resulting from depreciation expense.

e. Explain what deferred income tax valuation allowance is and when it should be recorded.

The deferred income tax valuation allowance is a valuation account (like allowance for doubtful accounts or accumulated depreciation) that is used to

separate a portion of the deferred tax asset that has a greater than 50% chance that the company will not realize the full amount of the asset.

f. Consider information in Note 8 – Income Taxes to answer the following:

- i. Show the journal entry that ZAGG recorded for the income tax provision in fiscal 2012.**

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

- ii. Decompose the amount of “net deferred income taxes recorded in income tax journal entry in part i. into its deferred income tax asset and deferred income tax liability components.**

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

- iii. 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?**

$$\begin{aligned} \text{ETR} &= \text{tax expense} / \text{pretax income} \\ &= \frac{9393}{23868} = 39.3\% \end{aligned}$$

- iv. 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 in ZAGG’s balance sheet. Why would a financial statement user care about this?**

\$6,912 is reported in current assets and \$6,596 is reported in long-term assets. This is important for a financial statement user because it gives a clearer picture of the types of tax assets for ZAGG. Also, their classification as current or noncurrent has serious implications for several commonly used ratios, so it is important that ZAGG report this accurately.

Case 12: Build-A-Bear Workshop, Inc.—Leases

Executive Summary:

The following report includes a study of Build-A-Bear Workshop, Inc.'s use of leases. This case identifies the advantages of leasing, the different types of leasing arrangements, and the characteristics of these different lease types. This case examines different lease situations and the accounting involved. It then points out the lease reporting in Build-A-Bear's financial statements and analyzes the ratio-effects of different situations and classifications with leases.

a. Why do companies lease assets rather than buy them?

A company may choose to lease an asset rather than buying it outright if there is a better use of their cash. The company can immediately use expensive equipment or assets without incurring a large cost. In addition, leasing offers tax benefits as lease costs can be deducted from taxable income. Another advantage to leasing is increased flexibility. A company does not have to commit to buying a rapidly-depreciating asset. It can focus funds towards financial growth that would have otherwise been spent on assets. Leasing also avoids both large down payments and maintenance costs, as they are usually included as part of the lease agreement.

b. What is an operating lease? What is a capital lease? What is a direct-financing lease? What is a sales-type lease?

An operating lease is a type of lease that allows the lessee to essentially rent use of an asset without any option for ownership. An operating lease is constructed so that the lease does not meet any of the requirements for a capital lease, allowing the asset to stay off the balance sheet.

A capital lease is noncancelable, and meets any one of the following four requirements:

- (1) Life of the lease is at least 75% that of the useful life of the asset
- (2) There is a bargain purchase option for a price less than the market value of the asset
- (3) Lessee gains ownership at the end of the lease period
- (4) Present value of the lease payments must be greater than 90% of the asset's market value

In a capital lease, the lessee assumes some risks of ownership and enjoys some benefits of ownership.

A direct-financing lease is an arrangement where the lessor accounts for the income from a sale over time as lease payments are made, recognizing no income when the lease is made.

A sales-type lease is an arrangement where the lessor recognizes income from the lease upon inception, based on the discounted future cash flows. The rest is accounted for as payments are made, but the majority the proceeds are included in gross profit when the lease begins.

c. Why do accountants distinguish between different types of leases?

Accountants distinguish between types of leases because the accounting for different types can be vastly different. There can be a lease liability or asset, each with very different implications on the financial statements and ratios.

d. Consider the following hypothetical lease for a Build-A-Bear Workshop retail location.

- The lease term is five years.
- Lease payments of \$100,000 are due the last day of each year.
- At the end of the lease, title to the location does not transfer to Build-A-Bear nor is there a bargain purchase option.
- The expected useful life of the location is 25 years. The fair value of the location is estimated to be \$1,500,000.

i. Will this lease be treated as an operating lease or a capital lease under current U.S. GAAP? Explain.

This lease will be treated as an operating lease because it does not meet any of the four requirements for a capital lease.

ii. Provide the journal entry that Build-A-Bear Workshop will record when it makes the first lease payment.

Rent Expense	100,000	
Cash		100,000

iii. Assume that a second lease is identical to this lease except that Build-A-Bear Workshop is offered a “first year rent-free.” That is, the company will make no cash payment at the end of year one, but will make payments of \$125,000 at the end of each of years 2 through 5. Provide the journal entries that the company will make over the term of this lease.

Year 1:

Rent Expense	100,000	
Deferred Rent		100,000

Years 2 through 5:

Rent Expense	125,000	
Deferred Rent		25,000
Cash		100,000

e. Consider Build-A-Bear Workshop’s operating lease payments and the information in Note 10, Commitments and Contingencies. Further information about their operating leases is reported in Note 1, Description of Business and Basis of Preparation (k) Deferred Rent.

i. What was the amount of rent expense on operating leases in fiscal 2009?

46.8 million

ii. Where did that expense appear on the company’s income statement?

This expense is lumped into selling, general, and administrative expense.

f. Recent proposals by the Financial Accounting Standards Board and the International Accounting Standards Board would largely eliminate the option to use operating lease accounting. Most leases would be accounted for as capital leases (which are called “finance” leases under IFRS). The present value of the expected lease payments would be treated as a “right to use the leased asset.” A corresponding capital lease obligation would be recorded, representing the liability incurred when the right-to-use asset was acquired. The asset would be amortized over a period not to exceed the lease term. The obligation would be accounted for as an interest-bearing obligation. Consider the future minimum lease payments made under the operating leases disclosed in Note 10, Commitments and Contingencies. Assume that all lease payments are made on the final day of each fiscal year. Also assume that payments made subsequent to 2014 are made evenly over three years.

i. Calculate the present value of the future minimum lease payments at January 2, 2010. Assume that the implicit interest rate in these leases is 7%.

Period	Lease Payments	Appropriate discount factor	PV of Payment
1	50,651	0.9346	47,337
2	47,107	0.8734	41,145
3	42,345	0.8163	34,566
4	35,469	0.7629	27,059
5	31,319	0.7130	22,330
6	25,229	0.6663	16,811
7	25,229	0.6227	15,711
8	25,229	0.5820	14,683
PV of lease obligation			219,643

- ii. **Had Build-A-Bear Workshop entered into all of these leases on January 2, 2010 (the final day of fiscal 2009), what journal entry would the company have recorded if the leases were considered capital leases?**

Property and Equipment	219,643	
Lease Obligation		219,643

- v. **What journal entries would the company record in fiscal 2010 for these leases, if they were considered capital leases? There are two: one to record interest expense and the lease payment and one to record amortization of the leased asset.**

Lease Obligation	35,275.98	
Interest Expense (219643*7%)	15,375.02	
Cash		50,651.00

Depreciation Expense (8yr life)	27,455.39	
Accumulated Depreciation		27,455.39

- g. **Under current U.S. GAAP, what incentives does Build-A-Bear Workshop, Inc.'s management have to structure its leases as operating leases? Comment on the effect of leasing on the quality of the company's financial reporting.**

There are tax incentives to classifying a lease as operating. They can reduce income by taking on the depreciation expense from the leased asset which allows the company to lower taxable income. In addition to the tax incentives, an operating lease creates no asset or liability on the balance sheet, and therefore offers a form of off-balance sheet financing. There are financial ratio-advantages to not recording an asset or liability as well.

- h. **If Build-A-Bear had capitalized their operating leases as the FASB and IASB propose, key financial ratios would have been affected.**
- **Refer to your solution to part f, above to compute the potential impact on the current ratio, debt-to-equity ratio (defined as total liabilities divided by stockholders' equity) and long-term debt-to-assets ratio (defined as long-term debt divided by total assets) at January 2, 2010. Is it true that the decision to capitalize leases will always yield weaker liquidity and solvency ratios?**

	January 2, 2010	If capitalized
Current Ratio	1.66	1.68
Debt-to-Equity Ratio	0.73	1.84
Long-term Debt-to-Assets Ratio	0.13	0.47

Current ratio is smaller while debt-to-equity and long-term debt-to-assets are greater. In this case, liquidity and solvency ratios are weaker. Liquidity and solvency ratios may not always be weaker as excluding the liability created by a capital lease may improve current ratio.