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A Comprehensive Analysis of Cases in Financial Accounting

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A COMPREHENSIVE ANALYSIS OF CASES IN FINANCIAL ACCOUNTING

by
Anna Lapayeva

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

Oxford
May 2019

Approved by

Advisor: Dr. Victoria Dickinson

Reader: Dean Mark Wilder

Abstract

The thesis constitutes a comprehensive analysis of various cases in financial accounting. The topics included investment decisions, income statement, property, plant, and equipment valuation, accounts receivable, allowance for doubtful accounts, research and development, data analysis, interest bonds, stock and dividends, securities, income taxes, and revenue recognition. The GAAP standards for the subjects include many options that can be used, and accounting will be significantly different dependent on the choice the firm will make. The research highlighted the respective differences in the methods and thoroughly explained the reasonings behind the chosen methods in cases. Topics were investigated over the course of two semesters, while attending a special course led by Dr. Victoria Dickinson. Each case discusses a topic by using different public companies as an example, which provides us with necessary background information to critically assess the situation and to explain the underlying concepts to reasonably informed user. The cases required different means of information gathering, but generally included references to the available textbooks and books, as well as web sources and data bases available through the university library. The data gathered assisted in the case analysis and helped to understand more in the area of financial reporting. We were encouraged to use codification, laws, and ratios to assist in the analysis. The case studies inspired us to acquire more knowledge on different topics and gain some expertise in the application of concepts. From case to case it can be clearly deduced how important is to understand the basics of each topic to be able to navigate through more advanced topics in our college career.

Takeaways from the course

On average I spent four to ten hours a week over the course of the two semesters working on the cases and drafting the thesis. The experience was invaluable because our expertise was applied to real cases scenarios, allowing us to discuss topics more thoroughly than we ever could in any other class. It taught us a great deal of self-management in the areas of research and professional writing. To be concise, we adhered to the professional formatting guidelines, presenting information as to a business official, or as we would have to later in our career. We improved our understanding of the underlying accounting principles and their application.

The course taught us how to navigate through the financial statements and how to recognize what parts are important to users and why. We would go through the same steps in the process as investors would and consider how to allocate resources between different business options. Analysis of different business entities rewarded us with the understanding how business operates, and its functions interact with each other.

We gained expertise in utilizing different financial ratios and can critically assess the firm's performance, relying on the financial metrics. The course highlighted the importance of the trend analysis both across firms and over the time periods. We faced the ambiguity of the financial metrics and can provide reasons for why that could be the case. It was of a huge future benefit to look though all of them to determine which numbers would be useful in calculations for ratios, because some of data could be misleading for an inexperienced user.

Multiple cases involved scrutiny of the transaction history, which helped us to build journal entries and T-accounts with much ease than before. It would help us in our future career, because even though various applications track transaction history, it would be impossible to draw any conclusions without complete understanding of how exactly application records entries.

Now, going back to the first case of the course, I can clearly see how far I have come in terms of understanding the details of various financial topics, for example, how the timing and the creditworthiness of the debtors will affect the calculation of the bad debt expense. After all, it would influence other elements as well, such as opinions of the users of financial statements and future estimates of allowance for doubtful accounts. In another case, it was important to note the relationship between total research and development costs to net sales, and how the companies adjust the former according to the changes in the latter. I think that research and development is crucial to many companies and understanding how we treat them is essential for us to be able to work for the future clients.

To talk more about the estimates, it can be noted that financial users do not favor relying on the estimates, so it is of the utmost importance to be able to be as specific as possible when dealing with specific accounts. In the cases we learned that you must have certain expertise to be able to operate such accounts. One of the most useful tools used for grasping the concepts was building T-accounts with corresponding journal entries.

One of the cases involved explanation of an intermediate accounting problem to a new student. Knowing how to break things down, and how to explain it to someone with no background knowledge of it, helps to work on problem-solving skills and ability to

follow logical conclusions. This concept might be used for the future topics and applied to different subjects in college.

Multiple cases offered us an insight in a technological side of the accounting world. We know that the data and analytics became the essential part of any company, especially those of accounting service providers. Data streams are constantly recorded and stored away, but even though the information gathered is invaluable, there are few platforms that can analyze it.

Other issues that we discussed was that the auditors have different opinions on the matter of how to account for securities, which is why it is very important to have a clear guidance and regulations in place. The cases helped us understand various reasonings behind the classifications as well as ways to record significant events. To understand better, we frequently consulted the codification and familiarized ourselves with different exempts from it.

What is more, sales revenue as an essential part of any accounting cannot be overlooked. Although not the only one, but maximizing sales and profit is one of the main objectives of any company. In order to do strategic planning, it is important for a firm to rely on reliable financial statements with accurate data. It is true that the more complex company's sales process is, the more difficult it is to choose accounting method, but the case helped to investigate one of the more common situations.

To conclude, the investigation of the accounting topics in this course had tremendous impact on me as a future professional, building the necessary foundation of knowledge and skills.

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Case «Home Heaters, Inc»

Investment Decisions

Introduction.

This case provides financial information for the two following companies: Glenwood Heating, Inc. and Eads Heaters, Inc. Operating in Colorado and selling the same product, these two companies compete in the same field, which means the company that performs better will be chosen for an investment. According to the analysis, Glenwood appears to be the better company to invest in based on a careful consideration of transactions, methods of operations, financial statements, and ratios.

It was important to consider which parts of the statements were valuable to the investors, and this selection depended on the understanding of how business operates. Personally, I believe that until a person will be involved in a company, he/she cannot fully understand its management, and consequently its accounting. In the class, we do not get the opportunity to apply knowledge to real cases, so this experience was valuable. To finish the case, it was necessary for me to consult not only the books, but the internet, and read the opinions of real investors, which let me understand how complex the process is. It taught me the principles of investment, excel, official formatting, and auditing. I find that case studying compliments greatly my Intermediate Accounting, Finance, and Marketing classes. I view this case from a completely different angle now compared to the time I tried to figure it out in class. After completing the case, I held more knowledge about the investing decisions and sources I can use to make one. I plan to enhance this knowledge by investigating following cases, which will help me not only in my classes, but in a possible internship.

To start the analysis Figure 1-1 identifies several transactions that are true to both Glenwood Heating, Inc., and Eads Heater, Inc. Trial balance is attached to the Figure 1-2 to confirm truthfully represented numbers.

Figure 1-1

Part A: Recording Basic Transactions

	Assets						=	Liability			+	Equity	
	Cash	Accounts receivable	Inventory	Land	Building	Equipment	Accounts Payable	Note Payable	Interest Payable	Common stock	Retained earnings		
No. 1	\$160,000									\$160,000			
No. 2	400,000							\$400,000					
No. 3	-420,000			\$70,000	\$350,000								
No. 4	-80,000					\$80,000							
No. 5			\$239,800				\$239,800						
No. 6		\$398,500											
No. 7	299,100	-299,100											
No. 8	-213,360						-213,360						
No. 9	-41,000							-20,000	21,000				
No. 10	-34,200												
No. 11	-23,200										\$23,200		
No. 12									6,650				

Figure 1-2

Trial Balance		
	Debits	Credits
Cash	\$47,340	
A/R	99,400	
Inventory	239,800	
Land	70,000	
Building	350,000	
Equipment	80,000	
A/P		\$26,440
N/P		380,000
I/P		6,650
C/S		160,000
Div	23,200	
Sales		398,500
Other Op	34,200	
Int Exp	27,650	

Figures 1-1 and 1-2 imply that the financial situation was exactly the same for two companies before managers started recording entries. Afterwards, there were several transactions that changed the course of companies' development – different ways of recording drastically changed the picture portrayed by the companies. Detailed review of their impact on the financial situation of the companies is presented in the Figure 1-3 for Glenwood Heating and in the Figure 1-4 for Eads Heaters. Figure 1-5 is the trial balance, taking into consideration additional transactions.

To begin with, there was a debit of \$99,400 to Accounts Receivable, but managers estimated different percentage for uncollectible receivables. Allowance for Bad Debt Expense accounts of Glenwood Heating, Inc. and Eads Heaters, Inc. were charged \$994 and \$4,970 respectively. Next, companies have chosen their own method of recording Cost of Goods Sold: Glenwood decided to use FIFO, while Eads opted for LIFO. This decision reflected on Gross Profit as well, because it influences Cost of Goods Sold. The difference of \$11,800 was estimated in favor of Glenwood Heating, Inc in terms of COGS. Depreciation method used was one of the long-term decisions that significantly influenced expenses. Eads Heaters used straight-line depreciation for building, but double-declining balance for delivery equipment, whereas Glenwood Heating recorded all depreciation using the straight-line method. Glenwood Heating finished year with only \$19,000 in depreciation, compared to \$41,500 in Eads Heaters' account. Managers of the companies used different approaches, while acquiring equipment for their companies. On one hand Glenwood made a riskier decision signing an agreement to rent equipment without guarantee of the same cost for next year, but on the other hand Eads' managers invested in a capital lease agreement of \$92,000. The

contract included eight percent interest rate, which raised total interest expense to \$35,010, when Glenwood managers recorded \$27,650. The tax was estimated to be 25 percent of the income. According to the calculations Glenwood Heating paid \$30,914 in taxes. The tax expense for Eads equaled \$23,505.

Figure 1-3: Glenwood Heating, Inc.

Part B: Recording Additional Information

Transaction	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Acc Dep - building	Equipment	Acc Dep - equipment
Balances: Part A	\$47,340	\$99,400		\$239,800	\$70,000	\$350,000		\$80,000	
Bad Debts			\$994						
COGS				-177,000					
Depreciation									
Building							\$10,000		
Equipment									\$9,000
Equipment Rental Payment	-16,000								
Income Tax	-30,914								
Balances	\$426	\$99,400	\$994	\$62,800	\$70,000	\$350,000	\$10,000	\$80,000	\$9,000

Figure 1-4: Eads Heaters, Inc.

Part B: Recording Additional information

Transaction	Cash	Accounts Receivable	Allowance for Bad Debts	Inventory	Land	Building	Acc Dep - building	Equipment	Acc Dep - equipment
Balances: Part A	\$47,340	\$99,400		\$239,800	\$70,000	\$350,000		\$80,000	
Bad Debts			\$4,970						
COGS				-188,800					
Depreciation									
Building							\$10,000		
Equipment									\$20,000
Equipment Rental Payment	-16,000								
Income Tax	-23,505								
Balances	\$7,835	\$99,400	\$4,970	\$51,000	\$70,000	\$350,000	\$10,000	\$80,000	\$20,000

Figure 1-5

Part B: Trial balances

Glenwood Heating, Inc.

Eads Heaters, Inc.

Cash	\$426		Cash	\$7,835	
A/R	99,400		A/R	99,400	
Allowance for Bad Debts		\$994	Allowance for Bad Debts		\$4,970
Inventory	62,800		Inventory	51,000	
Land	70,000		Land	70,000	
Building	350,000		Building	350,000	
Acc Dep - building		10,000	Acc Dep - building		10,000
Equipment	80,000		Equipment	80,000	
Acc Dep - equipment		9,000	Acc Dep - equipment		20,000
A/P		26,440	Leased Equipment	92,000	
Int/P		6,650	Acc Dep - leased equipment		11,500
N/P		380,000	A/P		26,440
Common Stock		160,000	Int/P		6,650
Dividends	23,200		N/P		380,000
Sales		398,500	Lease Payable		83,360
Cost of Goods Sold	177,000		Common Stock		160,000
Other operating expenses	34,200		Dividends	23,200	
Bad Debt exp	994		Sales		398,500
Dep Exp - building	10,000		Cost of Goods Sold	188,800	
Dep Exp - equipment	9,000		Other operating expenses	34,200	
Rent Exp	16,000		Bad Debt Exp	4,970	
Int Exp	27,650		Dep Exp - building	10,000	
Provision for income tax	30,914		Dep Exp - equipment	20,000	
Total	\$991,584	\$991,584	Dep exp - leased equipment	11,500	
			Rent Exp	0	
			Interest Exp	35,010	
			Provision for income tax	23,505	
			Total	\$1,101,420	\$1,101,420

Income Statements

Looking at the income statements, it is important to consider Sales Revenue, Cost of Goods Sold, Operating Expenses, and Net Income. Figure 1-6 presents income statement for each company.

Figure 1-6

GLENWOOD CO.

EADS CO.

INCOME STATEMENT

INCOME STATEMENT

FYE DECEMBER 31, 20X1

FYE DECEMBER 31, 20X1

Sales		\$398,500	Sales		\$398,500
Cost of goods sold	\$177,000		Cost of goods sold	\$188,800	
Gross Profit		221,500	Gross Profit		209,700
Operating expenses			Operating expenses		
Bad Debt Exp	994		Bad Debt Exp	4,970	
Dep - building	10,000		Dep - building	10,000	
Dep - equipment	9,000		Dep - equipment	20,000	
Rent Exp	16,000		Dep - leased equipment	11,500	
Other oper exp	27,650		Other Oper Exp	34,200	
Interest Exp	34,200		Int Exp	35,010	
Net Income before tax		123,656	Net Income before tax		94,020
Tax	30,914		Tax	23,505	
Net Income		\$92,742	Net Income		\$70,515

Each company earned \$398,500 in sales, but using different method of recording Cost of Goods Sold, Glenwood Heating ended with a larger Gross Profit of \$221,500, whereas Eads Heaters performed slightly worse with just \$209,700. It is notable that Glenwood Heating spent \$17,796 less on expenses than Eads Heaters, which speaks greatly about their management. Finally, looking at Net Income, Glenwood positions itself as a more profitable organization with

\$92,742. Eads Heaters reaches a Net Income of \$70,515. Income, in turn, influenced the ending balance of Retained Earnings, which is shown in Figure 1-7. Eads Heaters finished the period with \$207,315 in Total Equity, while Glenwood Heating ended up with \$229,542.

Figure 1-7

GLENWOOD CO.

EADS CO.

STATEMENT OF RETAINED EARNINGS

STATEMENT OF RETAINED EARNINGS

FYE DECEMBER 31, 20X1

FYE DECEMBER 31, 20X1

Category	Share Capital	RE	Total Equity	Category	Share Capital	RE	Total Equity
Beg Bal	\$160,000	\$0	\$160,000	Beg Bal	\$160,000	\$0	\$160,000
NI		92,742		NI		70,515	
Div		-23,200		Div		-23,200	
End Bal	\$160,000	\$69,542	\$229,542	End Bal	\$160,000	\$47,315	\$207,315

Return on Equity was calculated to determine how much profit was generated with invested money.

$$ROE = NI/Equity$$

$$Glenwood Heating, Inc.: 92,742/229,542 = 0.40$$

$$Eads Heaters, Inc.: 70,515/207,325 = 0.34$$

Calculations show that Glenwood Heating, Inc. has higher Return on Equity, which is, therefore, a more attractive choice for investors, because they are potential shareholders

Balance Sheets

Balance sheets reflect the amounts of what company own and owe. At that point of time Eads Heaters held more in both Assets and Liabilities as can be seen from Figure 1-8.

To be precise in the assumption which company could pay off the debt, Current Ratios were calculated.

Current ratio = Current Assets/Current liabilities

Glenwood Heater, Inc.: \$162,626/\$33,090 = 4.91

Eads Heater, Inc.: \$153,265/\$33,090 = 4.63

From the ratios, it is evident that Glenwood Inc. has a better chance to fulfill their obligations.

Conclusion

To conclude, Glenwood Heating, Inc. in comparison to Eads Heaters, Inc. is a more attractive company for investment. It does not only have a higher Net Income, but a Current Ratio, Retained Earnings, and Return on Equity, which will help company to continue perform profitably in the market.

Figure 1-8

GLENWOOD CO.

BALANCE SHEET

AS OF DECEMBER 31, 20X1

EADS CO.

BALANCE SHEET

AS OF DECEMBER 31, 20X

	Dr.	Cr.	Assets	Dr.	Cr.
Assets			Current Assets:		
<i>Current Assets:</i>			Cash	\$7,835	
Cash	\$426		Accounts Receivables	99,400	
Accounts Receivables	99,400		Allowance for Bad Debt		-\$4,970
Allowance for Bad Debt		-\$994	Inventory	51,000	
Inventory	62,800		Non-Current Assets		
<i>Non-Current Assets</i>			Building	350,000	
Building	350,000		Land	70,000	
Land	70,000		Equipment	80,000	
Equipment	80,000		Leased Equipment	92,000	
Leased Equipment			Acc Dep - building		-10,000
Acc Dep - building		-9,000	Acc Dep - equipment		-20,000
Acc Dep - equipment		-10,000	Acc Dep - leased equipment		-11,500
Acc Dep - leased equipment			Total Assets	\$703,765	
Total Assets	\$642,632		Liabilities		
Liabilities			Accounts Payable		26,440
Accounts Payable		26,440	Interest Payable		6,650
Interest Payable		6,650	Notes Payable		380,000
Notes Payable		380,000	Lease Payable		83,360
Lease Payable			Equity		
Equity			Common Stock		160,000
Common Stock		160,000	Dividends	23,200	
Dividends	23,200			\$351,185	\$1,054,950
	\$328,958	\$971,590	Total Liability + Equity		\$703,765
Total Liability + Equity	\$642,632				

Case «Molson Coors Brewing Company»
Income Statement

Introduction

The case presented financial statements for Molson Coors Brewin Company, focusing our attention on the Income Statement. The major objectives were to teach us to differentiate between various elements of the statement, their purpose and usefulness, as well as to analyze the placement of accounts within the statement.

Solving of this case required careful research and proficiency in understanding specific classifications. Thinking through the presented questions allowed me to perceive accounting not as an exact science, but as something adaptable and versatile. Application of different rules creates a conflict of how to best approach the statement. As a result, investigating decisions, that Molson Coors made, helped me to see the reasoning behind them. It is not a typical company, that is why not all the rules apply ordinarily.

- a. **The major elements of an Income Statement** include *Revenues, Expenses, Gains, and Losses* which are significant to investors and creditors in their decision making. While sales, fees, interest, dividends, rents are typically assigned to Revenues, as cost of goods sold, depreciation, interest, rent, salaries, wages, and taxes to Expenses, it might not necessarily be true for every company. The distinction between Revenues/Expenses and Gains/Losses lies in the company's set of operation and activities and its treatment of those.
- b. **«Classified» Income Statement** also known as *Multiple-step Income Statement* one of the formats GAAP requires companies to follow. Multiple-step Income Statement is easier to understand and evaluate. It separates operating and nonoperating activities as well as segregating income tax, discontinued operations, noncontrolling interest, and earnings per share. This format includes

totals and subtotals for gross profit, income from operations, income before tax, net income, earnings per share/net loss per share, making it possible to predict future performance based on how successfully a business entity allocates its resources. I believe that this statement is best characterized by one of the fundamental enhancing qualities of the conceptual framework — *understandability*.

- c. **Persistent income** shows earnings that recur from period to period. The more predictable the number is, the more risk-free a company will seem to investors, and the better resources they will have at their disposal. Persistent income indicates that the company is profitable and worth investing into.
- d. **Net Income** found at the end of Income Statement does not necessarily report all business activities, extraordinary gains and losses, and adjustments for prior periods. The net impact of all the elements that affect equity excluding those resulting from investment by owners and distributions to owners, can be found in comprehensive income statement which refers to them as **Other comprehensive income**.
- e. **Sales** is all amount earned, while **Net Sales** excludes discounts, allowances, and returns. Molson Coors reports these accounts separately. They have excise taxes levied on their product's shipment. **Excise taxes** are related to manufacturing rather than selling, which is why these taxes are applied before Net Sales are calculated. Molson Coors disclosed in the notes that Sales are stated net of incentives, discounts, and returns. They do not show the adjustments made on the income statement, because those are infrequent for their company. Molson Coors

lacks standard practice for returns, and treats discounts and allowances as a reduction of sales.

f.

- i. **Special items** are recorded in the Income Statement as an unexpected, infrequent, and extraordinary gains or losses that are not likely to recur in future periods. Special items listed by Molson Coors are employee-related charges, impairment or asset abandonment charges, unusual or infrequent items, and termination fees and other gains/losses.
- ii. According to a modified all-inclusive concept, companies report separately following general categories: *unusual and infrequent gains and losses, discontinued operations, noncontrolling interest, and earnings per share*. Special items of Molson Coors fall into these categories; therefore, they are shown on the income statement.

Inclusion of special items is a truthful representation of company's financial situation, and investors pay attention to them across periods. Molson Coors discloses that they consider special items "not indicative of [their] current operations", and "not necessarily non-recurring", so with a few exceptions I agree with their placement on the income statement.

Most items listed, excluding termination fees and other gains/losses, should be considered unusual and infrequent gains/losses. However, the appropriate place for termination fees and other gains/losses would be in a **Discontinued operations** section of the Income Statement.

g. Molson Coors does not report **Other income and expense** it under *Income from operations*. It is charged to other Comprehensive income. It should not be placed into the operating expenses as they are not associated with normal business operations. When looking over operating expenses, managers seek to find way to lower them, and both Other Income and Expense and Special Items account may interfere with the decisions being made on a normal cycle of business operations.

h.

i. Comprehensive income equals \$760.2 (*Note that numbers are presented in millions*), while Net Income is \$567.3; The difference is due to the Other comprehensive income and noncontrolling interests.

ii. All of the items listed in Comprehensive Income have impact on the equity of Molson Coors during current period of operations.

j.¹ **Effective tax rate = Income Tax Expense/Pretax Income**

Effective tax rate = $84/654.5 = 12.8\%$

Effective rate of 12.8 percent calculated above indicates the amount of money company pays in terms of the income. The lower the effective tax rate is, the better for the company.

In conclusion, Molson Coors is a complex company that modified their Income Statement according to their operations. Despite the changes that could have been made, the company succeeded in the reporting, and presented fair statement to the audience.

1. — “i.” part of the case was omitted from explanations.

Case «Pearson»
Accounts Receivable

Introduction.

Pearson case narrows our research to the accounts receivable portion of the financial statements. Accounts Receivable is one of the most important accounts of any company, second only to cash. A company would pay its liabilities, invest, and operate solely on the revenue it earns, so it is essential to understand the concept of uncollectible amounts. We, as accountants, must understand how the timing and the creditworthiness of the debtors will affect the calculation of the bad debt expense. After all, it would influence other elements as well, for example, opinions of the users of financial statements and future estimates of allowance for doubtful accounts.

From the research of the case, it became evident that there are things that influence allowances outside of what we learned in the principles of accounting. The significance of the account and its contra account in their uncertainty. People do not favor relying on the estimates, so it is of the utmost importance to be able to be as specific as possible when dealing with those accounts. In this case we learned that you must have certain expertise to be able to operate such accounts. One of the most useful tools used for grasping the concepts was building T-accounts with corresponding journal entries.

- a. **Accounts Receivable**, or *Loans and Receivables*, is a current asset account that indicates the amount owed to the company for the services provided. Accounts receivables are also called *trade receivables*.
- b. There is a distinct difference between Accounts Receivable and **Notes Receivable**. Company is likely to collect money for Account Receivable in 30 to 60 days, depending on the oral promises customers make. Notes receivable can be regarded as both short-term or long-term and are always based on a written

promise. Notes receivable are almost always interest bearing, whilst accounts receivable are not.

- c. A **contra account**'s balance is the opposite of the normal balance for a specific account. Pearson has two contra accounts that are associated with trade receivables: *Allowance for Bad and Doubtful Debts*, and *Allowance for Sales Returns*. They capture estimated amount of the receivables uncollectible from customers, and sales returned. Managers make their assumptions based on the percentage of sales and experience of the previous years.
- d. There are two ways to estimate uncollectible accounts receivable: **the percentage-of-sales procedure** and **the aging-of-accounts procedure**. Although the T-accounts look the same for these two methods, they differ in what company needs to estimate and plug-in. In the aging procedure company computes ending balance of Allowance for Uncollectible accounts, calculating allowance that will need to be added to the Beginning Balance to get to Ending Balance after subtracting Write-Offs. On the contrary, firms that use percentage-of-sales procedure need to estimate allowance number first, plugging-in what sum should end in the Ending Balance. It should be mentioned that in these two approaches one **composite rate** usually used for percentage-of-receivables, while an aging schedule is set-up for aging-of-accounts that accounts for various age categories. The latter is more accurate, because it carefully considers past experiences for different group of uncollectible accounts.
- e. Extending credit allows more customers to pay amount they owe to the firm. If managers have not considered that some of the customers will be able to pay later,

they would lose possible profit and it would be difficult to adjust. The risk is that the company cannot estimate these amounts accurately but will still rely on these numbers.

- f. Differences to the balances are mostly due *Income Statement movements* and *Write-Off* of Accounts Receivable accounts as can be seen from the Figure 3-1. *Currency exchange* and *Acquisition through business combination* also made an impact. Out of all beforementioned accounts only Bad Debt Expense appears on the Income Statements in the section of Selling and Administrative Expense, while Allowance for D/A and A/R belong to the Balance Sheet.

i. *Figure 3-1* **Allowance for D/A**

Dr.	Cr.
	72
5	26
20	3
	76

Note that all numbers are in millions.

Bad Debt Exp	26
Allowance for D/A	26
Allowance for D/A	20
A/R	20

- g. Allowance for Sales R/A, Allowance for R/A, And A/R are all reported to Balance Sheet. Sales R/A, on the contrary, is posted to the Income Statement as a contra revenue account, which is demonstrated in the Figure 3-2.

i. *Figure 3-2 Allowance for Sales R/A*

Dr.	Cr.
	372
	425
443	
	354

Sales R/A	425
Allowance for R/A	425
Allowance for Sales R/A	443
A/R	443

- h. As we can see from the T-account amount of **Gross Credit Sales** decreased due to Cash Collections, Write-offs, and Sales Returns(actual), and increased, when we added Sales revenue.

Figure 3-3 Gross Credit Sales

Dr.	Cr.
1474	17
	20
425	443
1419	

A/R	425
Sales	425
Cash	17
A/R	17
Sales R/A	443
A/R	443

Case «Solving Intermediate Problem»
Accounts Receivable and Bad Debt Expense

Introduction.

Out of three chapters given as a choice, I felt like the most recent chapter we covered, namely Receivables, was the one I struggled the most with. In order to help new generation of Intermediate Accounting students understand the concepts of receivables better, I created a study guide that highlighted basic concepts for recording the transactions. As one of the best ways to understand something is to teach it to someone, I think that this case prepared me for a part of my next intermediate exam well. Knowing how to break things down, and how to explain it to someone with no background knowledge of it, helps to work on problem-solving skills and ability to follow logical conclusions. This concept might be used for the future topics and applied to different subjects in college.

P7-6, Intermediate Accounting

Journalize Various Accounts Receivable Transactions.

The Balance Sheet of Starsky Company at December 31, 2016, includes the following.

Notes receivable	36,000	
Accounts receivable	182,100	
Less: Allowance for doubtful accounts	<u>17,300</u>	<u>200,800</u>

Instructions:

Prepare all journal entries necessary to reflect the transactions below.

Transactions in 2017 include the following.

1. Accounts receivable of \$138,000 were collected including accounts of \$60,000 on which 2% sales discounts were allowed.

Cash	136,800	
Sales Discounts	1,200	
	A/R	138,000

To make this entry, firstly, we need to estimate the discount, which is simply multiplying \$60,000 by two percent. Subtracting the estimated discount from expected receivables of \$138,000, we get the amount of actual cash received: $\$138,000 - \$1,200 =$ **\$136,800**. To balance debits and credits we included Sales Discount in the journal entry.

2. \$5,300 was received in payment of an account which was written off the books as worthless in 2016. It is essential to know what was an initial entry for a write-off, if we need to reverse it. Write-offs are uncollectibles that company believes will never be received. To write-off an account, we debit Allowance for Doubtful Accounts, and Credit Accounts Receivable. Therefore, a recovery of this write-off will be:

A/R	5,300	
	All for D/A	5,300

We should also recognize cash earned:

Cash	5,300	
	A/R	5,300

Posting both entries is crucial to the accuracy on the Balance Sheet.

3. Customer accounts of \$17,500 were written off during the year.

In the previous step, we have already understood how to write-off an account. Using that knowledge, the entry will be as follows:

All for D/A	17,500	
	A/R	17,500

Company recognizes that it is likely to never receive beforementioned payments.

4. At year-end, Allowance for Doubtful Accounts was estimated to need a balance of \$20,000. This estimate is based on an analysis of aged accounts receivable. Referring to the given information, we see that the ending balance in the Allowance for Doubtful

Accounts is \$17,300. In order to create the entry that we also need to consider all the previous entries we posted and their impact on the account. The easiest way to do that is to create a T-account (refer to Figure 4-1).

Figure 4-1

Allowance for D/A

Dr.	Cr.
	17,300
	5,300
17,500	
	5,100

The estimated ending balance equals to \$5,100, but the fourth question asks us to up this amount to \$20,000. Starsky Co understated the account by \$14,900 (\$20,000 — \$5,100), which means we will need to increase both Bad Debt Expense and Allowance for Doubtful Accounts.

Bad Debt Exp	14,900
All for D/A	14,900

Case «Palfinger AG»
Property, Plant, and Equipment

Introduction

Before this case, I could not even imagine such specific issues can arise from the decisions managers make on valuating Property, Plant, and Equipment. It was astonishing to find reasons why the numbers on the financial statements on something as specific as buildings, equipment, or even land may differ. However, the most important part of this case demonstrated how the practical application of depreciation varies depending on its methods. From the following research, ambiguity of perspective became apparent, so the conclusion is that each company should customize their cost allocation. It was interesting to see how depreciation methods resulted in gains or losses. I could say that the part I enjoyed the most was studying self-constructed assets. I believe that this one of the major parts of Property, Plant, and Equipment for any company, because it can involve so many other projects, for instance, government grants.

Although the case helped me understand Property, Plant, and Equipment better as a whole, it raised a lot of yet unanswered questions. I will use this intellectual curiosity to inspire myself to explore more endless accounting world.

- a. There should be several things included in Palfinger's **Property and Equipment**. It is predicted that they own land with warehouses and manufacturing facilities for their inventory. Equipment will not only include transportation, such as trucks, but also elevators/cranes, because the company manufactures large and heavy products. They will need mechanical assistance with lifting and handling those.
- b. €149,990 of PPE represents the historical cost of purchasing and bringing to its intended use all the assets company owns.

- c. They disclose that PPE consists of: *Land and buildings, Undeveloped, Plant and machinery, Other plant, Fixtures, fittings, and equipment, Prepayments and assets under construction.*
- d. **Prepayments and assets under construction** sub-account stands for the self-constructed assets under GAAP. It means that these are the buildings built by the company itself. They are not depreciated yet, because they are either not finished or not used in the operations yet. This account also includes expenses that are being prepaid. Palfinger acquired control over prepaid payments, and/or finished self-constructed building which is shown in Reclassification account, adding value to the PPE. It is a type of clearing account.
- e. Straight-line depreciation seems like a reasonable depreciation method for the company, but the detailed quantitative analysis shown in *part j* revealed that double-declining-balance method will better reflect on the company on the financial statements, because gain will be recorded.
- f. They report modifications as the current expenses during the year they are actually incurred. Alternatively, modifications can be either treated as an increase to depreciation or as a part of an asset if Palfinger reevaluates cost of said asset.
- g.
 - i. The purchases for 2007 are reported in the amount of €61,444 as they disclose in the notes.
 - ii. Governmental grants are financial or different type of the assistance government provides upon completion of some requirements. They are deducted from PPE because, the cost of bringing asset to its intended use reduces the depreciation account. There was a change of €733 reported at the end of the year.

iii. €12,557 is recorded as depreciation.

iv. *Net Book Value* for the disposal of the assets is estimated as follows:

$$\text{The cost of the disposal} - \text{accumulated depreciation} = \text{€13,799} - \text{€12,298} = \underline{\text{€1,501}}$$

h. **Sale — Net Book Value = Gain/Loss**

$$\text{€1,655} - \text{€1,501} = \underline{\text{€154}}$$

We see an increase in the value of the asset, so it is a gain upon sale. One of the possibilities is that the value went up because of the natural inflation rate over period of time. The alternative is that the value of the asset itself could increase because of certain modifications in quality or functions.

i. Assuming two different methods of depreciation, namely Straight-line and Double-declining-balance, as well as final salvage value of net assets at €1,273, the table was prepared. It shows year to year recording of depreciation.

Year	Depreciation Expense	Net Book Value	Year	Depreciation Expense	Net Book Value
2007	€ 1,880	€ 8,793	2007	€ 4,269	€ 6,404
2008	€ 1,880	€ 6,913	2008	€ 2,562	€ 3,842
2009	€ 1,880	€ 5,033	2009	€ 1,537	€ 2,305
2010	€ 1,880	€ 3,153	2010	€ 922	€ 1,383
2011	€ 1,880	€ 1,273	2011	€ 110	€ 1,273

j.

i. If Palfinger uses straight-line and does not depreciate for the year of sale, 2008, then the net book value will equal €8,793. Using the formula from before: **Sale — Net Book Value = Gain/Loss**, we calculate the loss on disposal of an asset of

€1,293(€8,793 — €7500). Adding to the loss amount depreciation expense of last year, we conclude that the total impact on income statement is €3,173.

ii. However, if the company uses double-declining-balance net book value of the asset will be significantly less, only €6,404. In this case, Palfinger will record a gain: €7,500 — €6,404 = 1,096. It must be noted that total impact on the income statement will be the same amount of €3,173 when gain is subtracted from depreciation.

iii. The total impacts are identical in the end, but in the first example Palfinger reported loss rather than gain as shown when using double-declining method. As was stated in *part e* the double-declining-method will seem more favorable to the outsiders of the company.

Case «Volvo Group»
Research and Development

Introduction

Working on the Volvo case taught us a lot about Research and Development costs, and especially their difference under American and international laws. Although research and development costs are reported together, there is an important distinction between the two that makes accounting for them even more challenging. The expenditures incurred can be capitalized as a part of an intangible asset or expensed directly to the Income statement. It was important to note the relationship between total research and development costs to net sales, and how the companies adjust the former according to the changes in the latter. I think that research and development is crucial to many companies and understanding how we treat them is essential for us to be able to work for the future clients. Below you can see a detailed conclusion of the finding of my research, and why do they matter in this particular case.

- a. **Research and development expenses** of kr13,193 million would include any expenditures incurred during the process of research only, because Volvo follows IFRS rules rather than GAAP. In that case, they would capitalize costs once technological feasibility is achieved. According to this, internally developed intangibles that are normally expensed under GAAP, will be excluded and capitalized under IFRS. To resume, the main difference in applying international rules will lie in determining the costs in development phase and them meeting requirements to be either expensed or capitalized.
- b. As Volvo applies IAS 38, there are several principles they follow in order to **expense or capitalize** a certain cost. First of all, if said expenditure has a high degree certainty that will result in future financial benefits they shall be reported

as Intangible Assets. However, there are additional criteria to be met. As mentioned in the notes, one example is to be able to prove a functionality of a product before its development costs are reported as an asset. That would mean that timing is important, as the company will normally be able to capitalize expenditures only during the industrialization phase of a product.

- c. Volvo states that **amortization period** for Product and Software development is three to eight years. Amortization expense is matched with the revenue its asset drives, so we can conclude that Volvo chooses the period according to the useful life of the asset and spreads the cost over it. Volvo exists for many years, so they should have an accurate representation of usage of their assets.
- d. There is a difference between reporting Research and Development costs **under IFRS and GAAP** that was discussed in the first part of this case. The difference is that you expense R&D under GAAP, but when certain criteria are met, development under IFRS is either capitalized and amortized or expensed. Both methods have their advantages, but IFRS way seems to be more accurate for more experienced companies. The GAAP method is easier to use and implement, and with given consistency the accuracy approximates more complex IFRS rules.
- e. **Product and software development, net**
 - i. To find net of the Product and Software development, we need to deduct an amount of the Accumulated Depreciation and Amortization.
kr25,148 — kr13,739 = kr11,409
kr11,409 is the ending balance for the year, while the starting value is kr12,381 as can be seen from a T-account in the next step.

Intangible assets have their own line on the balance sheet: Intangible Assets, that is recorded in Assets' section.

- ii. A T-account is presented in Figure 6-1 to show how depreciation and amortization impact balance of Product and Software development.

Figure 6-1 **Product and Software**

Development, net

Dr.	Cr.
12,381	
2,602	3,126
	448
11,409	

- f. Figure 6-2 combines Product and Software development costs capitalized, Total R&D expense, Amortization, R&D costs that were capitalized, as well as proportion capitalized during the years of 2007, 2008, and 2009. As we can see from the data proportion capitalized is slowly declining.

Figure 6-2

(in SEK millions)	2007	2008	2009
1) Product and software development costs capitalized during the year	2,057	2,150	1,858
2) Total R&D expense on the income statement	11,059	14,348	13,193
3) Amortization of previously capitalized costs (included in R&D expense)	2,357	2,864	3,126
4) Total R&D costs incurred during the year = 1 + 2 - 3	10,759	13,634	11,925
Proportion Capitalized	19.12%	15.77%	15.58%

- g. Refer to Figure 6-3. Volvo is steadily increasing their Total R&D to Net Sales, and while for Navistar there was a fall of 0.48 percent in 2008, they increased the

proportion by 1.16 percent in 2009. The difference between the companies is not substantial: the greatest one is around two percent. The other evidence that the numbers are quite comparable is that sales increased and fell in the same years. For example, even though Sales of Volvo fell by approximately 30 percent in 2009, Navistar faced 22 percent decrease in the same year.

Figure 6-3

Vol	2007	2008	2009
(in SEK millions)			
Net sales, industrial operations	276,795	294,932	208,487
Total assets, from balance sheet	321,647	372,419	332,265
Total R&D costs incurred	10759	13634	11925
Proportion of total R&D to Net Sales	3.89%	4.62%	5.72%
Navistar			
Total RD	375	384	433
Net Sales	11,910	14,399	11,300
Proportion	3.15%	2.67%	3.83%

Case «Splunk»
Data Analysis in Accounting

Introduction.

This case offered us an insight in a technological side of the accounting world. We know that the data and analytics became the essential part of any company, especially those of accounting providers. Data streams are constantly recorded and stored away, but even though the information gathered is invaluable, there are few platforms that are actually capable of analyzing it. Therefore, we considered one of the most valuable IT companies, namely Splunk Platform, and its current and potential contributions to the accountancy. Despite its relatively small life, 15 years of its operation, Splunk created various applications to assist users and contribute to the society as a powerful economic and analytical tool.

It was important for us to understand how Splunk gathered different types of companies to create a base for all-rounded IT company. For the company to have success it has to go above and beyond of what other companies offer. The platform proved to be an essential tool in various operations. To conclude, we recommend Splunk to be implemented as a means of system's progression and improvement.

1. Splunk is a software for searching and analyzing big amounts of data. Splunk (the product) captures, indexes, and correlates real-time data in a searchable repository from which it can generate graphs, reports, alerts, dashboards, and visualizations. (Woods). The company was founded in 2003 by Michael Baum, Rob Das, and Eric Swan. Throughout the years Splunk acquired a mobile-device data-analytics company, a cybersecurity startup, as well as allying with U.S government, becoming one of the world leaders in IT service. Splunk strives to gather and analyze data in a way modern customer of all backgrounds will access and use it with ease. The

company is not oriented, but makes its largest contributions to the business world, creating technology infrastructures and IT systems to help users make well informed decisions. Splunk is a platform itself, which includes Splunk Enterprise, Splunk Cloud, Splunk Premium Solutions, and Rich Ecosystem of apps and add-ons. Splunk premium solutions are further narrowed in Splunk IT Service Intelligence, Splunk Enterprise Security, and Splunk User Behavior Analytics.

2. From the information posted on the Splunk website, we can conclude that the active utilization of their tools will not require an abundance of special skills. The company prides itself in making information accessible, so the operation of the application should be simple enough for an average user to make use of that information.

Illustrations provide a clear picture of an interactive platform that excels at summarizing information. In addition, Splunk also assures assistance in implementing its programs. Comparatively, despite its complexity of functions, Splunk stays at the same level of difficulty as Microsoft Excel: while it is true that the user would need to learn certain functions of an application first, but after that the platform would do the rest of the work.

As students we learn similar skills in classes like Accounting Information Systems and Management Information Systems, which focus on the technology part of the business world. Working with databases and using special tools to analyze them could be one of the milestones on the way to mastering platforms like Splunk. Continuing practice with complex formulas and basics of programming could prove to be of a huge benefit in a further understanding, using, and improving more advanced applications like Splunk.

3. Accounting world uses technology in their day-to-day operations, and each decade proves to be on a completely different level in terms of advancement and usefulness. In this section we will examine various scenarios that show how the Splunk platform could be useful in auditing, tax planning, financial statement analysis, valuation, and advisory.

3a. Audit.

Splunk platform could aid auditors in sampling and vouching as a part of substantive testing. The system would easily detect gaps, errors, and any other misstatements that routinely occur. Already, more and more accountants rely on technologies in that regard.

The programs, that Splunk offers, also contain the protocol for assessing risk and its importance to the firm. While it is still managers' decisions how to approach the problem, it considerably saves both the time and resources.

Risk assessment is an essential part of auditing. It is usual for an event to repeat itself, which means many threats will resurface throughout life of the firm. The desired application will be a tool that could document and store previous risk assessments, later connecting arising one and referencing to the appropriate solutions. In a way, the platform would design responses building a complex scheme of solutions to tremendous number of challenges.

3b. Tax.

Tax reporting and compliance utilizes many complex concepts that Splunk could not only analyze, but cross-reference. This is very important for companies that are spread internationally as tax must be reported according to local regulations. The legal

aspect of tax varies from country to country, and analysis that Splunk produces could help stabilize reporting for the firm and improve its efficiency without allocating more resources.

Tax authorities, as mentioned in the article published by Ernst & Young, are taking advantage of digitization to introduce new e-invoicing requirements into their national legislation to assist with GST, VAT or other revenue-based taxes (Zöllkau 3). It is believed that introducing technologies as Splunk could not only lower taxes, but also increase return on investment.

Monitoring the impact of new tax regulations around the world is impossible without special applications to simplify the process and significantly reduce hours of gathering steady flow of information. Splunk platform is designed to accept stream of data without losing nor space nor speed, which makes it indispensable in planning and accounting for tax operations.

3c. Advisory.

Advisory department would benefit from the application called Splunk Quick Start, because it collects, correlates, indexes, and visualizes data from all layers of the infrastructure for quicker root cause analysis and faster troubleshooting. (Splunk website)

Splunk IT Service Intelligence specifically makes it easier for financial analysts. Not only it simplifies operation for quicker insights, but interactively shows critical issues, giving user an advantage of time to fix it. Implementing the system for the clients would allow for a better time management and would reorganize task approach in a more efficient way.

Application Delivery manages complex, highly taxed and interconnected information systems, which is an operational advantage in a valuating area of accounting. A machine that sorts out through extensive data, attaching it to proper categories would eliminate the need for several manual operations.

4. From the aforementioned evidence, it is clear that the company should invest and implement Splunk platform. Their application is an asset itself that will benefit people of the company in any department. Talented employees could use it to create and integrate various integrations inside the firm, so it would evolve in a more IT independent entity. However, Splunk's clean record does not assure cybersecurity of a high level because of the short-term existence. However, it will help the company to enhance data storage, as well as data's manipulation, gathering, and analysis. Using the ideas from the previous paragraphs, employees are going to create a new unique and successful way of performing analytical procedures on a global level. Overall, predicted outcomes outweigh the possible high costs of implementation of these professional applications.

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Case «Rite Aid»

Interest Bonds

Introduction.

In this case we looked at the indebtedness and credit agreement of Rite Aid. We learned to differentiate between the terminology, namely various types of bonds and interest. There is a slight, but very significant difference that I did not know, but mattered a lot in the end. It was important to construct entries for different types of notes and see how accounting rules for them differ. We carefully considered how to accurately expense the interest and amortize discounts and premiums. It was important to note the significance of issuing different types of notes according to the needs of the company.

Overall, the case was an asset and an aid in learning effects of terms on the debt itself and its accounting. Debt disclosures were quite complex, and it proved to be challenging to navigate in advanced aspects of a note, but this challenged me to know more. Working on the case aids us in preparing for future classes, where terminology will thoroughly be utilized.

a.

i. Note 11 features Indebtedness and Credit Agreement. According to it, Rite Aid issues both **secured** and **unsecured** loans. The main difference is that secured debts are backed up by a senior lien on, inventory, accounts receivable, and prescription files of the subsidiary guarantors. On the other hand, unsecured debt is an unprotected obligation with no guarantee of payment of any sort in case of default or bankruptcy.

ii. The **guaranteeing** is different from securing a debt. In the latter case company itself is a guarantor, but in the former a third-party is taking the responsibility for the

loan, if the firm fails to meet the obligation. Rite Aid's loans are secured by fully-owned subsidiaries of the company.

iii. To be precise, we need to define words “**senior**”, “**fixed-rate**”, and “**convertible**”. Senior loans are generally secured by a borrower's assets pursuant to a priority or “senior” lien, and they are first in priority in receiving payments when a borrower is servicing its debts (Norman 2). Fixed-rate mortgage has a fixed interest rate that does not change, which means steady equal payments as a result. Convertible debt can be turned into other securities of the company, for instance, common stock.

iv. It is important to be flexible in financing the operations. While the company's desire would be of a certain interest rate and terms, creditors have their own, making it difficult to find the one suitable. This results in adjusting according to time of the issuance, market rates, as well as conditions for both parties.

b. For the year ended February 27, 2010, **total debt** obligations equal to \$6,370,899, of which \$51,502 are current maturities of long-term debt and lease financing obligations that are due within the coming twelve months.

c.

i. **The 7.5% senior secured notes** that are due March 2017 were issued in the face value of \$500,000. The carrying value did not change from year to year, and when no discount or premium is listed, we can assume that the value listed in the note 11 is the face value.

ii. To issue the notes, Rite Aid made following entries:

Discount on Notes Payable	705
Cash	38,438

v. To compute the total rate of interest, we need to divide the interest expense by the carrying value for 2009:

$$\$39,143/405,246 = \underline{\mathbf{9.66\%}}$$

e. Next notes we are looking at are **9.75% senior secured** due 2016.

i. To record the proceeds of the note:

Cash	402,620 (410,000 X 98.2%)
Discount on Notes Payable	7,380
Notes Payable	410,000

ii. To compute the effective annual rate, we use financial calculator, where number of years is seven, present value is \$403,308, payments are \$39,975(410,000 X 9.75%), and future value is \$410,000. Then, effective interest rate would equal to 10.1212%.

iii. Figure 8-1 summarizes the amortization and interest expense schedule, holding the effective interest rate constant. It also demonstrates decrease in the net book value of the debt and show amounts of discount amortization for each of the periods in the first column.

Figure 8-1

Date	Interest Payment	Interest Expense	Bond Discount Amortization	Net Book Value of Debt	Effective Interest Rate
6/30/2009				\$ 402,620	10.1212%
6/30/2010	\$ 39,975	\$ 40,750	\$ 775	403,395	10.1212%
6/30/2011	39,975	40,828	853	404,248	10.1212%
6/30/2012	39,975	40,915	940	405,188	10.1212%
6/30/2013	39,975	41,010	1,035	406,223	10.1212%
6/30/2014	39,975	41,115	1,140	407,363	10.1212%
6/30/2015	39,975	41,230	1,255	408,618	10.1212%
6/30/2016	39,975	41,357	1,382	\$ 410,000	10.1212%

iv. To accrue two thirds of annual interest, Rite Aid would:

Interest Expense	27,167
Discount on Notes Payable	517
Cash	26,650

v. Net book value will increase by the amount of discount amortized.

$$\$402,620 + \$517 = \underline{\underline{\$403,137}}$$

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Case «Merck & Co., Inc.»

Stock and Dividends

Introduction.

The case summarized Merck's activity authorizing shares, issuing, and repurchasing them back, as well as paying dividends. The research illustrates the very reason for reporting Stockholder's Equity and disclosing Dividends. The information that is necessary to come to a certain conclusion is spread out on all four financial statements and the notes. It was of a huge future benefit to look through all of them to determine which numbers would be useful in calculations for ratios, because some of data could be misleading for an inexperienced user.

The first part of the case included determination of amount of shares the company as well as computing market capitalization. Next part was more conceptual, where we researched the company's reasons for not only paying dividends, but also for repurchasing its own stock — activities that are not profitable at first glance. However, they turned out to be essential for firm's ability to sell stock successfully as shareholders review them for determining attractiveness of the firm.

Furthermore, we looked how to account for dividends, carefully considering what amounts should be debited and credited, how much should be taken from retained earnings, and if all of the dividends declared would be paid. One of the following parts accounted for treasury stock, where we looked at it from the perspective of cost method. The last part included an excel table that makes the information we determined in earlier parts more useful for review and possible decision-making: there were patterns that are not so obvious without profound analysis.

Overall, this case allowed us to see the whole picture of what is happening when company issues stock. One action that triggers an enormous response from all stakeholders and constitutes one of the major parts of firm's financing.

a.

i. Merck is **authorized** to issue 5,400 million stock shares. The number can be found on the Balance Sheet.

ii. 2,983.5 million stock shares were **issued** at December 31, 2017 as stated on the Balance Sheet. (*Note that the numbers in calculations are not listed in millions to be as accurate as possible*)

iii. $\$29,800,000 / 2,983,508,675 = \underline{\$0.01}$

Shares are \$0.01 **par value**. We calculated this number, dividing the dollar amount that is shown on the balance sheet by the total number of shares issued.

iv. 811,005,791 shares are held in **treasury stock**.

v. Shares issued – Treasury stock = **Outstanding shares**

$2,983,508,675 - 811,005,791 = \underline{2,172,502,884}$

vi. Market price per share X total number of shares outstanding = **Market Capitalization**

$\$57.61 \times 2,172,502,884 = \underline{\$125,157,891,147}$

Using the formula, we concluded that the total for market capitalization at December 31, 2007 is \$125,157,891,147.

- c. Paying dividends is a way for the company to reward participating shareholders. Not all organizations can afford **distribution of dividends**, so it acts as a signal to potential investors that the company is profitable and is showing potential. With that being noticed, more and more new shareholders will invest in what they believe is a profitable entity, so naturally the stock price will go up.
- d. Companies **repurchase** their own stock from the market to increase shareholders' wealth. A firm itself cannot be a shareholder, but by buying back shares it decreases shares outstanding. With fewer shares, the value of one will be higher.
- e. To summarize Merck's **dividend activity** for 2007, the company should make the following entry:

R/E		3,310,700,000		
	Dividends Payable	3,400,000		
	Cash	3,307,300,000		

- g.
 - i. Merck uses **cost method** to account for treasury stock. Under this method, the par value of shares is ignored in favor of an actual cost of repurchasing.
 - ii. According to the note eleven, 26,500,000 shares were repurchased in 2007.
 - iii. From Stockholder's Equity we know that Merck paid \$1,429,700,000 for repurchases. If we divide this number by number of shares repurchased, the amount per share would equal \$53.95. This is considered a financing activity in the relation to cash flow.

- iv. Merck would not disclose treasury stock as an asset, because, in fact, it is a contra-equity account. It decreases Stockholder's Equity and does not bear any future economic benefit.
- v. As shown in the Figure 9-1, various were calculated for Merck in two consequential years. Merck paid 15 million less dividends in 2007 that could lead to negative assumptions from potential shareholders' perspective. However, if compared to the total numbers of dividends paid, it can be argued that this number is immaterial. While the stock price has shown an increase of \$16, dividends per share almost have not changed which led to a percent reduction in a dividend yield. It can also be considered, that even though Net Income decreased by a quarter, Total Assets show an increase of almost 4 billion, and ratio of dividends to assets have not changed despite varying values in two years.

Figure 9-1

	2007	2006
Dividends Paid	\$ 3,307,300,000	\$ 3,322,600,000
Shares Outstanding	2,172,502,884	2,167,785,445
Net Income	\$ 3,275,400,000	\$ 4,433,800,000
Total Assets	\$48,350,700,000	\$44,569,800,000
Operating cash flows	\$ 6,999,200,000	\$ 6,765,200,000
Year-end stock price	\$ 57.61	\$ 41.94
Dividends per share	\$ 1.52	\$ 1.53
Dividend yield	2.64%	3.65%
Dividend payout	1.01	0.75
Dividends to total assets	0.07	0.07
Dividends to operating cash flows	0.47	0.49

Case «State Street Corporation»
Securities

Introduction.

State Street Corporation is involved in acquiring marketable securities for generating profit. There are several ways for the firm to make money with certain securities. First, it is possible to use appreciation or, in other words, buy low, sell high. Second, it is common to receive dividends from the equity securities. Finally, interest is gained on the debt.

Accounting while holding securities also vary. There is an important difference between recognizing the sale and realizing it. Realization is related to the ability to convert asset into cash, that is why it is not possible to realize revenue for the security until it is actually sold.

Here is the basic framework for recognizing unrealized gains and losses as long as the company cannot exert significant influence:

- Trading — adjust the fair value, recognize gains and losses on the income statement.
- Available-for-Sale — adjust fair value, recognize unrealized gains and losses on equity (other comprehensive income).
- Held-to-Maturity — changes in fair value are possible because of changes in interest rates, but we do not recognize it, because we classified it as a Held-to-Maturity. Do not recognize unrealized gains and losses. Realize when sold, unless there is no change in what we paid/sold. Amortization of discount/premium reflects the change of the interest rate from purchase date to when it is ready to be sold.

Since State Street main operations involve buying and selling securities, its financial statements have elements that are very specific for the type of service they are providing. To begin with, Balance Sheet does not divide into subsections of Current and Long-term assets, but rather the firm lists their assets in order of decreasing liquidity. Moreover, Cost of Goods Sold is absent from Income Statement, because securities cannot be qualified as inventory. We also see that they do not include selling nor administrative expenses.

Auditors have different opinions on the matter of how to account for securities, that is why it is very important to have a clear guidance and regulations in place. This case helped us understand various reasonings behind the classifications as well as ways to record significant events that impact the cost of securities. It is important to understand how the securities work in order to audit one of the main financial instruments of the company.

a.

i. **Trading securities** are debt or equity securities, generally short-term, that are bought and sold in a rapid fashion to generate profit.

ii. \$1 of dividends or interest received will be recorded as:

a) Cash	1	
	Dividend Revenue	1
b) Interest Receivable	1	
	Interest Revenue	1

iii. if the value is increased by \$1:

Fair Value Adjustment (Trading)	1	
Unrealized Holding Gain — Equity		1

b.

i. Securities **Available-for-Sale** are either debt or equity securities with unclear intent. The owner might or might not sell them, so they can be used strategically, depending on what company currently needs.

ii. The entry for recording dividends and interest of \$1 will be as follows:

a) Cash	1	
Dividend Revenue		1
b) Interest Receivable	1	
Interest Revenue		1

iii. If value of the security is increased by \$1:

Fair Value Adjustment (AFS)	1	
Unrealized Holding Gain — Income		1

c.

i. **Held-to-Maturity** securities are the securities that the firm has an intent to hold to maturity. They can only include debt securities as stock have an unlimited life, thus they do not have a maturity life.

ii. The firm will not record any adjustments to the fair value as it does not matter since they will be holding the security until it matures. The security will be recorded at cost.

d.

i. On December 31, 2012, Trading account assets equal to \$637,000,000 on the Balance Sheet, which means the Market Value of the securities is the same, because they are recorded at its fair market value.

ii. If the unadjusted trial balance for 2012 shows that the value of trading securities equals to \$552,000,000, State Street will make a following entry:

Fair Value Adjustment (trading)	85,000,000
Unrealized Holding Gain — Equity	85,000,000

e.

i. The 2012 year-end balance of securities held-to-maturity account equals to \$11,379,000,000.

ii. Market value of these securities equals to \$11,661,000,000.

iii. The amortized cost of held-to-maturity is exactly the same as its carrying value listed on the balance sheet, \$11,379,000,000.

iv. The market value and amortized cost are different. While the former equals to the fair value, the latter is what is left from the original cost after costs were allocated over the life of the asset.

f.

i. The account balance at the year-end of 2012 for Available-for-Sale securities equals to \$109,682,000,000.

ii. Net Unrealized gains and losses for 2012 for AFS: \$1119 (\$2001 - \$882)

iii. What are the net realized gains and losses: \$55(found on the income statement) = 101 – 46.

g.

i. Purchase of Available-for-Sale securities:

Investment in AFS	60,812,000,000
Cash	60,812,000,000

We do not make any adjustment to Investment account until we sell the security.

ii. To record the sale of these securities, State Street would make the following entry:

Cash	5,399,000,000
Unrealized Holding Gain	67,000,000
Realized Gain on AFS	55,000,000
Investment in AFS	5,411,000,000

iii. To determine the original cost of Available-for-Sale securities:

Cash proceeds amount to \$5,399,000,000, gain was \$55,000,000.

Gain = Proceeds — Book Value.

$$55,000,000 = 5,399,000,000 - 55,000,000 = \underline{\underline{5,344,000,000}}$$

Case «Zagg Inc.»

Income Taxes

Introduction.

Income taxes are complex since it is crucial to take into consideration various details such as permanent differences, temporary differences, effective and statutory rates. The case study of Zagg Inc. talks about each of these items in detail, but mainly focuses on the application of deferred taxes. We learned how to construct two different balance sheets, where the new one represents the amount deducted or added for tax reporting purposes.

The reconciliation of both pre-tax financial income from an Income Statement and Taxable Income from a tax return gives us a general idea of the amount we should consider that is created due to different strategies and methods company uses for valuating certain accounts. Although permanent differences occur on one side of the equation, temporary differences affect both pre-tax financial income and taxable income, which creates a significant impact we must consider. They typically result in deferred tax assets or deferred tax liabilities, but in rare cases that are explained below they cannot be linked to any asset or a liability.

Temporary differences are caused by the timing and they will reverse themselves in the future periods. In the event, when realization of deferred taxes is more than likely not to be realized company creates valuation allowance account. Zagg has a net system for the deferred taxes, and its financial statements contain both deferred tax assets and liabilities. They cannot offset each other, an asset will never become a liability, but the firm uses net of each, combining them in one item, which we will decompose in one of the entries. To understand better, we consulted the codification, specifically ASC 740, which exempts you can see below.

a. **Book Income. Taxable Income.**

Book Income, also known as a pretax income, is used for financial reporting purpose and can be found on the Income Statement. It is used as a base for computing Income Tax Expense. Zagg reports \$23,898 million of a pretax income for 2012. Taxable Income, on the other hand, is used to compute Income Tax Payable for tax reporting purposes.

b.

i. **Permanent tax difference** is recognized as an expense on the financial statement according to GAAP regulations, but these differences are not allowed by IRS, which is why they do not constitute as a part of tax return. For instance, interest on tax-exempt securities such as municipal bonds, non-tax-deductible goodwill amortization or impairment, and dividends-received deduction based on income from businesses in which an entity has ownership.

ii. **Temporary tax differences** are created when an event has been treated differently for financial reporting and tax reporting purposes, and it is expected to reverse back in the future and impact the tax amount. They are identified by preparing a tax balance sheet, which later is compared to the official balance sheet statement. The main cause for temporary differences to occur is timing of events, payments, financial reports, and tax returns. There are two types of temporary differences: future taxable and future deductible amount, which are discussed in part e.

iii. **Statutory tax rate** is mandated by law. There could be multiple rates for different income levels. Although both rates are used for computing tax expense,

statutory rate does not equal effective rate, because of the temporary differences involved.

iv. **Effective tax rate** is a calculated rate, which uses the following formula: Tax Expense divided by Pretax income.

c. **Codification ASC 740.**

ASC 740-10-30-3

Total income tax expense (or benefit) for the year is the sum of deferred tax expense (or benefit) and income taxes currently payable or refundable.

According to ASC 740, tax reporting consists of calculating two items: amount that is currently due and deferred taxes. The two are computed separately, but their sum equals the total tax expense.

Deferred Tax mainly consists of temporary differences that are defined as a “tax basis of an asset or liability computed pursuant to the requirements in Subtopic 740-10 for tax positions, and its reported amount in the financial statements”. It impacts future periods, creating future taxable or deductible amounts, when the reported amount of the asset or liability is recovered or settled.

ASC 740 recognizes eight examples of different temporary differences that are possible to occur. Each of them explains the importance of it being included in the total tax provision together with the current tax bill.

ASC 740-10-30-4 Deferred tax expense (or benefit) is the change during the year in an entity’s deferred tax liabilities and assets. For deferred tax liabilities and assets recognized in a business combination during the year, it is the change since

the acquisition date. Paragraph 830-740-45-1 addresses the manner of reporting the transaction gain or loss that is included in the net change in a deferred foreign tax liability or asset when the reporting currency is the functional currency.

First few examples of differences are created due to timing discrepancies. Book value of an item is more than is reported for tax purposes, so if it was to be sold today, it would result in a future taxable amount, that results in a deferred tax liability. However, it gets more complicated if we consider depreciation for said asset. It is important to compare how it has been depreciated both for reporting and for tax purposes. For instance, if six years of depreciation were used on the tax return, and only three on the books, the temporary difference creates a deferred tax asset, or a future deductible amount. On the other hand, if the situation was reversed, we would observe no depreciation for some of the years for taxable income. Other events will include business combinations, indefinite-lived assets, inflation indexation.

Accounting for temporary difference in general includes the following steps:

1. Identify temporary differences.
2. Identify tax loss carryforwards and tax credits.
3. Determine the tax rate to apply to temporary differences and loss carryforwards.
4. Calculate deferred tax assets and liabilities.
5. Evaluate the need for a valuation allowance.

Intuitively it is unclear why deferred taxes are reported as a part of total income expense, because they are deferred. However, current period events are causing those differences directly, so we must follow the expense/revenue matching principle.

Some temporary differences are not identified with an asset or liability. According to ASC 740 those result from events that have been fully recognized as per the financial statements but may be recognized differently on the tax return. These differences cannot be identified with a particular asset or liability. One example would be if a construction company reports revenues and expenses using percentage of completion method on its financial statements, while using completed-contract method for tax purposes. The difference becomes taxable when the project is completed.

d. Deferred tax assets and deferred tax liabilities.

Deferred tax liabilities are those temporary differences that will generate future tax. It implies that the company will have future tax obligations because of a transaction that takes place during the current period. Difference in depreciation amounts for financial statements and tax reporting is one of the most common deferred tax liabilities. For instance, long-lived assets are usually depreciated using straight-line method, while the tax regulations allow for an accelerated way. Depreciation on the tax return will be higher for the number of periods. Deferred tax liability will gradually lower to the point where difference with straight-line depreciation will disappear.

On the opposite side, deferred tax assets will result in the reduction of tax, its return or relief. They exist when company overpaid its obligations or paid them in advance. It can be compared to other prepaid assets, such as rent, advertising, or insurance. Although the company distributed the money, it is still entitled to the benefits they paid for, and that is why this amount should be reflected in its financial

statements. Carry forward of a loss is a good illustration of a deferred tax asset. The codification authorizes businesses to carry the loss over the periods to reduce the taxable income in the future. Recent tax reform prohibited carrying losses backwards to the past.

In general, firms' objectives are to defer their liabilities for as long as possible, and do not pre-pay any taxes. Tax assets are not certain to be realized, which is why companies establish tax valuation allowance accounts for those that are "more likely than not" that they will not be realized.

e. **Tax Valuation Allowance.**

First of determining if the tax valuation account is needed is assessing the evidence. There should be enough quality pieces of information that will allow the user to make a decision. It is very subjective part that is usually handled by more experienced personnel. Because its mainly based on management's judgement, a certain percentage of an allowance account would not work and would not be appropriate. Formulas exist to have a starting point in the determination of amount that should be assigned to the account, but they are not the substitute for experienced perspective or judgement.

f.

i. To record **Income Tax Provision** for 2012, in millions:

Income Tax Expense	9,393	
DTA, net	8,293	
Inc Tax Payable		17,686

ii. To **decompose** into deferred income tax asset and deferred tax liability components:

Income Tax Expense	9,393	
DTA	8,002 (14,302 — 6,300)	
DTL	291	
Income Tax Payable		17,686

iii.

Effective tax rate can be calculated by dividing Tax expense by Pretax Income.

Effective tax rate = $9,393,000,000 / 23,898,000,000 = \underline{\mathbf{39.3\%}}$

Statutory rate for Zagg is 35%. The difference between the two includes temporary differences: deferred tax asset of \$8,002 million and deferred tax liability of \$291 million, as well as valuation allowance accounts and permanent differences.

iv.

Ending balance for deferred tax assets is \$13,508 million, net of valuation allowance and net of DTL, which also equals to the sum of current deferred taxes and non-current.

Case «Apple»
Revenue Recognition

Introduction.

Although we studied revenues under the new recognition principle, we have never considered from the perspective of a real company like Apple. This case is a perfect example for revenue recognition as the company operated not only with goods, but services both at the physical stores and online. Specific rules are applied to revenue recognition over time. In order to analyze this case, we accessed codification, specifically ASC 605 and ASC 606.

Throughout the case we defined such terms as revenues, gains, recognition of revenue, and multi-element contracts. There are many methods company may use. For example, Apple accounts for contracts with multiple deliverables using products' relative selling price. Accounting for such contracts is discussed in part d. of this case. Part e., on the other hand, discusses the manager's perspective of accounting for sales revenue. In the last part of the case, we considered when revenue would be recognized for different sales situations, aligning the recognition principles as much as possible with the new standard. Because of the wide assortment of goods and services that Apple provides, we could research and apply variety of methods.

Overall, sales revenue is an essential part of any accounting, and cannot be overlooked. Although not the only one, but maximizing sales and profit is one of the main objectives of any company. In order to do strategic planning, it is important for a firm to rely on reliable financial statements with accurate data. It is true that the more complex company's sales process is, the more difficult it is to choose accounting method, but this case helped to investigate one of the more common situations.

- a. **Revenues** arise from central operations of the organization, whereas **gains** results from peripheral activities. Another way to look at them is that revenue is “normal” income that is expected and realized, when gains are typically unexpected and might be unrealized.

For the next steps we use information attained from research on the codification.

Its objective “is to establish the principles that an entity shall apply to report useful information to users of financial statements about the nature, amount, timing, and uncertainty of revenue and cash flows arising from a contract with a customer”.

- b. Revenue is recognized when the contract performance obligations are fulfilled, there are many nuances though. The new revenue recognition standard will have a huge impact on the existent practices. Main areas that are affected are amount and timing of revenue recognition. According to ASC 606, which is effective since 2018, company should identify significant financing components, which can be explicitly stated or implied by the contract terms and are accounted for separately from the revenue transaction. The cumulative effect of the new regulation may be recognized retrospectively or apply for existing contracts, adjusting the beginning retained earnings, if company so chooses. In general, it is created to support international alignment and comparison amongst global entities.

The new standard is called “**Revenue from contracts with customers**” and uses asset-liability approach as the basis for revenue recognition. A firm will account for revenue based on assets and liabilities that arise from contracts with

customers. A five-step process for revenue recognition under the new method exists:

1. Identify the contract with customers. Several questions must be answered in order to satisfy this requirement. Contract has to have a commercial substance, and both parties agree on the contract.
2. Identify the separate performance obligations in the contract.
3. Determine the transaction price. Payment terms are to be established.
4. Allocate the transaction price to the separate performance obligations if applicable.
5. Recognize revenue when each performance obligation is satisfied.

Criteria outline exists for revenue recognition as well. It includes issues like collection probability, delivery completion, persuasive evidence of an arrangement, determinable price.

Accounts are affected in several situations, including sales, sales returns and allowances, repurchase agreements, bill and hold, principal-agent relationships, consignments, warranties, nonrefundable upfront fees, contract modifications, and revenue recognition over time for long-term contracts. Various accounts are affected, depending on the situation.

- c. Apple's main sources of revenue are hardware, software, applications, digital content, peripherals, and service and support contracts.

On the other hand, Apple recognizes revenue when four of the following **criteria** are met:

1. Persuasive evidence of an arrangement exists.

2. Delivery has occurred.
3. The sales price is fixed or determinable.
4. Collection is probable.

Apple criteria fully align with generally accepted ones.

In the most recent Apple 10-K the following statement may be found:

The new revenue standards may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of adoption. The Company will adopt the new revenue standards in its first quarter of 2019 utilizing the full retrospective transition method.

- d. **Multi-element contract** involves an arrangement of more than one item or service that contractor agrees to provide. It is very difficult to standardize the revenue recognition across multiple arrangements. New accounting standard tried to ease the issue proposing accounting for the elements using their fair market value, but there are so many possibilities that fair market value can vary depending on how a company decided to calculate it. There are also revenue recognitions adjustments that have to be made overtime.

606-10-25-9 An entity shall combine two or more contracts entered into at or near the same time with the same customer (or related parties of the customer) and account for the contracts as a single contract if one or more of the following criteria are met:

- a. The contracts are negotiated as a package with a single commercial objective.

b. The amount of consideration to be paid in one contract depends on the price or performance of the other contract.

c. The goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation in accordance with paragraphs 606-10-25-14 through 25-22.

e. Managers would have to consider what relative selling price they would use. Currently Apple uses a hierarchy that includes vendor-specific objective evidence of fair value, third-party evidence of selling price, and best estimate of the selling price. Manager's objectives should also include accounting and predicting for the sales returns and allowances and maintaining warranties.

f.

i. iTunes **songs** sold online.

As Apple is not primarily vendor of iTunes content, it recognizes sales on net basis, retaining only commission it is entitled to. A part of what buyers are paying never appears on the consolidated statements of the company.

606-10-55-49 An entity should recognize a liability (and not revenue) for any consideration received that is attributable to a customer's unexercised rights for which the entity is required to remit to another party, for example, a government entity in accordance with applicable unclaimed property laws.

ii. Mac-branded **accessories**: headphones, power adaptors, and backpacks sold in the stores and online.

For hardware and accessories, Apple would use generally accepted principles that are listed in part b and c, in other words if the contract between Apple and customer exist, it would recognize upon fulfilling its obligation to deliver product to the customer. The revenue would be recognized when transfer of ownership is completed which is different for Apple stores and online shopping. While purchase in the store entails immediate transfer of ownership for goods, online shopping includes Apple taking responsibility for shipping.

iii. iPod sold to **third-party** reseller in India.

Unless there is an existent contract with a third-party reseller, there would be no difference in recognizing revenue. However, such things as timing and tax rates will be taken into considerations.

iv. Revenue from **gift cards**.

According to note 1, Apple records deferred revenue with each gift card sold, which is going to be relieved when customer redeems it.