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Financial Accounting Fundamentals: A Series of Case Studies

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FINANCIAL ACCOUNTING FUNDAMENTALS: A SERIES OF CASE STUDIES

by

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

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ABSTRACT

SIDNEY ALBRITTON: Financial Accounting Fundamentals: A Series of Case Studies

(Under the direction of Dr. Victoria Dickinson)

Financial accounting is an area of study that encompasses a variety of topics and concepts. Understanding these concepts, both in theory and in practice, allow professionals and future professionals to have a firm foundation in the work they are expected to do. In order to develop this firm foundation of financial accounting, a series of case studies was completed. These cases covered concepts such as revenue recognition, shareholders' equity, debt financing, and the like. Each case consisted of qualitative/quantitative information from a real company and a series of questions that allowed the student to explore the concepts and the intricacies of a real firm's application of said concepts. This exploration not only served as an opportunity to explore real company financial documents, but it also augmented the process of learning financial accounting.

CASE 1: HOME HEATERS, INC.

September 6, 2017

Executive Summary

This case explores how different accounting practices, including certain choices and estimates made, can affect a company's financial statements. We evaluated two similar heating supply companies with identical operations during their first year. After recording the transactions resulting from these operations, we drafted financial statements for each company. These financial statements provided insight into the effects these accounting practices had.

This case provided me with a better understanding of the effects certain accounting practices have on our financial statements. It was particularly helpful because it allowed me to witness the effects of decisions throughout the accounting cycle, from recording entries to financial statements. Having this information will assist not only me but any client I may be working for when deciding which methods to use.

Analysis & Recommendation

Based on the financial information above, there are two primary recommendations we would make to investors and/or creditors. In terms of investment, Glenwood Heating presents the best opportunity. Its earnings per share for this fiscal year ($29.98) were significantly higher than that of Eads Heaters ($22.14). Glenwood also has a lower amount of liabilities than Eads. In terms of lending money, Glenwood is also the more attractive option. A significant amount of Eads Heaters' financing already comes from debt as opposed to Glenwood Heating. With a comfortable net income and lower amount of debt, Glenwood is the best option for creditors or investors.

Glenwood Heating, Inc. Income Statement December 31, 20X1		
Sales		
Sales Revenue	$ 398,500	
Net Sales		$398,500
Cost of Goods Sold		(177,000)
Gross Profit		221,500
Operating Expenses		
Bad Debt Expense	994	
Interest Expense	27,650	
Depreciation Expense	19,000	
Other Operating Expenses	34,200	
Rent Expense	16,000	(97,844)
Income Before Tax		123,656
Income Tax Provision		(30,914)
Net Income		$ 92,742
Earnings per Share		$ 28.98

Glenwood Heating, Inc. Statement of Retained Earnings For Period Ending December 31, 20X1	
Beginning Balance, Retained Earnings, 1-Jan-20X1	$ -
Add Net Income For 20X1	92,742
Total	92,742
Less Dividends Declared & Paid FY 20X1	(23,200)
Ending Balance, Retained Earnings, 31-Dec-20X1	$ 69,542

Glenwood Heating Inc. Balance Sheet December 31, 20X1			
Assets			
Current Assets			
Cash	$ 426		
Accounts Receivable	99,400		
Less: Allowance for Doubtful Accounts	(994)		
Inventory	62,800	$ 61,632	
Property, Plant, & Equipment			
Land	70,000		
Building	350,000		
Less: Accumulated Depreciation-Building	(10,000)		
Equipment	80,000		
Less: Accumulated Depreciation-Equipment	(9,000)	481,000	
Total Assets			$ 642,632
Liabilities & Equity			
Current Liabilities			
Accounts Payable	$ 26,440		
Interest Payable	6,650	33,090	
Long-Term Liabilities			
Note Payable	380,000	380,000	
Total Liabilities			$ 13,090
Stockholders' Equity			
Common Stock		160,000	
Retained Earnings		69,542	
Total Equity			229,542
Total Liabilities & Equity			$ 642,632

Glenwood Heating, Inc. Statement of Cash Flows For Period Ending on December 31, 20X1		
Cash Flows from Operating Activities		
Net Income		$ 92,742
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation Expense	$ 19,000	
Bad Debt Expense	994	
Accounts Receivable	(99,400)	
Inventory	(62,800)	
Accounts Payable	26,440	
Interest Payable	6,650	(109,116)
Net Cash Flows from Operating Activities		(16,374)
Cash Flows from Investing Activities		
Purchase of Land	(70,000)	
Purchase of Building	(350,000)	
Purchase of Equipment	(80,000)	
Net Cash from Investing Activities		(500,000)
Cash Flows from Financing Activities		
Issuance of Common Stock	160,000	
Payment of Cash Dividends	(23,200)	
Long-Term Notes Payable	380,000	
Net Cash from Financing Activities		516,800
Total Net Cash Flows		$ 426

CASE 2: MOLSON COORS BREWING COMPANY

September 20, 2017

Executive Summary

Molson Coors Brewing Company--Profitability and Earnings Persistence explores the financial statements of Molson Coors Brewing Company, paying specific attention to the Income Statement. In this case, we explored the role of classification on income statements and specific items on the income statement, including Special Items and Other Income. The goal of analyzing these particular items was to facilitate a better understanding of persistence and its role in the decision-making of users, while also providing a context for the inclusion of items that are not persistent.

This case provided me with a greater understanding of the role of certain items on the income statement, specifically the role of items that are outside the regular operations (revenues and expenses) of the business. By exploring these items, I was able to see the role they have in transmitting information to the users of financial statements. The goal of financial statements is to provide the user with relevant and reliable information regarding the financial state of a company. By understanding the role of irregular items, such as those included in Special Items, I will be better able to facilitate the transmission of information to investors, creditors, and other users.

Concepts

A. What are the major classifications on an income statement?

The major classifications on an income statement are the operating section, nonoperating section, income tax, discontinued operations, noncontrolling interests, and earnings per share.

B. ***Explain why, under U.S. GAAP, companies are required to provide "classified" income statements.***

According to the conceptual framework, the objective of financial reporting is to provide users with an accurate understanding of the quantity and likelihood of future cash flows. This information, in turn, allows users, specifically investors and creditors, to make educated decisions. Classified income statements differentiate between regular items, like sales revenues and operating expenses, and non-regular items, such as gains and losses, in the nonoperating section.

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

By understanding persistent income, financial statement users will be better able to project future income. This is especially useful to investors and creditors in determining whether investing in the company or loaning money to the company is reasonable. An understanding of future cash flows, resulting in income, allows an understanding of the company's financial stability.

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

SFAS #130 defines comprehensive income as "the changes in equity during a period except those resulting from investments by owners and distribution to owners." Comprehensive income includes all of the nonowner changes in a company, usually resulting from revenues and expenses. However, it also includes income or expenses that have yet to be realized. These unrealized items, including such things as unrealized holding gains/losses and gains/losses resulting from foreign currency exchanges, are what differentiates comprehensive income from net income.

Process

A. The income statement reports "Sales" and "Net Sales." What is the difference? Why does Molson Coors report these two items separately?

"Sales" is the total amount of money a company receives from the sale of its goods. On the other hand, "Net Sales" is the total amount of income from sales after items such as Sales Returns & Allowances and Sales Discounts have been accounted for. Molson Coors reports these items separately because excise taxes must be considered when determining actual sales. Excise taxes are taxes that are included in the sales price of a good, as opposed to as a separate line item, like sales tax. Because excise taxes are part of the sales price, they must be taken out to calculate the actual amount of money earned by the company from the sale of a good.

B. ***Consider the income statement item "Special items, net" and information in Notes 1 and 8.***

i. ***In general, what types of items does Molson Coors include in this line item?***

Items that are unusual or nonrecurring during the period, including asset abandonment, restructuring charges, and gains (losses) on disposal of investments, are included in the "Special items, net" line-item. These items are irregular, but Molson Coors believes that they are related to the core operations of the business.

ii. ***Explain why the company reports these on a separate line item rather than including them with another expense item. Molson Coors classifies these special items as operating expenses. Do you concur with this classification? Explain.***

These items are included in a separate section because they do not constitute regular items. Because they are unusual, they do not speak to the normal occurrences of the business. Since they are not descriptive to the normal operations of the business, I do not think they should be included in operating expenses. Operating expenses provide financial statement users with an approximate understanding of the year-to-year operations of a business. Special items are often non-recurring. By classifying this information as operating expenses, it goes against the principle of providing users with information that allows them to understand the quantity and certainty of future cash flows.

C. ***Consider the income statement item "Other income (expense), net" and the information in Note 6. What is the distinction between "Other income (expense), net" which is classified a nonoperating expense, and "Special items, net" which Molson Coors classifies as operating expenses?***

The items under "Other Income (expense)" include items such as Interest Expense and Interest Income, along with other smaller items that do not deal specifically with the core operations of the business. These items can be regularly occurring. On the contrary, "Special items, net" includes activities that are unique and do not occur regularly, but Molson Coors believes these items to be related to their core operations.

D. ***Refer to the statement of comprehensive income.***

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

Comprehensive income in 2013 was $760.2 million for Molson Coors, while net income was $572.5 million during the same year. Comprehensive income was $187.7 million greater than net income.

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

The items in the consolidated statement of comprehensive income included such items as foreign currency translation adjustments, pension and other postretirement benefits adjustments, and unrealized gain on derivative instruments. These items are important in terms of determining income, but they are not realized.

Analysis

A. ***Identify items on Molson Coors' income statement that you consider non-persistent. For each item indicate whether you do not expect the item itself to recur or whether the item might recur on future income statements but at potentially very different amounts.***

Special Items is one item that is non-persistent. The items included in Special Items are not likely to recur, or they will recur at significantly different amounts. Other Income (expense) is also an item that could or could not be persistent. Some of the items within this classification may or may not recur, and the amounts that they recur at may be similar or different. Income (loss) from Discontinued Operations will also not be persistent. Specific items in this area will not recur since they are discontinuations of operations.

B. Consider the information on income taxes, in Note 7.

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

Molson Coors' effective tax rate is 12.83% for the FY 2013.

CASE 3: PEARSON PLC.

October 4, 2017

Executive Summary

Pearson plc—Accounts Receivable explores the accounts receivable process. It takes a detailed look at the role of contra accounts that decrease accounts receivable, including "Sales Returns and Allowances" and "Allowance for Doubtful Accounts." The case also looks at the various journal entries related to accounts receivable, changes in the balances of accounts because of these entries, and the processes by which companies determine their estimated amount of bad debts.

Accounts receivable is a pertinent part of the operations of a company. Having a firm understanding of the accounts receivable terminology, and the processes involved with it, are imperative for an accounting professional. Accounts receivable and its contra accounts are also an important part of a firm's assets and value. By understanding accounts receivable, its contra accounts, and how various accounting procedures affect these accounts, it allows an individual to evaluate the value of a company.

Concepts

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

An account receivable is the result of a sale to a customer on credit. It is the existing amount the customer owes to the company. It can also be called a trade receivable.

B. How do accounts receivable differ from notes receivable?

Accounts receivable are expected to be paid within the operating period or one year (whichever is longest). Notes receivable, on the other hand, may fall outside of the operating period, leaving them to be considered "long-term." While Accounts Receivable are not interest bearing, Notes Receivable often are. Notes receivable are also created in more clearly defined terms than accounts receivable.

C. ***What is a contra account? What two contra accounts are associated with Pearson's trade receivables (see Note 22)? What types of activities are captured in each of these contra accounts? Describe factors that managers might consider when deciding how to estimate the balance in each of these contra accounts.***

Contra is the Latin word for "against." As such, a contra account is one that goes against another account, causing the true value of the main account to decrease. The two contra accounts associated with trade receivables are "provision for bad and doubtful debts" and "provision for sales returns," which are equivalent to "allowance for doubtful accounts" and "sales returns and allowances," respectively. These two accounts capture two types of situations where trade receivables will experience a decrease that is not the result of a payment. Historical amounts of bad debts or sales returns are good metrics by which to estimate these accounts. The macroeconomic environment is also one factor that must be considered, as bad debts are likely to be higher during periods of economic distress.

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

Under the percentage-of-sales procedure, the company determines a percentage that they feel accurately describes the amount of accounts that will not be paid. They then multiply this percentage with the overall sales, thus determining a dollar amount for sales they believe will be uncollectable. Under the aging-of-receivables procedure, the company views time as the primary factor in determining the amount of accounts receivable that are uncollectable. It is assumed that the longer an account goes unpaid, the more likely it is that this account will not be able to be collected at all. As such, the percentage of accounts receivable under each time frame (i.e. six months, one year, two years) is multiplied by a different percentage, and this percentage increases with the amount of time. For each of these methods, managers need historical information to develop percentages that they feel accurately reflect the collectability of accounts. For the percentage-of-sales procedure, they will evaluate the historical amount of accounts receivable that go uncollected. The same process is used for the aging-of-receivables method, but historical data is evaluated based on the different amounts of time the accounts go unpaid and the subsequent default of those accounts. In my opinion, the aging-of-receivables method is more effective at determining the true amount of uncollectable accounts, as it conducts a deeper evaluation than the percentage-of-sales method. However, this procedure entails more work and calculation for the company.

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

In some situations, the financial state of a company could not be known at the time of purchase, or its financial state could take a drastic change once the credit has been granted. It is difficult and unreasonable to expect a company to be able to conduct a thorough evaluation of a buyer before every sale on account. Likewise, many companies operate off a historical evaluation of a company's reliability. A company that, at one point, was reliable in paying off its accounts could now be struggling to pay off its debts. Managers face the risk of bad accounts every time a sale on credit is made. For a company to thoroughly evaluate its buyers before every sale, it would require them to divert resources from other areas.

Process

A. ***Note 22 reports the balance in Pearson's provision for bad and doubtful debts (for trade receivables) and reports the account activity ("movements") during the year ended December 31, 2009. Note that Pearson refers to the***

trade receivables contra account as a "provision." Under U.S. GAAP, the receivables contra account is typically referred to as an "allowance" while the term provision is used to describe the current-period income statement charge for uncollectible accounts (also known as bad debt expense).

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

Provision for Bad & Doubtful Debts

(exchange differences) 5 (utilized) 20	Beginning: £72* 26 (income statement movements) 3 (acquisition from business comb.)
	Ending: £76

The exchange differences are a result of different currencies being utilized in the company's sales. The income statement movements are changes in expenses resulting from the estimation (and recording) of bad debts expense. The "utilized" line item represents the company's writing-off of doubtful accounts. The final line item is the result of the company acquiring another company, resulting in the primary company taking on that company's allowance for doubtful accounts.

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

1.	Bad & Doubtful Debts Expense		26		*(Income Statement)*
		Provision for Doubtful Accounts		26	*(Balance Sheet)*
2.	Provision for Doubtful Accounts		20		*(Balance Sheet)*
		Trade Receivables		20	*(Balance Sheet)*

iii. ***Where in the income statement is the provision for bad and doubtful debts expense included?***

The provision for bad and doubtful debts expense is included in the operating expenses section of the income statement.

B. ***Note 22 reports that the balance in Pearson's provision for sales returns was £372 at December 31, 2008 and £354 at December 31, 2009. Under U.S.***

GAAP, this contra account is typically referred to as an "allowance" and reflects the company's anticipated sales returns.

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

Provision for Sales Returns

(actual) 443	Beginning: £372 425 (estimate)
	Ending: £354

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

1	Sales Returns & Allowances		425		*(Income Statement)*
.		Provision for Sales Returns		425	*(Balance Sheet)*
2	Provision for Sales Returns		443		*(Balance Sheet)*
.		Trade Receivables		443	*(Balance Sheet)*

iii. In which income statement line item does the amount of 2009 estimated sales returns appear?

Estimated sales returns would appear as a line item deduction under "sales," in order to calculate net sales.

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

Trade Receivables

Beginning: £1,342	
(sales on credit) 5,624	
	5,219 (cash collections)
	20 (utilized bad debts estimates)
	443 (sales returns)
Ending: £1,284	

Trade Receivables		5,624	
	Sales		5,624
Cash		5,219	
	Trade Receivables		5,219

CASE 4: PALFINGER AG

NOVEMBER 8, 2017

Executive Summary

Palfinger AG explores the Property, Plant, & Equipment category and what types of assets fall under this classification. The case also evaluates the process and different methods by which these assets are depreciated. There is also an analysis of how a company can record an expenditure associated with an asset under this category, either by capitalizing it or recording it as an expense.

Property, Plant, and Equipment is a major part of a company's assets, and, subsequently, a major part of a company's value. PPE is an important indicator in determining the long-term ability of a company to generate revenue, as the assets recorded here are usually essential to the operations of the business. Likewise, recording depreciation of these assets is an important accounting process, as it allows a company to report a faithfully representational value for said assets. As an accountant, understanding these processes is instrumental in fulfilling one's obligations, especially in reporting information to financial statement users.

Concepts

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

Based on the goods that Palfinger supplies, they are likely to have large assembly and storage facilities, which will require a sizeable portion of land. As such, the goods being manufactured by Palfinger will require large pieces of machinery, including their own pieces of large-scale lifting equipment. Depending on who is responsible for delivery of the goods, Palfinger may also have transportation equipment capable of moving large goods.

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

The €149,990 value represents the combined value of all property, plant, and equipment assets held by the company. These assets are long-term and are used in the operations of the business. Items such as land, buildings, manufacturing equipment, and other machinery fall under this classification. This value is after factors such as depreciation are taken into account.

C. ***What types of equipment does Palfinger report in notes to the financial statements?***

According to the financial statement notes, equipment includes such items as machinery, plant equipment, fixtures, and fittings.

D. ***In the notes, Palfinger reports "Prepayments and assets under construction." What does this subaccount represent? Why does this account have no accumulated depreciation? Explain the reclassification of €14,958 in this account during 2007.***

Prepayments represent payments on PPE assets that have yet to be completed and/or put into operation. These items may be assembled or under construction, which is where the classification "assets under construction" comes into play. Once these items become available for use, they will be transferred to another account under PPE. The €14,958 reclassification represents an asset that became available for use during the 2007 fiscal year. Depreciation represents the value lost with time and use once an asset is put into operation. Because these assets have yet to be put into operation, they do not depreciate.

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

Palfinger depreciates their property and equipment on a straight-line basis. The asset depreciates a set amount each year of its useful life. The useful life for buildings, as per Palfinger, can range from 8 to 50 years. Likewise, "plant and machinery" are assumed to have a useful life of 3 to 15 years, and "fixtures, fittings, and equipment" are assumed to have a useful life of 3 to 10 years. Any investment or value-adding costs are added to the value of the asset and depreciated. Two important factors management must take into consideration when choosing a depreciation policy is the timing of expenses and the value of assets on the balance sheet each year. As with many accounting practices, there is often a major trade-off between the accuracy of practices and the amount of resources these practices use. A method such as straight-line is a simple process, and will utilize less company resources to calculate. However, this method may be less accurate than others. On the other hand, a declining balance depreciation method allows a company to depreciate assets significantly during its first few years of use. This helps the company in terms of taxes owed during this period. However, it is more complicated, and takes more resources, to calculate.

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

These expenditures are capitalized, or added to the value of the equipment. They are then depreciated along with the equipment according to straight-line depreciation. The alternative treatment for these types of expenditures is to record them as expenses, placing the entire expenditure on a single income statement.

Process

A. ***Use the information in the financial statement notes to analyze the activity in the "Property, plant and equipment" and "Accumulated depreciation and impairment" accounts for 2007. Determine the following amounts:***

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

   The purchase of new PPE assets totaled €61,444.

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

   The total amount of government grants used to purchase new PPE was €733. The government may offer grants to facilitate manufacturing and other types of business ventures. Companies apply for and are awarded these grants. As per IAS 20, these grants can be accounted for in two ways. One such way is to deduct the amount of the grant from the carrying value of the asset, which is the method utilized by Palfinger.

iii. ***Depreciation expense for fiscal 2007.***

The total amount of depreciation expense for FY2007 was €12,577.

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

The net book value of PPE assets disposed of during FY2007 was €1,501.

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

Palfinger incurred a gain of €1,501 as a result of the sale of PPE during FY2007. The value, as it was recorded in Palfinger's financial statement, of disposals during this year was €154, after accounting for depreciation. Because the equipment was sold for €1,655, the company received €1,501 above the recorded value of the equipment, hence the gain.

C. ***Consider the €10,673 added to "Other plant, fixtures, fittings, and equipment" during fiscal 2007. Assume that these net assets have an expected useful life of five years and a salvage value of €1,273. Prepare a***

table showing the depreciation expense and net book value of this equipment over its expected life assuming that Palfinger recorded a full year of depreciation in 2007 and the company uses:

i. Straight-line depreciation

Year	Depreciation Exp.	Net Book Value
FY2007	€1,880	€8,793
FY2008	€1,880	€6,913
FY2009	€1,880	€5,033
FY2010	€1,880	€3,153
FY2011	€1,880	€1,273

ii. Double-declining-balance depreciation.

Year	Net Book Value (Beg. Yr)	Depreciation Expense	Net Book Value (End Yr.)
FY2007	10,673	4,269	6,404
FY2008	6,404	2,562	3,842
FY2009	3,842	1,537	2,305
FY2010	2,305	922	1,383
FY2011	1,383	110	1,273

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

i. Calculate any gain or loss on this transaction assuming that the company used straight-line depreciation. What is the total income statement impact of the equipment for the two years that

Palfinger owned it? Consider the gain or loss on disposal as well as the total depreciation recorded on the equipment (i.e. the amount from part i. i.).

If this equipment were sold at the beginning of FY2008 for €7,500, Palfinger would suffer a loss of €1,293 on the sale. As per Palfinger's policy of not recording depreciation for the year of sale, depreciation expense would only affect the FY2007 income statement, at a value of €1,880. The loss because of the sale also affected the FY2008 income statement, at an effect of €1,293. The total income statement effect across both years totaled €3,173.

CASE 5: VOLVO GROUP

NOVEMBER 22, 2017

Executive Summary

Volvo Group explores the research and development processes of a company, along with the costs that arise from such activities. The case first explores what types of activities are classified as "research and development," before moving on to the reporting of these costs. It explains the difference between "research phase" costs and "development phase" costs and how these costs are represented in the financial statements. The case also analyzes the effects varying international practices for R&D costs (IFRS vs. U.S. GAAP) have on a company's reporting.

For many companies, research and development is integral to their operations and continued success. As a result, it is important for us to understand how to account for these activities in the financial information of a company. How a company records its R&D expenditures is important to its value and, as such, it is important to accurately report this information to investors, creditors, and other users of financial statements.

Concepts

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

   As the global market moves towards more environmentally-friendly vehicles and machinery, companies must strive to keep up with and accommodate these trends. Based on the description and clientele of Volvo, a large portion of their research and development activities are conducted with environmental and emissions goals in mind. As such, their research and development costs are likely related to the labor and materials required for these types of activities. Costs associated with pioneering or improving these technologies, including administrative and legal fees associated with innovation, are included in these expenditures.

B. Volvo Group follows IAS 38—Intangible Assets, to account for its research and development expenditures (see IAS 38 excerpts at the end of this case). As such, the company capitalizes certain R&D costs and expenses others. What factors does Volvo Group consider as it decides which R&D costs to capitalize and which to expense?

When evaluating whether to capitalize or expense R&D expenditures, Volvo looks at whether the activities fall under the research phase or the development phase. Activities associated with obtaining new knowledge or determining the applications of knowledge or alternatives are associated with the research phase. As a result, expenditures associated with these types of activities are expensed. Activities associated with the development phase, however, are capitalized. These activities include actions taken by the company to complete an asset for use or sale. Such actions as designing, constructing, and testing, fall under the development phase. An important factor when making the distinction between research phase and development phase activities is the probability of future economic benefits resulting from the activities. If future economic benefits exist, then the expenditures can likely be capitalized.

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

   The length of time over which an asset could be used is the primary consideration when determining the period for amortization. Factors affecting the useful life of an asset include the general wear an asset undergoes as it is used and how viable it is to use the asset as technology advances. Using the Product & Software Development category as an example, Volvo believes that these assets will be useful for a period ranging from three to eight years. When dealing with assets of this nature, a company must consider the progress of technology and how long it will be before an asset such as this will become outdated and not of use.

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

Expending all R&D costs, as practiced under U.S. GAAP, is the better accounting practice. Although R&D activities are important to the creation of assets, they are often not fruitful. If a company capitalizes costs associated with R&D, and the project does not lead to a useful asset, then the value of the company is overstated. To provide the most accurate value of a company to investors and creditors, all R&D activities should be expensed. If these activities do lead to the creation of a useful asset, then the possession of this asset will be reflected in the value of the company.

Process

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

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

SEK 11,409 is the net amount of the asset at the end of FY 2009. This value can be found in the "Net carrying value in balance sheet 2009" line-item in the Footnote.

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

Product & Software Development, net

Beginning: 12,381	
(amounts capitalized) 2,602	
	3,126 (amortization)
	448 (other)
Ending: 11,409	

B. ***Refer to Volvo's balance sheet, footnotes, and the eleven-year summary. Assume that the product and software development costs reported in footnote 14 are the only R&D costs that Volvo capitalizes.***

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

(in SEK millions)	2007	2008	2009
1) Product and software development costs capitalized during the year	2,057	2,150	2,602
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	12,669

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

FY2007: 19.12%; FY2008: 15.77%; FY2009: 20.54%

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

i. ***Use the information from Volvo's eleven-year summary to complete the following table:***

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

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

R&D Costs to Net Sales	**2007**	**2008**	**2009**
Volvo Group	3.89%	4.62%	6.08%
Navistar International Co.	3.15%	2.67%	3.83%

The proportion for Volvo Group is slightly higher than that of Navistar. For 2007, Volvo's proportion is less than a percent higher than Navistar's. However, in 2008 and 2009, Volvo's proportion is roughly two percent higher than Navistar's.

CASE 6: DATA ANALYTICS

JANUARY 31, 2018

Executive Summary

Technology has had a tremendous impact on the accounting profession, and the metamorphosis will continue at the same rate that technology progresses. As an accounting professional, a working knowledge of technology is a requirement. A firm understanding of how to operate computer programs and other technology-driven business solutions opens many doors for a professional in terms of the tasks they can complete.

For this case, I was asked to look at Python, a programming language. Before this case, I had little to no knowledge of programming, let alone the existence of varying languages like Python. Understanding a program like Python, and how it can be used in the accounting and business profession, allows me to be more effective as a professional. After completing this case, I now have a drive to become proficient in these types of programs.

Concepts

A. ***Identify the history and purpose of this tool and describe, in general, how it is used to make business decisions. Be specific about what kind of technology platform it uses, etc. and other resources that need to be in place to fully utilize the functionality of the tool.***

Python is a computer programming language known for its readability and its ease of use.[1] First put into operation in 1991, Python was the creation of Guido van Rossum. Rossum, originally from Norway, was a fan of Monty Python's Flying Circus, hence the name "Python." Because Python is a relatively simple programming language, its application becomes less reliable as the programs become more complex. However, for simple programs, Python is regarded as one of the best. The syntax used by Python is simpler than that of other programming languages, so it is easy for users to read and write. The foundation of Python can be found in programs like C, Java, and Lisp. Python was written in C, although there are some syntactical differences between the two.[2] There are a variety of existing programs written in Python that can be used in business practices. Some of the more common uses of this program, in terms of business operations, is the development of programs that gather data from varying sources. Because it is a programming language, as opposed to an actual program, the possibilities this program has are limitless.

B. What special skills are needed to use this tool to aid in business decision making. How might a student like yourself gain those skills?

One of Python's greatest strengths as a programming language is the ease with which one can learn to use it. The programming language itself is easy to understand, making it popular among beginner programmers. There are a variety of resources available for someone who wishes to utilize Python, including beginner's courses. The Python Software Foundation, the entity responsible for the language, has some literature available for those wishing to get started with it.[3] Python also serves as a good transition into other, more difficult, programming languages.

C. ***How, specifically, would you use the tool in the following business settings? Create at least three specific scenarios for each category in which the tool would lead to more efficiency and/or better effectiveness. Be sure to describe what kinds of data your tool would use for each scenario.***

i. ***Auditing***

When relaying information from other document forms, such as pdfs, it would be beneficial to write a program using Python that withdrew the information from said documents. It would increase efficiency tenfold when compared to manually pursuing and withdrawing the information. The data involved here could range from financial statement numbers to asset values to journal entry numbers.

Keeping track of inventory values is an important part of financial accounting and auditing. Using Python, one could develop a program that compiled inventory information and kept track of inventory values. Some Python-based programs have also been written to calculate FIFO and LIFO inventory values.

Applications such as these make compiling information and making calculation simple and easy, allowing auditors to spend this time on other activities.

Using Python, one could create a program that calculated the balance of accounts as transactions are made and entries recorded. There are several Python-written programs that maintain the system of double-entry accounting. For this information, it would primarily be looking at the values in journal entries.

ii. Tax Planning

When preparing tax documents, one could develop a program, utilizing Python, that drew this information from Excel spreadsheets or other forms of data storage. This automation of the process would eliminate the menial task of moving numbers back and forth manually. The data here would most likely include different payroll values, including income, tax-related payables, and similar information.

Using a program developed under Python, one could develop models to determine how different situations affect tax responsibilities. Because of the limited applications of Python, it would need to be a relatively simple program, utilizing data such as income to predict situations.

Calculating and documenting payroll taxes is a process integral to most businesses. To make this process more efficient and accurate, a tax professional could develop a program to both calculate and document these values. The program, written in Python, could pull tax information from other documents and record them for payroll activities. A program such as this would rely mostly on tax data found in various documents.

iii. Financial Statement Analysis/Valuation/Advisory

When viewing financial statements over time, there are a variety of applicable ways to use Python in this operation. If someone needed to pull information from financial statements over several years, they could develop a Python-written program that pulled this information out.

Stock information, especially to-the-minute information, is important when trying to value a company. Programs have been written, using Python, that allow the user to gather and analyze stock data over long periods of time. A Python-written program can also be used to pull data from sources, such as Yahoo Finance, for company and stock valuation.

Simple, Python-based programs could be used to model business decisions. Especially in an advisory capacity, this would be instrumental in evaluating different business alternatives. Because Python programs are relatively simple, the model may only be able to accommodate a few variables. The variables, and data, involved in this have an infinite range of possibilities.

D. ***Write a few paragraphs to your future public accounting partner explaining why your team should invest in the acquisition of and training in this tool. Explain how the tool will impact the staffing and scope of your future engagements.***

Technology has dramatically affected the accounting profession over the past few decades. Proficiency in the use and implementation of technology has gone from a desired skill to a required skill in the field of accountancy. One of the most dramatic changes the industry has seen is in how we process data and make calculations. Technology has automated many of the processes in the profession, allowing employees to spend their time on more beneficial activities.

A knowledge of programming languages allows a professional to not only analyze the programs currently being used but also write their own programs. These programs serve to streamline the accounting and valuation process, reserving the time of professionals for more important tasks and cutting back on human-based errors. One of the best ways to gain a foothold in programming knowledge is to utilize Python for simple programs.

Python is known for its readability and the ease with which one is able to become proficient in it. Its simple syntax allows one to easily read through lines of code and find any errors in a program. Especially for employees who have little to no experience with programming, Python is an excellent program to learn. Once they become proficient in Python, it will be easier for them to transition into other, more advanced programming languages, allowing them to develop more complex programs. Having a team trained in this programming language allows our professionals to both write programs and check the programs of other professionals, creating systems that are more efficient and more effective.

CASE 7: RITE AID CORPORATION

FEBRUARY 14, 2018

Executive Summary

Rite Aid Corporation—Long-Term Debt deals with the intricacies and processes involving long-term notes payable. It first explores the terminology of instruments of debt, delving into terms or classifications such as "secured," "unsecured," "convertible," and "guaranteed." It then examines the processes, and associated journal entries, of issuing debt, paying and recording interest expense, and paying the notes off at maturity. This case also studied how debt is recorded when it is issued at a discount or premium.

Notes Payable and other instruments of debt are crucial to the operations of a business, so it is vital that this information be reported fully and accurately in the financial statements. Information around debt, a major aspect of liabilities, is of interest to all financial statement users, especially creditors. As such, it is crucial that professionals understand this part of the accounting process. As a future professional, it was beneficial for me to see how this information is presented in the financial statements, especially in the notes section (note 11). It was also helpful for me to consider how all these processes affect important values, such as assets, liabilities, net income, and stockholders' equity.

Concepts

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

i. ***Explain the difference between Rite Aid's secured and unsecured debt. Why does Rite Aid distinguish between these two types of debt?***

Secured debt is debt that is backed up by some form of collateral. This means that, in the event the company defaults on its payments, the creditor has claim to whatever assets were offered as collateral in the credit agreement. Unsecured debt, on the contrary, has no form of collateral backing. It is important for Rite Aid to disclose this information as it gives financial statement users, especially creditors, further insight into Rite Aid's debt standing. Collateral-backed debt, by nature, is less risky for creditors, since there is a tangible guarantee if the debtor were to default on their obligations. It also provides others with an understanding of what claims to assets creditors have.

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

When debt is classified as "guaranteed," it means that some other entity, the guarantor, has pledged to take over the debt in the event the main entity or individual cannot cover its obligation. Much of Rite Aid's debt is guaranteed by its wholly-owned subsidiaries. Rite Aid is classified as a holding company, meaning it has no assets or operations of its own. Therefore, its subsidiaries provide the assets for Rite Aid to pay its obligations, and they guarantee the debt if Rite Aid were to default.

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

When debt is classified as "senior," it means that this debt takes priority over the other debt obligations of the company. In the hierarchy of a company's debt, senior debt sits at the top. Debt with a "fixed-rate" is debt with solidified interest rates. The interest rate does not change throughout the life of the debt, as opposed to debt with floating interest rates. When debt is "convertible," the creditor can convert the debt into another form of security. There is usually a stated timeframe after the issuance in which the creditor can convert the debt.

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

The range of debt indicates the range of situations under which Rite Aid may need to take on debt. The market is fluid, and this is embodied in changing interest rates. The particulars of the debt depend on the circumstances under which Rite Aid took on the debt. Interest rates can vary based on the other obligations of the company, if the debt is secured or unsecured, if the debt is guaranteed or not, and a variety of other factors.

Process

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

On February 27, 2010, Rite Aid has debt totaling $6,370,899.* Within one year from the date of publication, $51,502 of the debt will be maturing.

Debt Accounts & Balances from B/S	
Current maturities on long-term debt & lease financing obligations	$51,502
Long-term debt, less current maturities	6,185,633
Lease financing obligations, less current maturities	133,764
Total	$6,370,899

B. ***Consider the 7.5% senior secured notes due March 2017.***

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

The face value of this note is $500,000. Because the amount does not change between the 2009 and 2010 statements, there appears to be no discount or premium associated with the note. Therefore, the value recorded is the face value of the note.

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

Cash		500,000	
	Notes Payable		500,000

This transaction would result in an increase in assets of $500,000 and an increase in liabilities of $500,000.

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

Interest Expense		37,500	
	Cash		37,500

This entry would result in a decrease in net income (given the expense), a decrease in retained earnings, and, ultimately, a decrease in stockholders' equity. It would also result in a decrease of assets through the cash payment.

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

Notes Payable		500,000	
	Cash		500,000

This entry would result in a decrease in liabilities of $500,000 and a decrease in assets of $500,000.

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

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

The face value of this note is $410,000, while the carrying value (as of 2/27/2010) is $405,951. This note was issued at a discount, resulting in the different face and carrying values. The discount is being amortized over the life of the note.

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

Rite Aid payed interest totaling $39,438 on these notes during FY2009. This can be determined by multiplying the stated rate (9.375%) by the face value of the note ($410,000).

xi. Determine the total amount of interest expense recorded by Rite Aid on these notes for the year ended February 27, 2010. Note that there is a cash and a noncash portion to interest expense on these notes because they were issued at a discount. The noncash portion of interest expense is the amortization of the discount during the year (that is, the amount by which the discount decreased during the year).

The total interest expense recorded as a result of these notes is $39,143. This can be determined by adding the amount of discount being amortized ($705) to the cash interest paid for the year ($38,438). The amount of amortized discount can be determined by taking the previous unamortized discount ($4,754) and subtracting the current unamortized discount ($4,049). This interest payment would be a decrease in assets, a decrease in net income, a decrease in retained earnings, and a decrease in stockholders' equity.

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

Interest Expense		39,143	
	Cash		38,438
	Discount on Notes Payable		705

xiii. ***Compute the total rate of interest recorded for fiscal 2009 on these notes.***

The interest rate for FY2009 was 9.659%. This can be determined by dividing the year's interest expense ($39,143) by the previous year's carrying value ($405,246). The formula for interest expense is (Carrying Value x Effective Rate).

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

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

6/30/2009	Cash		402,620	
	Discount on Notes Payable		7,380	
		Notes Payable		410,000

This entry would result in an increase in assets and an increase in liabilities.

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

These notes were issued at an effective interest rate of 10.121%. This can be determined by dividing the first year's interest expense ($40,749) by the original carrying value of the note ($402,620).

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

Date	***Interest Payment***	***Interest Expense***	***Bond Discount Amortization***	***Net Book Value of Debt***	***Effective Interest Rate***
June 30, 2009	--	--	--	$402,620	10.1212%
June 30, 2010	$39,975	$40,750	$775	403,395	10.1212%
June 30, 2011	39,975	40,828	853	404,248	10.1212%
June 30, 2012	39,975	40,915	940	405,188	10.1212%
June 30, 2013	39,975	41,010	1,035	406,223	10.1212%
June 30, 2014	39,975	41,115	1,140	407,363	10.1212%
June 30, 2015	39,975	41,230	1,255	408,618	10.1212%
June 30, 2016	39,975	41,357	1,382	410,000	10.1212%
	$279,825	$287,205	$7,380		

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

2/27/2010	Interest Expense		27,167*	
		Discount on Notes Payable		517***
		Interest Payable		26,650**

* $402,620 x 10.1212% x (8/12)

** $39,975 x (8/12)

*** 27,167 – 26,650

CASE 8: MERCK & CO., INC. AND GLAZOSMITHKLINE PLC

FEBRUARY 23, 2018

Executive Summary

Merck & Co., Inc.—Shareholders' Equity looks at the presentation of common shares on the Balance Sheet. The case looks at how a company reports its shares authorized, issued, and outstanding, and what each of these designations means. Additionally, the case looks at common share practices taken by a company, including paying dividends and repurchasing common shares. It explores both the theoretical and the computational aspects of such practices.

In the public accounting field, it is imperative that professionals understand the various processes and presentations of common shares, dividends, and treasury stock. These processes an important part of a company's operations, as they deal with the distribution of retained earnings. It is also important that such information be reported fully and accurately, as it is of great interest to both shareholders and potential investors. Even the smallest difference between expected and actual dividends can have a tremendous effect in the market for a company. Beyond the public accounting field, this information and these processes are important knowledge for anyone looking to invest in a company's stock.

Concepts

A. Consider Merck's common shares.

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

As per the Stockholders' Equity section of its Balance Sheet, Merck is authorized to issue 5,400,000,000 common shares.

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

As of December 31, 2007, Merck has issued 2,983,508,675 common shares.

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

With a $0.01 per share par value, the amount in the common stock account should be $29,835,087, considering there are 2,983,508,675 issued shares. On the Balance Sheet, the value recorded in the common stock account is $29,800,000, as of December 31, 2007.

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

As of December 31, 2007, there are 811,005,791 shares of treasury stock held by Merck.

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

When taking into account the roughly 811 million shares of treasury stock, there are 2,172,502,884 common shares outstanding, as of December 31, 2007.

vi. ***At December 31, 2007, Merck's stock price closed at $57.61 per share. Calculate the total market capitalization of Merck on that day.***

As of December 31, 2007, Merck's market capitalization is $125,157,891,100, when valuing the shares outstanding at the market price.

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?***

Dividend payments show the market that a company is not only meeting their obligations and breaking even, but that they are also profiting. As such, the ability to pay dividends shows the company's success and financial strength, something important when being viewed by the market. Once a company begins paying dividends, it is important that they maintain not only the practice but also the level at which they are paying dividends. Any drop in the amount of dividends paid may provoke negative speculation in the market. In recent years, shareholders have also grown to expect dividend payments from companies. The accounting scandals of the late 1990s and early 2000s showed investors that profits, on paper, may not exist in the same amount or at all.

Dividends prove, at least partly, the existence of a company's profits. Because the payment of dividends signifies a strong company, it usually leads to an increase in share price. If, however, a company were to pay less dividends than expected or none at all, a company's share price would likely fall.

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

The repurchase of shares is an additional mechanism by which a company can distribute cash earnings to its shareholders. The repurchase of shares also increases a company's earnings per share, a positive indicator to investors. When a company repurchases its shares, it gives them more control over its ownership. This is particularly useful when trying to prevent another entity or individual from taking control of ownership in a hostile takeover. Buying shares also has the potential to encourage the market and spur others to buy the stock, leading to an increase in demand for the stock.

Process

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

Retained Earnings		3,310.7	
	Dividends Payable		3.4
	Cash		3,307.3

(all values in millions of $)

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

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

      Merck summarizes its treasury stock transactions for the year in a table included in the financial statement notes. For the current and two previous years, Merck starts with its treasury stock balance (both number of shares and cost). Then, any treasury stock purchases are added to the balance, and any issuances are deducted. Using this method, Merck determines its end-of-year treasury stock balance.

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

      During 2007, Merck repurchased 26,500,000 shares on the open market.

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?***

During 2007, Merck paid $1,429,700,000 to buy back its shares, averaging $53.95 per share. The purchase of treasury stock is considered a financing activity, and this is where it can be found on the Statement of Cash Flows.

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

When a company purchases treasury stock, it is seen as a decrease in assets and in stockholders' equity. Treasury stock, as an account, is contra to stockholders' equity and common stock. An asset is something that provides additional value to a company, but treasury stock adds no new value to a company. Therefore, it cannot and should not be classified as an asset but should be thought of as unissued stock.

Analysis

A. ***Determine the missing amounts and calculate the ratios in the tables below. For comparability, use dividends paid rather than dividends declared. Use the number of shares outstanding at year end for per-share calculations. What differences do you observe in Merck's dividend-related ratios across the two years?***

	Merck ($)	
($ in millions) Rows 1-5	**2007**	**2006**
Dividends Paid	$3,307.3	$3,322.6
Shares Outstanding	2,172,502,884	2,167,785,445
Net Income	$3,275.4	$4,433.8
Total Assets	$48,350.7	$44,569.8
Operating Cash Flows	$6,999.2	$6,765.2
Year-End Stock Price	$57.61	$41.94
Dividends per Share	$1.52	$1.53
Dividend Yield (dividends per share to stock price)	2.6%	3.6%
Dividend Payout (dividends to net income)	101%	75%
Dividends to Total Assets	6.8%	7.5%
Dividends to Operating Cash Flows	47.3%	49.1%

Merck's payment of dividends in 2007 is not as large as it was during the previous year, and this is reflected in the various dividend-related ratios. For 2007, Merck paid more dividends than it received in net income. When compared to its stock price, total assets, and operating cash flows, 2007's dividends represent a smaller portion when compared to 2006's. This may be an indication that 2007 was not as strong of a year financially for Merck, compared to 2006.

CASE 9: STATE STREET CORPORATION

APRIL 4, 2018

Executive Summary

State Street Corporation—Marketable Securities explores the accounting practices related to the purchase, possession, and sale, of debt and equity securities. State Street is a financial services firm whose business model revolves around the process of buying and selling securities. In this case, we define the three classifications of securities—trading, available-for-sale, and held-to-maturity—and how each classification involves different transactions. We explore how classification does or does not affect the accounting entries for when the security is purchased, when the fair value of the security changes, when interest and dividend payments are received, and when the security is sold. Furthermore, we looked at the values recorded in the balance sheet and how a company goes about calculating these.

Understanding the three classifications of securities and how each is accounted for in the financial statements is crucial to any professional that comes across these in their work. Especially for financial services firms, the accurate recording of these instruments in their financial statements is critical to their operations. This strong understanding and accurate reporting carries over to the users of financial statements also. For creditors and investors, understanding a company's security holdings are important part of valuing a company.

Concepts

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

i. In general, what are trading securities?

Trading securities are equity or debt securities that are held for a short period of time. The intention when purchasing these types of instruments is to buy at one price and sell them at a higher price. Companies are also able to earn revenue on these instruments through the receipt of dividend and interest payments. Trading securities, unlike available-for-sale securities, are held for a certain amount of time, usually short-term, before they are sold. Unlike held-to-maturity securities, however, they are not held until the maturity date. Because this organization is a financial services firm, trading securities, as assets, are an integral part of their business and operations. As stated in Note 4 of State Street's financial statements, in reference to trading securities, "our trading activities typically involve active and frequent buying and selling with the objective of generating profits on short-term movements."

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

Cash		1.00	
	Dividend Revenue (Interest Revenue)		1.00

Any proceeds from dividend or interest payments follow the same recording practices as any other security. The amount is debited to the Cash account and credited to the respective revenue account.

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

Fair Value Adjustment—		1.00	
Trading	UHGL-Income		1.00

Because these are trading securities, and not AFS or HTM, any unrealized holding gains or losses flow through net income. The FV Adjustment account, an adjunct asset account, is used to record the securities at their fair value.

B. ***Consider securities available-for-sale. Note that State Street calls these, "Investment securities available for sale."***

i. ***In general, what are securities available-for-sale?***

Available-for-sale securities are debt or equity securities that are purchased by a company with the intention of reselling them at a higher price. As opposed to trading securities, which are typically held in the short term, available-for-sale securities are held for an indefinite amount of time and can be sold at any moment, as the name implies.

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

Cash		1.00	
	Dividend Revenue (Interest Revenue)		1.00

Any proceeds from dividend or interest payments follow the same recording practices as any other security. The amount is debited to the Cash account and credited to the respective revenue account.

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

Fair Value Adjustment — AFS		1.00	
	UHGL - Equity		1.00

As these are Available-for-Sale securities, any unrealized holding gains or losses flow through equity, as opposed to income. They are included in Other Comprehensive Income. Just as with trading securities, the FV Adjustment account is an adjunct asset account used to record the securities at their fair value.

C. ***Consider securities held-to-maturity. Note that State Street calls these, "Investment securities held to maturity."***

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

      Held-to-maturity securities are debt securities that are purchased with the intention of maintaining ownership of the security through the end of its life. These debt securities typically include such instruments as government bonds or bonds issued by companies. Firms earn revenue through the receipt of interest payments, as with other debt securities. Equity securities cannot be classified as held-to-maturity because they can be held in perpetuity, as there is no date of maturity.

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

      No entry would be recorded as these securities are not recognized at market value. They are instead recognized at amortized cost, or the cost plus/minus any amortized premium or discount.

Process

A. ***Consider the "Trading account assets" on State Street's balance sheet.***

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

As of EOY 2012, the balance in the "Trading account assets" account is $637 million. As per Note 1, "trading account assets are carried at fair value." This means that the amount recorded on the balance sheet is the fair value of these securities. Any fair value adjustments, flowed through the Fair Value Adjustment account, have been applied to this account balance.

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

Trading account assets		85	
	UHGL – Income		85

In this entry, the additional value is added to the balance of the securities in the books. This additional value is flowed through income as an unrealized holding gain.

B. Consider the balance sheet account "Investment securities held to maturity" and the related disclosures in Note 4.

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

As of EOY 2012, the balance in the “Investment securities held to maturity” account is $11,379 million.

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

The market value of these securities, as of EOY 2012, are $11,661 million.

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

Per Note 4 to the financial statements, the amortized cost of these securities is $11,379 million, as of EOY 2012. The “amortized cost” represents the value of the securities after they have been adjusted for the effect of premium amortization or discount accretion. The amortized cost of a security is either higher or lower than the historical cost, depending on the value of discounts or premiums.

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

When a difference exists between the market value and the amortized cost, this means that the market interest rate has changed since the securities were purchased. Thus, the market values the security at a greater or lesser value than when it was originally purchased. Based on the difference between the amortized cost ($11,379) and the market value ($11,661), one can assume that the current market rate is lower than the market rate at the time of purchase. A lower market rate, in comparison to the stated rate, makes the investments more attractive to the market.

C. ***Consider the balance sheet account "Investment securities available for sale" and the related disclosures in Note 4.***

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

   As of EOY 2012, the "Investment securities available for sale" account carried a balance of $109,682 million. This balance represents the fair value of all available-for-sale securities owned by State Street.

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

The net unrealized gain on the available-for-sale securities is $1,119 million. This amount can be determined by subtracting the gross unrealized losses ($882) from the gross unrealized gains ($2,001).

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

The net realized gain from the sale of available-for-sale securities for 2012 was $55 million. This amount can be determined by subtracting the gross realized losses ($46) from the gross realized gains ($101).

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

Proceeds from sales of AFS securities	***$5,399***
Purchases of AFS securities	***$60,812***

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

Investments		60,812	
(AFS)	Cash		60,812

This entry records the purchased securities in an asset account (Investments) and credits an anther asset account (Cash) to record for the payment.

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

Cash		5,399	
UHGL – Equity		67	
	Gain on Sale		55
	Investments (AFS)		5,411

This entry records the receipt of cash resulting from the sale of the AFS investments. The assets account (Investments) is credited to remove the sold securities, and a gain is recognized on the sale (also credited). To remove the associated unrealized holding gain from the books, UHGL – Equity is debited.

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

The cash proceeds from the sale of these securities is $5,399 million, with a recognized gain of $55 million. Based on these amounts, we can determine that the original cost of these securities was $5,344 million (5,399 – 55). The gain on sale is the cash proceeds less the book value.

CASE 10: ZAGG INC.

APRIL 11, 2018

Executive Summary

ZAGG Inc.—Deferred Income Taxes looks at the practice of creating deferred tax assets and deferred tax liabilities. The case explores concepts at the foundation of understanding this process. It looks at the difference between book income and taxable income, and it explores how this difference arises. It defines permanent and temporary tax differences, seeking examples of each. It also defines statutory rate and effective rate, looking at how the two differ. Most importantly, it looks at the conceptual reasons behind the process of creating deferred tax assets and liabilities, as opposed to simply recording income tax expense at the amount that will paid that year. Finally, it looks at how deferred tax assets and liabilities are calculated, recorded, reversed, and adjusted to represent their realizable value.

Whether you are an individual person or a large corporation, taxes are inevitable. As such, it is important that a professional, working for an accounting firm or business entity, understand the operations associated with calculating, paying, and delaying taxes. Because GAAP and the IRS Code diverge on several factors, it is crucial that a professional be able to reconcile these two amounts and record the right amounts in the financial statements. Whether a company gains value from a deferred tax asset or loses value because of a deferred tax liability, it is important that this information be accurately reported in the financial statements, as it is especially pertinent to investors and creditors. This case allows a future professional to not only define these types of transactions and accounts but also explore the conceptual foundation behind these practices.

Concepts

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 a company's book income differs from its taxable income.

Book income is the amount of income the company derives from deducting the expenses from revenues for a fiscal year. The book income amount is what the company bases its tax expense calculations on and is determined using GAAP. The book income, designated "Income before provision for income taxes" in the statement of operation, is $23,898 for FY 2012. While a company's book income is the amount that should be taxed based on the transactions conducted and recorded by the company during the year, taxable income is the amount of income that should be taxed based on the Internal Revenue Service (or respective taxing entity) Code. Differences often arise between the book income and the taxable income due to when and how certain items are recorded. Oftentimes this difference is due to the fact that the IRS looks at taxable income on a cash basis while companies typically use an accrual basis when recording their transactions.

B. In your own words, define the following terms:

i. Permanent tax differences (also provide an example)

A permanent tax difference is a difference between book income and taxable income that will not reverse itself in the coming year or years. These represent a permanent departure from the pretax financial income, in comparison to the taxable income, or vice versa. One example of this would be revenue from municipal bond interest. To promote investment in these financial instruments, many government entities allow these proceeds to go untaxed. Because this revenue will never be taxed from a government standpoint, it is a permanent difference. However, this revenue is recognized in the books of the company and, consequently, recognized in pretax financial income.

ii. Temporary tax difference (also provide an example)

A temporary tax difference is a difference between book income and taxable income that will reverse over future periods. This amount will either be taxable in future periods or deductible in future periods. This category of tax differences can be split into two types—the originating difference and the difference that occurs as a result of reversing the originating difference. An example of a deductible temporary difference would be rent paid in advance. Per tax policy and its cash basis, this is recognized in the period it is received as revenue, even though it has not been earned in the eyes of the company or recorded in their books as revenue. An example of a taxable temporary difference would be a difference in depreciation practices that includes higher amounts of depreciation expense (per IRS policy) in one year compared to the company's depreciation practices. In this situation, the company would benefit from the higher deductible amount in the early year, but they would not be able to deduct it in future years, leading to a higher taxable income.

iii. Statutory tax rate

The statutory tax rate is the tax rate that a person or entity is beholden to per statutory law. This rate is established in law or other code, and it is based on the primary location of the person or entity.

iv. Effective tax rate

The effective tax rate, as opposed to the statutory rate, is the actual rate an individual or entity is paying in taxes. The difference in the effective tax rate can be traced to a variety of factors. For one, the person or entity could have taken advantage of deductions or other ways of lowering their tax burden. The person or entity may also have revenues/expenses outside of the nation or state in which they are paying taxes. For example, a U.S. corporation is beholden to the U.S. statutory rate only on income earned in the U.S. Any income earned internationally is susceptible to the tax rates of the respective states in which it was earned, many of which have significantly lower tax rates.

To determine the effective tax rate, one divides the total income tax expenses for the period by the pretax financial income for the period.

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?

There are four basic principles of accounting that the Financial Accounting Standards Board sets forth in its *Statement of Financial Accounting Concept No. 5*, "Recognition and Measurement in Financial Statements of Business Enterprises." *SFAC No. 5* lays out the concepts and processes involved in the recording of financial events and how these events should be accounted for in the financial statements. Two of these basic principles are the revenue recognition principle and the expense recognition principle. The revenue recognition principle says that revenue should be recognized when the performance obligation has been met. This ensures that companies report revenue in a manner that best describes their business operations and provides insight into their future cash flows, an element of particular interest to financial statement users. The expense recognition principle, also called the matching principle, says that expenses should be matched as best as possible with their associated revenues. The revenue and expense recognition principles are the foundation of a company's practice of reporting an income tax expense that is different from its actual tax bill. Companies must report their revenues and expenses in a manner acceptable to the two basic accounting principles and the conceptual framework. This includes income tax expense, even when it deviates from what the company will actually be paying in a period. The incurrence of this income tax expense should be matched with the expenses and revenues from which it results. Because of differences between GAAP and the Internal Revenue Service Code, disparities between what a company owes according to its books and what it actually owes arise. To create financial statements that accurately predict future cash flows, that provide relevant and accurate information to users, and that can be considered reliable and meaningful, companies must adhere to the conceptual framework and resulting practices, which includes the recording an income tax expense that is higher or lower than what is actually owed to the taxing entity. Accounting Standards Codification Topic 740 guides entities in taking tax positions that may affect amounts reported in the financial statements and the amounts of deferred tax assets/liabilities. ASC 740 provides entities with practices and judgment guidance in regards to income taxes.

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 income tax asset represents an amount that an entity can deduct from future tax responsibilities, ultimately lowering their tax burden. They arise out of temporary differences that result in future deductible amounts. It is classified as an asset because it presents future financial benefit to the company. A deferred income tax liability represents an amount that will be taxed in the future, adding to the company's future tax responsibilities and increasing their tax burden. They arise out of temporary differences that result in future taxable amounts. It is classified as a liability because it presents a future amount, owed by the entity, that will need to be paid using the company's assets. If the IRS code uses a different method of depreciation than the company, resulting in depreciation expense being greater for taxable income compared to pretax financial income, a deferred tax liability will result. Because the larger amount of depreciation on the tax return will lead to a greater deduction in the current year, the company will not be able to report as high of a level of depreciation on future returns, meaning their book income will be less than their taxable income. If a company receives advance rent payments (that will be recognized as revenue over several tax return periods), this will result in a deferred tax asset. Because the IRS Code operates on a cash basis, it recognizes the entire receipt as revenue for the year it was received, meaning the company's tax burden for that year will be greater than their book-calculated amount. However, because the taxes have already been paid on the associated revenues, the book income will be greater than the taxable income over the reversing years, or the years in which the company recognizes these advance rent payments as revenue.

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

A deferred income tax valuation allowance is the amount of the deferred tax asset that a company believes will not be realized. To be recorded in the valuation allowance, the company should believe that "it is more likely than not" that the amount will not be realized. The valuation allowance acts as a contra account to the deferred tax asset, adjusting it to net realizable value. It is important that the deferred tax asset be recorded at a realizable amount, for the sake of providing strong financial statements.

Process

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

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

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

This journal entry debits the income tax expense incurred during FY 2012. The deferred tax asset, also debited, represents the total of all deferred tax assets ($8,002) and reversing deferred tax liabilities ($291) resulting from FY 2012. The credit for the entry, to income taxes payable, represents the amount owed to the government in taxes for FY 2012.

ii. Using the information in the third table in Note 8, decompose the amount of "net deferred income taxes" recorded in income tax journal entry in part f. i. into its deferred income tax asset and deferred income tax liability components.

The $8,293 debited to "Deferred Tax Asset, net" account, which is equivalent to the "net deferred income taxes" account, can be broken into two parts. $8,002 of this amount comes from deferred income tax assets that were created during the year, and the remaining $291 represents the amount of deferred income tax liabilities that is reversing during the year. The $8,002 is calculated by taking the current year's total deferred tax assets (14,302) and subtracting the previous year's deferred tax assets (6,300). The $291 is calculated by taking the current year's deferred tax liabilities (794) and subtracting the previous year's (1,086). The resulting negative amount shows that total deferred tax liabilities has decreased, or reversed, over the two years.

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?***

ZAGG's effective income tax rate for FY 2012 was 39.3% (9393 / 23,898), which is higher than their statutory rate (35%). This increase is due to several factors, including the state income tax ZAGG has to pay (net of the federal tax benefit), expenses incurred by ZAGG that were not deductible, a deduction for domestic production, a return to provision adjustment, and an increase in the valuation allowance. All these factors, except the deduction for domestic production activities, are credited with increasing ZAGG's tax provision.

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 on ZAGG's balance sheet.***

On the balance sheet, the $13,508,000 is split between two items. $6,912 of it is found with "Deferred income tax assets" under the Current Assets section of the balance sheet. This represents the portion of the deferred tax asset that will be utilized in the coming year, and thus represents a current asset. The remaining $6,596 is found with "Deferred income tax assets" as a separate section on the balance sheet. This represents the long-term portion of the deferred income tax asset.

CASE 11: APPLE INC.

MAY 2, 2018

Executive Summary

Apple Inc.—Revenue Recognition looks at the processes used by Apple to recognize revenue. Beyond just evaluating Apple's processes of revenue recognition, the case takes a detailed look at the process of revenue recognition under the newly implemented ASC 606, which provides new guidance and regulation on revenue recognition. Apple was a particularly interesting company to look at for revenue recognition as the breadth of its product/service base requires differentiation in its revenue recognition practices. One of the most important processes explored in this case is the recognition of revenue on multiple-element contracts. The last section of the case looks at specific products in Apple's business model and how the process of recognizing revenue varies between them.

Because of ASC 606 and its current implementation, the process of revenue recognition for companies is undergoing important changes. As accounting students, we have the opportunity to learn this process from an academic standpoint before actually utilizing this knowledge in the profession, as opposed to current accounting professionals who are having to learn a new way of doing things. Revenue recognition itself is a crucial process in accounting and creating responsible and accurate financial statements. The possibility for manipulation of revenue through its recognition means it is important for accounting professionals to have a firm understanding of the process. Looking at how revenue is recognized on different products allows us to take both a conceptual and applicable look at revenue recognition.

Concepts

A. ***In your own words, define "revenues." Explain how revenues are different from "gains."***

Revenues are the money a company earns in a given period through regular, recurring operations. Revenues can fall into several classifications, and a business may earn revenue through multiple routes, depending on its nature. Sales revenue, interest revenue, dividend revenue, and the like, are all different avenues by which a company can receive revenue. Gains, on the other hand, are money that is earned by a company through irregular, or nonrecurring, business activities. Revenues are meant to represent the ongoing operations of a company, while gains are meant to represent the peripheral occurrences a company may have. As such, revenues are an important indicator and metric for creditors, investors, and other financial statement users. Gains, however, are a less credible metric because of their singularity.

B. ***Describe what it means for a business to "recognize" revenues. What specific accounts and financial statements are affected by the process of revenue recognition?***

A certain threshold must be met for revenues to be considered "earned." As such, a business develops policies around the process of "recognizing" revenues, which means recording them in the company's books. To promote accurate and informative financial reporting, it is important that businesses develop strong processes regarding the recognition of revenue. Because the users of financial statements use expected cash flows as a major determinant in their decisions, businesses are responsible for accurately reporting information used to predict these cash flows, or they risk misinforming investors, creditors, and other financial statement users. Revenues are measured on a period basis, meaning they are reported on the Income Statements of companies. Revenues that have not quite been earned are placed in a Balance Sheet account. The accounts affected include a revenue account, such as Sales Revenue, Interest Revenue, Rent Revenue, etc., and, if money has been received in advance, Unearned Revenue. Per the newly-implemented ASC 606, a company must follow several steps in order to recognize revenue. First, the company must identify the contract they have with a customer. They must then identify their own performance obligations, or the goods/services they will be providing to the customer, that are part of the contract. The third step is to determine the transaction price, or the amount of money or value the company receives upon successful completion of the contract. The company must then allocate this transaction price to the various performance obligations (if more than one exists), and, as the obligations are met, recognize revenue.

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

In line with the process laid out by ASC 606, Apple recognizes revenue when four criteria (similar to the criteria laid out in the four ASC 606 steps) have been met. In order for revenue to be recognized, there must be evidence that an "arrangement" (or contract) exists, "the sales price is fixed and determinable," (there is a clear transaction price) "collection is probable," and "delivery has occurred" (the performance obligation has been fulfilled). There is some variance in the exact process when it comes to the sale of different goods/services, such as online orders and arrangements with multiple parts (multiple performance obligations), but the processes involving these follow the conceptual idea put forth by ASC 606.

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

Multiple-element contracts are transactions between companies and customers that involve more than one item or obligation. Companies are faced with revenue recognition issues due to there being multiple performance obligations they must fulfill. Allocating the appropriate amount of revenue to each of these obligations and determining when to recognize this revenue in the books of the company, can be a difficult process. Many of these elements lack clarity in the successful completion of the obligation. Take, for example, Apple's sale of devices. There is the performance obligation associated with the physical transfer of ownership and possession of the device itself, which is a clearly defined point at which revenue can be recognized. Part of the company's revenue is associated with this obligation. However, there is also the ongoing obligation on the part of Apple to provide software and other upgrades to the device in the future. The successful completion of this obligation is unclear. It is difficult for Apple to predict not only the time point of delivery for this software in the future but also how long they will continue to provide software to that device. Revenue recognition on this performance obligation, as such, can be subjective.

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

Managers typically receive additional compensation, in the form of bonuses and the like, for good company performance. Strong revenue numbers are also looked on fondly by shareholders, leading to increased job security for the manager. As such, the creation or inflation of revenue is a practice that serves to benefit managers. Higher revenues lead to higher net income and a higher value for the company. For the business itself, the perception of strength, especially in cash flows, is good. As many managers maintain ownership in their company's stock, strong company valuation, because of inflated revenue numbers, stands to increase the value of managers' stocks also.

Process

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

i. iTunes songs sold online.

For digital content sold on the iTunes Store, Apple uses the same process of recognition as it would a normal sale, like the sale of hardware. Upon the sale of the digital content to the consumer, Apple recognizes revenue, as its performance obligation has been fulfilled. Ownership of the content has technically transferred to the customer.

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

For accessories that carry no ongoing performance obligation, like routinely providing software, they are recognized as revenue upon their delivery to the customer. For in-store sales, this means revenue is recognized at the same time as the actual sale, as the goods are transferred to the buyer during this event. For online purchases, revenue cannot be recognized until ownership of the goods has been transferred to the buyer. In most situations, this will be upon delivery of the goods. According to Note 1 of Apple's financial statements, "the Company legally retains a portion of the risk of loss on [online sales] during transit." This means that the company still bears a degree of responsibility, or ownership, of the goods during transit.

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

For the sale of iPods, and other software enabled devices, to a third-party seller, revenue recognized is allocated to multiple performance obligations. There is the performance obligation related to the transfer of the physical goods, the obligation associated with software essential to the operation of the device, and the obligation associated with the ongoing delivery of software for the device. Per the process laid out by ASC 606, the transaction price is allocated to the different performance obligations. Like other physical goods, some revenue is recognized upon transfer of ownership of the devices, in this case to the third-party seller. This is the moment when the performance obligation associated with the essential hardware and software is fulfilled. However, the performance obligation related to the ongoing provision of software for the device is instead recognized over a designated period of time, as deemed acceptable and appropriate by accounting regulation and the company.

iv. Gift cards sold

The sale of gift cards presents companies with a unique accounting situation. Per ASC 606, gift cards represent an obligation on the part of the company to provide a good/service in the future. As such, the performance obligation is not fulfilled at the initial sale of the gift card, but it is instead fulfilled upon redemption. Therefore, a liability is created upon the sale of a gift card, and revenue would be recognized when the gift card is redeemed. However, there is the persistent problem of unredeemed gift cards, which are typically written off as breakage income. ASC 606 calls for the use of the redemption method for writing off unredeemed gift cards. This means that breakage income will be recognized over the redemption period of the cards, however long that may be.