# A COLLECTION OF CASE STUDIES ON FINANCIAL ACCOUNTING CONCEPTS 

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## ABSTRACT <br> SARAH CATHERINE THORNTON: A Collection of Case Studies on Financial Accounting Concepts

This thesis is compiled of twelve case studies, each on a unique accounting concept. Each case study was analyzed in a group of two to four students, and each student completed a write-up answering the case questions and examining the proper accounting treatment for each issue in the case. Case topics included financial statement assembly and analysis, internal controls, inventories, leases, revenue recognition, deferred income taxes, and examinations of equity, among others. Each topic was considered using accounting knowledge learned during intermediate accounting classes at the University of Mississippi as well as the Financial Accounting Standards Board (FASB) Codification. The codification explicitly states rules and regulations to follow when accounting for each item, and was very useful when considering unfamiliar and unusual topics presented in the cases. The case studies are arranged in chronological order of completion, and each is titled with a description of the case topic.

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## LIST OF ABBREVIATIONS

| ASC | Accounting Standards Codification |
| :--- | :--- |
| ASU | Accounting Standards Update |
| FASB | Financial Accounting Standards Board |
| US GAAP | United States Generally Accepted Accounting Principles |
| RSU | Restricted Stock Unit |
| SAB | Staff Accounting Bulletins |

# Case 1: Home Heaters: The Effects of Accounting Estimates 

For this case, we are analyzing two separate companies and their accounting processes. To do this, I first recreated the journal entries corresponding with the transactions listed in the case. I then used these journal entries to create a chart of accounts, a trial balance, and, using the information from Part B, financial statements including an income statement, a statement of stockholders' equity, a classified balance sheet, and a statement of cash flows. Using Excel as a medium to create the statements, I then compared the two companies and evaluated which of the companies that I would prefer to invest in, lend money to, or do business with. I also used these statements to analyze the methods of estimation and adjusting used by each company and how each method affects things like total assets, net income, and retained earnings.

| Home Heaters <br> Trial Balance - Part A |  |  |
| :---: | :---: | :---: |
|  | Debits | Credits |
| Cash | \$47,340 |  |
| Accounts Receivable | 99,400 |  |
| Inventory | 239,800 |  |
| Land | 70,000 |  |
| Building | 350,000 |  |
| Equipment | 80,000 |  |
| Accounts Payable |  | \$26,440 |
| Note Payable |  | 380,000 |
| Interest Payable |  | 6,650 |
| Common stock |  | 160,000 |
| Dividends | 23,200 |  |
| Sales |  | 398,500 |
| Other Operating Expenses | 34,200 |  |
| Interest Expense | 27,650 |  |
| Total | \$971,590 | \$971,590 |

The two companies, Glenwood Heating and Eads Heaters, have identical transactions throughout the year and differ only in their estimation methods and adjusting entries. These estimation methods are integral to the differences in the companies but are not implemented until year end. The two companies' identical transactions during the year are reflected in the following trial balance.

As seen in this trial balance, both Glenwood and Eads have the same amount of debits and credits at December 31. On this date, however, the two companies begin to differentiate on several things, including their adjusting entries and the estimations used in the entries. The adjustments are done differently by each company, and therefore affect net income for each company differently. These adjustments and their effects are best reflected in the income statements for the two companies.

The adjustments deal with bad debts, cost of goods sold, depreciation expense, a lease agreement, and income tax expense. As shown below in the income statements, the cost of goods sold directly affects net income, as do bad debt expense and depreciation expense. Rent expense also directly affects net income, and is only present on Glenwood's income statement because Eads capitalized the lease as an asset.

| Eads Company <br> Multistep Income Statement For year ended December 31, 20X1 |  |
| :---: | :---: |
| Sales | \$398,500 |
| Cost of Goods Sold | $(188,800)$ |
| Gross Profit | \$209,700 |
| Operating Expenses |  |
| Bad Debt Expense | 4,970 |
| Depreciation Expense | 41,500 |
| Other Operating Expenses | 34,200 |
| Total operating expenses | 80,670 |
| Operating Income | \$129,030 |
| Other expenses |  |
| Interest Expense | 35,010 |
| Income before taxes | \$94,020 |
| Income tax expense | 23,505 |
| Net Income | \$70,515 |


| Glenwood Company <br> Multistep Income Statement <br> For year ended December 31, 20X1 |  |
| :---: | :---: |
| Sales | \$398,500 |
| Cost of Goods Sold | $(177,000)$ |
| Gross Profit | \$221,500 |
| Operating Expenses |  |
| Bad Debt Expense | 994 |
| Depreciation Expense | 19,000 |
| Other Operating Expenses | 34,200 |
| Total operating expenses | \$54,194 |
| Operating Income | \$167,306 |
| Other expenses |  |
| Rent Expense | 16,000 |
| Interest Expense | 27,650 |
| Total other expenses | \$43,650 |
| Income before taxes | \$123,656 |
| Income tax expense | 30,914 |
| Net income | \$92,742 |

The first adjustment deals with bad debts. Glenwood estimates that one percent of accounts receivable will be uncollectable, while Eads estimates that five percent of accounts receivable will be uncollectable. This method is the same for both companies, but they have different percentage estimations based on their customers. Glenwood recorded $\$ 994.00$ in bad debt expense; Eads calculated $\$ 4,970.00$ to be uncollectable. This estimation decreases both assets (accounts receivable) and net income (bad debt expense).

The second adjustment is the estimation of cost of goods sold. Glenwood uses a periodic first in, first out inventory system; cost of goods sold expense is based on the historical cost of the units when they were purchased possibly several months ago. This method often uses outdated costs that are not current and therefore does not align well with the matching principle. Glenwood's cost of goods sold is calculated to be $\$ 177,000$, while Eads' cost of goods sold is $\$ 188,800$. Eads uses a periodic last in, first out inventory, which uses current costs instead of old costs to calculate cost of goods sold.

Third is the adjustment to account for depreciation. The two companies both use the straight line method for depreciation on their building, which is estimated to be $\$ 10,000$ per year each. Glenwood also uses the straight line method for depreciation on their equipment, bringing their total depreciation to $\$ 19,000$. Eads uses the doubledeclining balance method for their equipment's depreciation, totaled at $\$ 20,000$. Eads also must depreciate the leased equipment in the fourth adjustment; they use the straight line method to calculate this at $\$ 11,500$. Eads' total depreciation expense including building, equipment, and leased equipment is $\$ 41,500$.

The fourth adjustment is the payment of a lease agreement for equipment used by the companies. Glenwood simply rents the equipment for one year at a time, payable on December 31 of each year. The adjustment for this lease is a debit to rent expense and a credit to cash. Eads capitalizes the lease as an asset because they agree to lease the equipment for eight years, paying $\$ 16,000$ at the end of each year to cover both the rent expense and the interest expense.

The last adjustment deals with income tax provisions. The stated rate for income tax is 25 percent; thus, each company sets aside 25 percent of their income before taxes to pay to the IRS for income tax. Glenwood has a higher income, so their income tax expense is more than Eads'.

These adjustments affect net income, an important aspect to examine before lending to or investing in a company. Net income, however, is not the only important aspect to consider. Other aspects to consider include cash flows, which show that the company is a going concern throughout the fiscal year; current assets, which show liquidity; and property, plant, and equipment, which show possible collateral against a loan. These are shown on the statement of cash flows and the balance sheet, respectively, which are included below for both Glenwood and Eads.

These statements of cash flow below provide insight on the company as an operation as well as in its peripheral transactions. Glenwood has overall greater cash flow, but Eads' net cash from operating activities is a greater amount. Part of this is due to Eads' capitalization of the lease agreement, compared to Glenwood's payment at the end of the year. This one adjustment method can impact the decisions of many investors and lenders.

| Glenwood Company Statement of Cash Flows For year ended December 31, 20X1 |  |
| :---: | :---: |
| Cash Flows from Operating Activities |  |
| Net income | \$92,742 |
| Adjustments |  |
| Depreciation on PP\&E | 19,000 |
| Interest on note payable | 6,650 |
| Changes in current assets |  |
| Accounts receivable | $(98,406)$ |
| Inventory | $(62,800)$ |
| Changes in current liabilities |  |
| Accounts payable | 26,440 |
| Net cash from operating activities | \$(16,374) |
| Cash flows from investing activities |  |
| Purchases of PP\&E | $(500,000)$ |
| Net cash from investing activities | \$(500,000) |
| Cash flows from financing activities |  |
| Proceeds from long term debt | 400,000 |
| Payment on long term debt | $(20,000)$ |
| Net cash from financing activities | \$380,000 |
| Net increase (decrease) in cash | $(136,374)$ |
| Cash balance January 1, 20X1 | - |
| Cash balance December 31, 20X1 | \$(136,374) |


| Eads Company <br> Statement of Cash Flows <br> Foar ended December 31, 20X1 |  |
| :---: | ---: |
| Cash Flows from Operating Activities |  |
| Net income |  |
| Adjustments | $\$ 70,515$ |
| Depreciation on PP\&E | 41,500 |
| Interest on Note payable | 6,650 |
| Changes in current assets | $(94,430)$ |
| Accounts receivable | $(51,000)$ |
| Inventory | 26,440 |
| Changes in current liabilities | $\$(325)$ |
| Accounts payable |  |
| Net cash from operating activities | $(500,000)$ |
| Cash flows from investing activities | $(92,000)$ |
| Purchases of PP\&E | $\$(592,000)$ |
| Lease of equipment |  |
| Net cash from investing activities | 400,000 |
| Cash flows from financing activities | $(20,000)$ |
| Proceeds from long term debt | $\$ 380,000$ |
| Payment on long term debt | $(212,325)$ |
| Net cash from financing activities | - |
| Net increase (decrease) in cash | $\$(212,325)$ |
| Cash balance January 1, 20X1 |  |
| Cash balance December 31, 20X1 |  |


| Glenwood Company Classified Balance Sheet As of December 31, 20X1 |  |  |  |
| :---: | :---: | :---: | :---: |
| Assets |  | Liabilities |  |
| Current Assets |  | Current Liabilities |  |
| Cash | \$426.00 | Accounts payable | \$26,440.00 |
| Accounts Receivable | \$99,400.00 | Interest payable | \$6,650.00 |
| Allowance for Bad Debts | \$(994.00) | Current portion of note payable | \$20,000.00 |
| Inventory | \$62,800.00 | Total Current Liabilities | \$53,090.00 |
| Total Current Assets | \$161,632.00 | Long term liabilities |  |
| Property, Plant, \& Equipment |  | Note payable | \$360,000.00 |
| Land | \$70,000.00 | Total Liabilities | \$413,090.00 |
| Building | \$350,000.00 |  |  |
| Accumulated depreciation - building | $\$(10,000.00)$ | Stockholders' Equity |  |
| Equipment | $\$ 80,000.00$ | Common Stock | \$160,000.00 |
| Accumulated depreciation - equipment | \$(9,000.00) | Retained Earnings | \$69,542.00 |
| Total Property, Plant, \& Equipment | \$481,000.00 | Total Stockholders' Equity | \$229,542.00 |
| Total Assets | \$642,632.00 | Total Liabilities \& Stockholders' Equity | \$642,632.00 |


| Eads Company <br> Classified Balance Sheet <br> As of December 31, 20X1 |  |  |  |
| :---: | :---: | :---: | :---: |
| Assets | Liabilities |  |  |
| Current Assets | Current Liabilities |  |  |
| Cash | \$7,835.00 | Accounts payable | \$26,440.00 |
| Accounts Receivable | \$99,400.00 | Interest payable | \$6,650.00 |
| Allowance for Bad Debts | \$(4,970.00) | Current portion of note payable | \$20,000.00 |
| Inventory | \$51,000.00 | Lease payable | \$83,360.00 |
| Total Current Assets | \$153,265.00 | Total Current Liabilities | \$136,450.00 |
| Property, Plant, \& Equipment |  | Long term liabilities |  |
| Land | \$70,000.00 | Note payable | \$360,000.00 |
| Building | \$350,000.00 | Total Liabilities | \$496,450.00 |
| Accumulated depreciation - building | \$(10,000.00) |  |  |
| Equipment | \$80,000.00 | Stockholders' Equity |  |
| Accumulated depreciation - equipment | \$(20,000.00) | Common Stock | \$160,000.00 |
| Leased equipment | \$92,000.00 | Retained Earnings | \$47,315.00 |
| Accumulated depreciation - leased equipment | \$(11,500.00) | Total Stockholders' Equity | \$207,315.00 |
| Total Property, Plant, \& Equipment | \$550,500.00 |  |  |
| Total Assets | \$703,765.00 | Total Liabilities \& Stockholders' Equity | \$703,765.00 |

As shown on the balance sheets above, Glenwood has more current assets than Eads. This is a good sign of liquidity for Glenwood, but again, not the only aspect to consider when investing in a company. Eads has much more property, plant, and equipment, which is advantageous when looking at the company from an investment aspect. Eads also has more debt than Glenwood, but this is not necessarily a bad thing. Eads' increased debt involves the capitalized lease agreement as a liability while Glenwood's debt does not include this. Overall, Eads has more debt, but this also means that they have more assets than Glenwood. An investor would consider both of these items from the balance sheet and compare them to their investment goals to then make a decision on which company to invest in.

Based on the information presented in this case and above in my analysis of the information, I would personally rather lend money or invest in Eads Heaters. This company seems to be more conservative with their accounting methods. Using the last in, first out inventory system provides a more accurate look at cost of goods sold, while the larger percentage of accounts receivable used to estimate bad debt decreases net income according to which customers the company believes will pay for their sale on credit. Additionally, Eads' net income is lower, and therefore the income tax expense they incur for the year is also lower. Lower net income allows for fewer taxes to be paid and thus fewer expenses. Eads has less current assets than Glenwood, but more property, plant, and equipment that can be used as collateral against a loan, which is more advantageous when borrowing money. Overall, either company would most likely make a good investment, but based on this information I would choose to invest in or lend money to

# Case 2: Totz Income Statement Analysis Using FASB Codification 

## 1. Net Sales

ASC 225-10-S99-2 (1) in the codification indicates that net sales of tangible products (i.e. the clothing from the Totz stores) are stated separately from revenues that are earned from services (i.e. services from its in-store art studio Doodlez) but are both featured under the Sales section of the income statement. The specific regulation is as follows: "If income is derived from more than one of the subcaptions described under $\S 210.5-03.1$, each class which is not more than 10 percent of the sum of the items may be combined with another class. If these items are combined, related costs and expenses as described under § 210.5-03.2 shall be combined in the same manner.

1. Net sales and gross revenues. State separately:
(a) Net sales of tangible products (gross sales less discounts, returns and allowances),
(b) operating revenues of public utilities or others;
(c) income from rentals;
(d) revenues from services; and
(e) other revenues."

Both sales from Totz and Doodlez are more than ten percent of the sum of the items, which means they must be separately stated on the income statement. My team and I discussed compiling a comparative income statement for the different years of information provided to us. This would be useful to be able to compare revenues from 2014, 2015, and 2016; however, Doodlez was only introduced in the third quarter of 2015. Therefore, to properly disclose the
dramatic change in Doodlez's revenue from 2015 to 2016 (an increase of $\$ 7.3$ million), explanatory notes to the financial statements would be necessary.

## 2. Gross Profit

Gross profit is its own line item on the income statement. However, it is not actually a "section" of the income statement, but it is an important part of the financial statement. According to the codification ASC 360-20-55-14, "gross profit is presented as a separate item of revenue on the income statement when it is recognized as earned." Gross profit is equal to net sales less cost of sales, which needs to be broken down into cost of tangible goods sold and cost of services and are stated separately according to the FASB codification. ASC 225-10-S99-2 (2) states, " 2 . Costs and expenses applicable to sales and revenues. State separately the amount of
(a) cost of tangible goods sold,
(b) operating expenses of public utilities or others,
(c) expenses applicable to rental income,
(d) cost of services, and
(e) expenses applicable to other revenues.

Merchandising organizations, both wholesale and retail, may include occupancy and buying costs under caption 2(a). Amounts of costs and expenses incurred from transactions with related parties shall be disclosed as required under § 210.4-08(k)."

This says that both cost of goods sold and cost of services must be recognized as two different line items under the sales section of the income
statement. Additionally, we are told that depreciation is excluded from cost of sales. Under ASC225-10-S99-8, the company cannot report a subtotal that excludes depreciation. Therefore, Totz should not report a gross profit subtotal because the excluded depreciation is attributable to cost of sales. ASC 225-20-S99-8, or SAB Topic 11, states the following: "The following is the text of SAB Topic 11.B, Depreciation and Depletion Excluded from Cost of Sales. Facts: Company B excludes depreciation and depletion from cost of sales in its income statement. Question: How should this exclusion be disclosed?

Interpretive Response: If cost of sales or operating expenses exclude charges for depreciation, depletion and amortization of property, plant and equipment, the description of the line item should read somewhat as follows: "Cost of goods sold (exclusive of items shown separately below)" or "Cost of goods sold (exclusive of depreciation shown separately below)." To avoid placing undue emphasis on "cash flow," depreciation, depletion and amortization should not be positioned in the income statement in a manner which results in reporting a figure for income before depreciation."

## 3. Gain on Sale of Corporate Headquarters

Totz sold its corporate headquarters and relocated to Mountain View, California. The sale of the old building would be recognized as extraordinary under ASC 225-20-45-1; however, this codification is superseded by ASU 225-20-65-1, which states that extraordinary items are no longer listed on the income statement. Under the combination of ASC-605-10-S99-1 and ASC-360-10-45-5, the gain on the sale of corporate headquarters should be recognized and presented
as operating income. ASC-605-10-S99-1 states that "Gains or losses from the sale of assets should be reported as 'other general expenses' ... Any material item should be stated separately." ASC-360-10-45-5 states that "A gain or loss recognized on the sale of the long-lived asset (disposal group) that is not a component of an entity shall be included in income from continuing operations before income taxes in the income statement of a business entity." Because of this, the sale of this building will be recognized as operating income. The gain on the sale of the building would be included in the operating income section of the income statement. This gain will be listed as a line item under the operating income section of the income statement, and will be be added to net income and be taxed accordingly.

## 4. Class Action Settlement

Due to a class action lawsuit settlement against a supplier, Totz received proceeds of $\$ 2.7$ million. Under ASC 225-20-45-1, this item would have been treated as an extraordinary item; it is both unusual and infrequent and would have been listed as an extraordinary gain or loss on the income statement. However, under ASU 225-20-65-1, extraordinary items are no longer listed on the income statement, which means that this item would no longer be considered extraordinary. the costs associated with the materials provided by the supplier in this transaction are part of Totz' central operations and therefore, the gain associated with the class action lawsuit should be treated as operating income. ASC-605-10-S99-1 indicates that both gains and losses should be treated according to the guidance of Reg S-X, Rule 5-03(b)(6).

The proceeds of this lawsuit would be treated as other operating income, although being both unusual and infrequent, because of the change in recognition of extraordinary items. This income would then affect net income, increasing it by $\$ 2.7$ million net of income tax expense. It is crucial to include this income on the income statement because it deals with expenses that are part of the company's central operations.

## Case 3: Rocky Mountain Chocolate Factory Financial Statements

| Rocky Mountain Chocolate Factory <br> Income Statement <br> For period ended February 28, 2010 |  |
| :---: | :---: |
| Revenues |  |
| Sales | \$22,944,017 |
| Franchise and royalty fees | 5,492,531 |
| Total revenues | 28,436,548 |
| Costs and expenses |  |
| Cost of sales, excluding depreciation and amortization of \$698,580 | 14,910,622 |
| Franchise costs | 1,499,477 |
| Sales and marketing expenses | 1,505,431 |
| General and administrative expenses | 2,422,147 |
| Retail operating expenses | 1,756,956 |
| Depreciation and amortization | 698,580 |
| Total costs and expenses | 22,793,213 |
| Operating income | 5,643,335 |
| Other income (expenses) |  |
| Interest income | 27,210 |
| Other, net | 27,210 |
| Income before income taxes | 5,670,545 |
| Income tax expense | $(2,090,468)$ |
| Net income | \$3,580,077 |
| Basic earnings per share | \$0.60 |
| Diluted earnings per share | \$0.58 |
| Weighted average common shares outstanding | 6,012,717 |
| Dilutive effect of employee stock options | 197,521 |
| Weighted average common shares outstanding, assuming dilution | 6,210,238 |


| Rocky Mountain Chocolate Factory <br> $\quad$ Statement of Retained Earnings <br> For period ended February 28, 2010 |  |  |
| :--- | ---: | :---: |
|  |  |  |
| Retained earnings, March 1, 2009 | $\$ 5,751,017$ |  |
| Add: Net income | $3,580,077$ |  |
| Less: Dividends | $(2,407,167)$ |  |
| Retained earnings, February 28, 2010 | $\mathbf{\$ 6 , 9 2 3 , 9 2 7}$ |  |


| Rocky Mountain Chocolate Factory <br> Balance Sheet <br> As of February 28, 2010 |  |  |  |
| :---: | :---: | :---: | :---: |
| Assets | Liabilities and stockholders' equity |  |  |
| Current assets |  | Liabilities |  |
| Cash and cash equivalents | \$3,743,092 | Current liabilities |  |
| Accounts receivable, less allowance for doubtful accounts | 4,427,526 | Accounts payable | \$877,832 |
| Notes receivable, current | 91,059 | Accrued salaries and wages | 646,156 |
| Inventories | 3,281,447 | Other accrued expenses | 946,528 |
| Deferred income taxes | 461,249 | Dividends payable | 602,694 |
| Other | 220,163 | Deferred income | 220,938 |
| Total current assets | \$12,224,536 | Total current liabilities | \$3,294,148 |
| Property and equipment, net | \$5,186,709 | Deferred income taxes | 894,429 |
| Other Assets |  | Total liabilities | \$4,188,577 |
| Notes receivable, less current portion | \$263,650 | Equity |  |
| Goodwill, net | 1,046,944 | Common stock | \$180,808 |
| Intangible assets, net | 110,025 | Additional paid-in capital | 7,626,602 |
| Other | 88,050 | Retained earnings | 6,923,927 |
| Total other assets | \$1,508,669 | Total stockholders' equity | \$14,731,337 |
| Total Assets | \$18,919,914 | equity | \$18,919,914 |

## Case 4: Fraud Schemes and Internal Controls

| Potential Fraud Scheme | Internal Control |
| :--- | :--- |
| The store only has one credit card <br> machine located in between the two <br> cash registers. | Documentation - Transactions could get mixed up <br> between the two cash registers: have a credit card <br> machine for each cash register. Running two different <br> purchases at the same time could allow for an <br> employee to steal money: have proper documentation <br> for theft prevention. If the credit card machine fails, <br> there is no way to track transactions/ inflow or outflow <br> of money: have an alternate system of documentation <br> in addition to the credit card machine and two cash <br> registers. |
| Every single employee has their own <br> access code to both registers, <br> increasing the risk of possible errors <br> or discrepancies during transactions. | Access Controls - Limit the number of workers with <br> access to the registers and/or assign employees to <br> certain registers that they can use. Check the <br> accounting software to identify any variances under <br> specific users. |
| Employees can steal inventory. | Physical Audits - The store should perform a physical |
| inventory count once a month (or after a certain period |  |
| of time) and compare physical inventory with recorded |  |
| inventory. |  |$|$


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


| Employees are able to steal cash <br> from the register during the day <br> without Kayla knowing exactly <br> which employee stole the cash. | Access Controls - Employees should be required to <br> close out their cash box at the end of their shift at a <br> particular register. This would show who is responsible <br> if money goes missing. Employees should be required <br> to only work on one register during his/ her shift, and <br> each cash register should only be used by one <br> employee each shift. |
| :--- | :--- |

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

## Case 5: Analysis of Inventories and Accounting for Obsolete Inventory

1. Raw materials inventory includes direct material costs associated with purchasing raw materials in order to manufacture the product as well as freight-in costs related to acquiring the materials. Materials could include things such as wood or plastic that are directly involved in production of the product. The work-in-process inventory also includes direct materials costs, and also includes direct labor costs and overhead incurred during the period. Direct labor costs include not only wages accrued by workers, but also employee benefits; overhead includes overtime and supervisor salaries earned during the period. The finished goods inventory includes all costs from the work-in-process inventory that have been completed during the period.
2. Inventories are recorded net of unmarketable or obsolete inventory. This allowance is based on current inventory levels, past sales trends, and historical data in addition to management's estimates on market conditions and predictions for future market conditions and product demand. All of these things are subject to change, and therefore management must make proper and conservative estimates in order to have a correct estimate of inventory, which should be approximately equal to the fair value of the inventory.
3. a. This amount for unmarketable or obsolete inventory does not appear as a line item within the financial statements. This amount may be disclosed in the notes to the financial statements, but without such a note, it does not appear on the financial statements.
b. Gross inventories 2011 - $\$ 243,870$

Inventory amount on the balance sheet for 2011 - \$233,070
Balance in allowance account at year-end 2011-\$10,800

Gross inventories 2012 - \$199,214
Inventory amount on the balance sheet for 2012 - \$211,734
Balance in allowance account at year-end 2012-\$12,520
c. The allowance for obsolete and unmarketable inventory would be attributed to the finished goods and raw materials inventories. The portions attributable to each type of inventory would be based on the proportion of total inventory that each type makes up. Obsolete inventory, by nature, could not be attributed to work-in-process inventory because the units would have to be finished or not yet begun to be considered unmarketable; for example, a portion of raw materials could be considered obsolete if some amount of raw materials was unused at the end of the period.
4. 2012

Cost of goods sold 13,348
Allowance for obsolete and unmarketable inventory

Allowance for obsolete and unmarketable inventory $\quad 11,628$
Finished goods inventory $\quad 11,628$
5.

| Raw materials <br> inventory |  |
| ---: | ---: |
| $\$ 46,976$ |  |
| $\$ 438,561$ |  |
|  | $\$ 442,068$ |
| $\$ 43,469$ |  |


| Work-in-process <br> inventory |  |
| ---: | ---: |
| $\$ 1,286$ |  |
|  | $\$ 568,735$ |
| $\$ 126,000$ |  |
| $\$ 442,068$ |  |
| $\$ 619$ |  |


| Finished goods inventory, <br> net |  |
| ---: | ---: |
| $\$ 184,808$ |  |
|  | $\$ 13,348$ |
|  | $\$ 572,549$ |
| $\$ 568,735$ |  |
| $\$ 167,646$ |  |


| Cost of sales |  |
| :---: | :---: |
| $\$-$ |  |
| $\$ 13,348$ |  |
| $\$ 572,549$ |  |
| $\$ 585,897$ |  |


| Accounts payable |  |
| ---: | ---: |
|  | $\$ 39,012$ |
|  | $\$ 438,561$ |
| $\$ 432,197$ |  |
|  | $\$ 45,376$ |

a. $\$ 572,549$ is the cost of finished goods sold.
b. $\$ 568,735$ is the cost of finished goods transferred from work-in-process.
c. $\$ 442,068$ is the cost of raw materials transferred from work-in-process.
d. $\$ 438,561$ is the amount of raw materials purchased.
e. $\$ 432,197$ is the amount of cash disbursed for raw materials.
6. 2011 Inventory Turnover ratio $=\$ 575,226 /((\$ 211,734+233,070) / 2)=2.6344$ times 2012 Inventory Turnover ratio $=\$ 585,897 /((\$ 233,070+268,591) / 2)=2.2933$ times
7. 2011 Inventory Holding Period $=365 / 2.6344=138.55$ days 2012 Inventory Holding Period $=365 / 2.2933$ = 159.16 days

On average during 2011, the company is holding inventory for 139 days before it is sold. In 2012, the company holds its inventory for 159 days before it is sold. From 2011 to 2012, the company is slightly less efficient in its in inventory management.
8. Percent of finished goods estimated as obsolete $=13,348 /(167,646+13,348)=0.0737$, or $7.37 \%$ of finished goods are considered obsolete in the current year. This is the
provision for obsolete inventory divided by gross finished goods inventory, which is the net finished goods inventory plus the provision. As an investor, I would like to know more information regarding prior years in order to determine whether or not the company is improving this ratio. It might also be helpful to know what type of product this company is making so that this percentage and other ratios may be compared to other industry companies.

## Case 6: WorldCom, Inc. - Capitalized Costs and Earnings Quality

a. i. An asset is generally defined as a probable future benefit owned or controlled by a company. An expense is defined as an outflow or the using up of an asset, or the incurrence of a liability, that is central to the company's operations.
ii. When costs are central to the company's operations, they should typically be expensed and listed on the income statement. When costs have potential future benefit, they should be capitalized as assets.
b. Capitalized costs are considered assets on the balance sheet, so the total assets are increased, depending the method of payment. Over time, these costs are depreciated, which is expensed and listed on the balance sheet. Also, as the costs are depreciated, the total assets on the balance sheet are decreased with every period in which depreciation is recorded.
c. Line costs for WorldCom are, for example, charges paid to local telephone networks. For year ended December 31, 2001, line costs were reported as $\$ 14,739,000,000$.

$$
\begin{array}{lr}
\text { Line costs expense } & 14,739,000,000 \\
\text { Cash, etc. } & 14,739,000,000
\end{array}
$$

d. WorldCom improperly capitalized costs related to central operations. These types of costs would include things like, as mentioned above, charges paid to local telephone networks as well as other operating costs. Costs such as these do not meet the criteria for capitalization as they cannot be considered assets because they do not have the required probable future benefit.
e. The costs in the following journal entry appear in the assets section of the balance sheet. On the statement of cash flows, these costs would appear in the investing section, depending on the method and timing of payment.

```
PP&E 3,055,000,000
    Line costs expense 3,055,000,000
```

f. First quarter depreciation: $(\$ 771 / 22 \text { years })^{*}(4 / 4)=\$ 35,045,455$ million Second quarter depreciation: $(\$ 610 / 22$ years $) *(3 / 4)=\$ 20,795,455$ million Third quarter depreciation: $(\$ 743 / 22 \text { years })^{*}(2 / 4)=\$ 16,886,364$ million Fourth quarter depreciation: (\$931/22 years)*(1/4)=\$10,579,544 million Total depreciation for 2001: $\$ 83,306,818$
g. A partial income statement for WorldCom for year ended December 31, 2001.

| WorldCom, Inc. <br> Partial Income Statement <br> For year ended December 31, 2001 |  |  |
| :--- | ---: | ---: |
| Income before income taxes, as reported | $\$$ | $2,393,000,000$ |
| Add: depreciation for year (from part f) | $\$ 83,306,818$ |  |
| Deduct: Improperly capitalized line costs |  | $(3,055,000,000)$ |
| Income (loss) before taxes, restated | $\$$ | $(578,693,182)$ |
| Income tax benefit |  | $202,542,614$ |
| Add: minority interests |  | $35,000,000$ |
| Net income (loss), restated |  |  |
|  |  | $(341,150,568)$ |

This loss of $\$ 341,150,568$ is a large material difference in net income. The income reported is almost $\$ 2,000,000,000$ more than the loss actually incurred by WorldCom. A difference this large is clearly important for shareholders, as they are under the impression that WorldCom was profitable during the year 2001.

## Case 7: Analysis of the FASB Codification with Respect to Restructuring Charges

Targa Co. is preparing its annual financial statements in accordance with US GAAP. On December 27, 20X1, Targa communicated to its employees a one-time termination plan regarding the discontinuation of the company's Armor Track business line. The nonvoluntary termination plan will cost Targa a one-time estimated $\$ 2.5$ million, and the value of two weeks' severance for the affected employees is estimated at $\$ 500,000$. Additionally, the manager of the facility will receive $\$ 50,000$ in a lump sum benefit when the facility is closed. The business line will be terminated by January 31, 20X2. The company will also incur relocation costs of \$500,000 and training costs of $\$ 1.5$ million. In this case study, I will analyze how Targa should account for these charges according to the FASB Codification.

Targa needs to properly account for the one-time termination benefit of $\$ 2.5$ million. Section 420-10-25-4 describes the criteria that must be met in order for the cost to be considered a one-time termination benefit, all of which Targa's benefit meets. According to $\S 420-10-25-5$ of the codification, the liability for the one-time employee termination benefits is recognized at the communication date, when employees are notified of the termination plan. In Targa's case, the liability will be created and recognized as of December 27, 20X1.

According to §410-10-25-14, "costs to ... close facilities and relocate employees" are considered to be associated with the exit or disposal activity. Therefore, Targa's relocation costs of $\$ 500,000$ and retraining costs of $\$ 1.5$ million are considered other disposal costs. Section 420-10-25-15 describes how to recognize such associated costs as follows: "a liability for other costs associated with and exit or disposal activity shall be recognized in the period in which the liability is incurred." Therefore, these costs
will be recognized as as both a liability and an expense kin the same period as the onetime termination benefits above.

The $\$ 500,000$, two weeks' severance for affected employees, is accounted for according to section 712-10-25-2 of the codification. This section states that the employer "shall recognize a liability and a loss when it is probable that employees will be entitled to benefits and the amount can be reasonably estimated." These benefits are considered contractual termination benefits and are not paid out of a retirement or pension plan. This benefit should be recognized at the communication date as well, as the amount is reasonably estimated and the employees are entitled to the benefits.

The final cost, a $\$ 50,000$ lump-sum benefit paid to the facility manager upon closing the facility, should also be accounted for according to section 712-10-25-2. Targa should recognize this amount as a loss on its financial statements, in accordance with the codification. This $\$ 50,000$ benefit is the only restructuring charge incurred by Targa in this process that is not considered a liability on the financial statements. Unlike the other costs, which will appear on the balance sheet, this benefit will appear as a loss on the income statement.

These restructuring charges are material for the company and should be treated as such in the preparation of the financial statements. The company's liabilities will increase due to the one-time termination benefits, relocation and retraining costs, and \$500,000 of two weeks' severance to affected employees. Targa's losses will also increase because of the $\$ 50,000$ lump-sum benefit paid to the facility manager. These restructuring charges will impact the balance sheet, income statement, and statement of retained earnings, but
should not be too deeply considered as the company chose to terminate the business line for legitimate purposes.

## Case 8: Examination of Equity on the Balance Sheet

a. Merck's common shares
i. Merck is authorized to issue $5,400,000,000$ shares of common stock.
ii. As of December 31, 2007, Merck had issued 2,983,508,675 shares of common stock.
iii. The common stock has a par value of $\$ 0.01$ per share, so $2,983,508,675$ shares multiplied by $\$ 0.01$ each equals $\$ 29,835086.75$. Merck has listed this as $\$ 29.8$ million on its balance sheet.
iv. Merck owns $811,005,791$ shares of treasury stock as of December 31, 2007.
v. Issued shares are $2,983508,675$ and treasury stock is $811,005,791$. The difference between these is shares outstanding: 2,172,502,884 shares.
vi. Market capitalization is Merck's closing stock price multiplied by shares outstanding. So, $2,172,502,884$ times $\$ 57.61$, which is more than $\$ 125$ billion.
c. Companies pay dividends for many reasons. For example, a company may pay dividends because they have excess profits and have extra cash to pay to their shareholders. This is a positive sign from the company that they care about their shareholders and are sharing profits with them. Alternatively, a company may pay dividends instead of using the extra money to invest, which can indicate that they are not growing. This reason, however, is a negative sign from the company, as it signals that the company is no longer growing. When dividends are paid, the company's share price will typically decrease.
d. Companies will repurchase their own shares for multiple reasons. One reason is that the shares are undervalued in the market. The company can repurchase undervalued shares as treasury stock and reissue them when the market price per share is closer to
the actual value of the stock. Another reason is that the company wants to take back some of the ownership of the company. Companies sell shares to raise capital to use for operations and other purposes; however, when the company is in a position that it does not require capital, it may buy back some of the shares it had previously sold in order to control the ownership of the company.
e.

| Retained earnings | $\$ 3,310.7$ |
| :--- | ---: |
|  |  |
| Dividends payable <br> Cash | $\$ 3.4$ |
|  | $\$ 3,307.3$ |

g. Merck's treasury stock transactions
i. Merck is using the cost method to account for its treasury stock transactions.
ii. During the year 2007, Merck purchased 26.5 million shares of treasury stock.
iii. To purchase the treasury stock, Merck paid $\$ 1,429.7$ million in total and $\$ 53.95$ per share on average. This represents a cash outflow for Merck.
iv. Treasury stock is not considered an asset because there is no income generated from owning treasury stock. Assets are typically used in operations or other income-generating activities. Instead, it is classified as equity with a debit balance.

| Dividends paid | 2007 | 2006 |
| :--- | ---: | ---: |
| Shares outstanding | $2,172.5$ | $2,167.8$ |
| Net income | $\$ 3,275.4$ | $\$ 4,433.8$ |
| Total assets | $\$ 48,350.7$ | $\$ 44,569.8$ |
| Operating cash flows | $\$ 6,999.2$ | $\$ 6,765.2$ |
| Year-end stock price | $\$ 57.61$ | $\$ 41.94$ |
| Dividends per share | $\$ 1.52$ | $\$ 1.53$ |
| Dividend yield (dividends per share to stock price) | $\$ 0.03$ | $\$ 0.04$ |
| Dividend payout (dividends to net income) | $\$ 1.01$ | $\$ 0.75$ |
| Dividends to total assets |  |  |
| Dividends to operating cash flows | $\$ 0.07$ | $\$ 0.07$ |

i. Over the two years, Merck's dividend ratios stay approximately the same. There are a few differences, but once rounded, these differences are only a few pennies. The only ratio with a major difference is dividend payout, which is $\$ 0.26$ higher in 2007 than in 2006. This difference just means that for every dollar of net income, Merck paid $\$ 0.26$ more in dividends in 2007 than 2006.

## Case 9: Analysis of Stock Options as Employee Compensation

In this case, I will examine the use of stock options as compensation for employees instead of traditional cash payments. Using the financial statements and notes provided by Xilinx, I will analyze the trends and uses of both stock options and restricted stock units as forms of compensation for employees.
a. This stock compensation plan works by offering compensation to employees in the form of stock options instead of the usual cash compensation. These options cannot be exercised before the exercise date, and employees only have the ability to purchase these stock options as long as they are employed by Xilinx. These plans incentivize employees to remain employed at Xilinx, which provides Xilinx with human capital as well.
b. Restricted stock units are different from stock options in that the company can grant employees either cash equivalents or shares of company stock. With stock options, the employee only has the opportunity to purchase stock, though hopefully at a lower price than the stock's market price at the time. Both of these options are good for the company to offer because different employees have different interests, and therefore would rather have stock or cash equivalents depending on their preferences. Offering both stock options and restricted stock units provides the company with an opportunity to take interest in what their employees want. Also, offering restricted stock units is less risky for the company and the employee because they do not have to be concerned with the future stock market price but instead can choose the cash equivalents in the restricted stock units.
c. Grant date - This is the date that the stock option contract is initiated.

Exercise price - This is the price at which employees with stock options can
purchase stock after the exercise date, and it is usually lower than the market price of the stock.

Vesting period - This is the time period that employees must wait before they can exercise their stock options, and is the time between the grant date and the exercise date.

Expiration date - This is that date on which the company no longer reserves the right for employees to purchase stock under the stock option agreement.

Options/RSUs granted - This is the number of stock options or RSUs that the employees are able to purchase under the stock option contract.

Options exercised - This is the number of stock options that employees actually purchase at the exercise price.

Options/RSUs forfeited or cancelled - This is the number of stock options or RSUs that were able to be purchased by the employee but were not actually purchased. The employee therefore forfeits the right to exercise these options.
d. This allows employees to purchase stock every 6 months for 24 months at a discounted purchase price. However, employees can only purchase stock worth up to 15 percent of their annual salary. For Xilinx, these shares are offered at 85 percent of marker value, which means that the employee can immediately resell the shares for a 15 percent gain. This is a clear incentive for the employees to participate in the purchase plan. This purchase plan is different from stock options in that stock options are explicitly offered at a certain price and the purchase plan offers the stock at a percentage of market price. Also, stock options are granted at the discretion of
management, but the employee stock purchase plan allows the employee to participate based on a set of criteria that must be met in order to participate.
e. Employee stock option activity is accounted for by Xilinx by debiting the appropriate expense accounts for the amounts corresponding to employees being compensated with stock options. The credit for this entry would be to an additional paid in capital equity account.
f. Stock-based compensation expense
i. The total expense before taxes for stock-based compensation is $\$ 77,862$.
ii. On the income statement, this amount is appropriated in cost of revenue, research and development, and selling, general, and administrative expenses.
iii. On the statement of cash flows, stock-based compensation is listed under cash flows from operating activities. It contributes to the cash flows from operating activities as an adjustment to reconcile net income.
iv. The tax on this stock-based compensation expense will essentially become a prepaid expense, and will result in a deferred tax asset.
v.

| Cost of revenue | $\$ 6,356$ |  |
| :--- | ---: | :--- |
| Research and development expense | 37,937 |  |
| Selling, general, \& administrative | 33,569 |  |
| Additional paid-in-capital - stock options |  | $\$ 77,862$ |

Deferred tax asset $\quad \$ 22,137$ Income tax payable $\$ 22,137$
i. Wall Street Journal article
i. Overall, the article states that stock options "kind of got squeezed out" over time in favor of restricted stock awards. More and more companies are trending toward restricted stock awards instead of stock options in recent years. According to the article, stock options that trade for less than market price can hurt employee morale. Also, restricted stock units are far less risky for employees and can easily be redeemed for cash equivalents. This means that the RSUs can be relied on as a form of compensation for employees more so than the riskier stock options.
ii. Xilinx's use of restricted stock unit awards increased by nearly 2,000 shares from 2010 to 2013 while the number of shares available via stock options decreased by almost 15,000 by 2013, which is approximately half of the shares available in 2010. This data is consistent with the article, and will continue to trend this way in the future according to the article.

## Case 10: Using the New FASB Revenue Recognition Rules

## Part 1:

2. How does each step in the five-step revenue model apply to this transaction?
a. Step 1: The contract with the customer is that the bartender will provide a cup of beer in exchange for $\$ 5$ from the customer.
b. Step 2: The performance obligation in this transaction is to provide the customer with one cup of beer.
c. Step 3: The transaction price in this situation is $\$ 5$ for one cup of beer.
d. Step 4: The transaction price will be allocated to the goods involved in the performance obligations, which is beer in this case.
e. Step 5: The revenue will be recognized immediately in this case, as the performance obligation and collection of payment happen at the same time.
3. 

| Cash | $\$ 7$ |  |
| :--- | ---: | :--- |
| Revenue - Beer |  | 7 |

Part 2:
2. How does each step in the five-step revenue model apply to this transaction?
a. Step 1: In this case, the contract with the customer is similar to part I: the bartender will provide a large beer in a thermal mug in exchange for $\$ 7$ from the customer.
b. Step 2: The performance obligation in this transaction is to provide the customer with one large thermal mug of beer.
c. Step 3: The transaction price in this case is $\$ 7$ for the large thermal mug of beer.
d. Step 4: In this case, the transaction price will be allocated based on the relative standalone price of the individual items. Here, the beer will be allocated to the total transaction price as $(\$ 5 / 8) * 7$, which is $\$ 4.38$. The mug will be allocated as $(\$ 3 / 8) * 7$, which is $\$ 2.62$.
e. Step 5: The revenue will be recognized immediately in this case because the performance obligation is fulfilled when the bartender exchanges the customer's money for the beer and mug.
3.

| Cash | $\$ 7$ |  |
| :--- | ---: | :--- |
| Revenue - Beer |  | 4.38 |
| Revenue - Mug |  | 2.62 |

## Part 3:

1. How does each step in the five-step revenue model apply to this transaction?
a. Step 1: In this scenario, the contract with the customer is the bartender providing the beer and pretzel in exchange for $\$ 7$ from the customer.
b. Step 2: The performance obligation in this transaction is to provide the customer with a cup of beer and one pretzel.
c. Step 3: The transaction price is $\$ 8.50$, because it is the two standalone prices for the beer and the coupon added together.
d. Step 4: The transaction price will be allocated to the beer $(\$ 5 / 8.50) * 7$, which is $\$ 4.12$. The coupon will be allocated to unearned revenue as $(\$ 3.50 / 8.50) *$, which is $\$ 2.88$.
e. Step 5: Revenue will only be recognized for the beer, as the performance obligation for the pretzel has not been fulfilled. The coupon will instead be recorded as unearned revenue.
2. 

| Cash | $\$ 7$ |  |
| :--- | ---: | :--- |
| Revenue - Beer |  | 4.12 |
| Unearned revenue |  | 2.88 |

Part 4:

1. How does each step in the five-step revenue model apply to this transaction?
a. Step 1: The contract is to provide the customer with two pretzels in exchange for $\$ 4$ or a coupon.
b. Step 2: The performance obligation is to provide the customer with two pretzels.
c. Step 3: The transaction price in this situation is $\$ 3.50$ for two pretzels because that is how much a coupon for two pretzels costs.
d. Step 4: The transaction price will be allocated will be allocated to the pretzels in this transaction. Based on how much the coupon was recorded for in part 3, the revenue will be recorded as $\$ 2.88$.
e. Step 5: The revenue will be recognized immediately because the performance obligation is fulfilled at the time of payment.
2. 

| Unearned revenue - pretzel | $\$ 2.88$ |  |
| :---: | :---: | :---: |
| Revenue - pretzel |  | 2.88 |

## Case 11: Deferred Income Taxes

a. Book income is the same as financial income, which is revenues minus expenses. Zagg's book income for 2012 is $\$ 14,505$. This differs from taxable income due to temporary taxable differences, permanent taxable differences, and loss carryforwards and carrybacks.
b. In your own words, define the following terms:
i. Permanent tax difference - this is a difference between book income and taxable income that will never be eliminated. An example of this is municipal bond interest income, which is recognized as part of book income but not taxable income.
ii. Temporary tax difference - this is the difference between the carrying value of an asset or liability on the company's balance sheet and the asset or liability's taxable base. There are two types of temporary tax differences: deductible or taxable. An example of a temporary difference is depreciation, which is accounted for differently on book income versus taxable income.
iii. Statutory tax rate - this is the rate imposed by the state or country that is responsible for taxing the entities.
iv. Effective tax rate - this is the average tax rate that the entity will pay on their pre tax income.
c. These deferred taxes are actually incurred during the period and therefore should be included in total income tax expense to satisfy the matching principle.
d. Deferred tax assets represent a future positive cash inflow because of overpaid taxes in the present, while a deferred tax liability represents a tax payment that the
company is obligated to make in the future. An example of a deferred tax asset is the carry-over of losses; an example of a deferred tax liability is depreciation differences for taxable income and book income.
e. The deferred income tax valuation allowance is a provision relating to the deferred tax asset account to ensure that the deferred tax asset is not overstated. For Zagg, it is listed in Note 8 in table 3. An allowance should be recorded when there is potential that the deferred tax asset might be overstated.
f. Consider the information disclosed in Note 8 - Income Taxes to answer the following questions:
i.

| Income tax expense | $\$ 9,393$ |  |
| :---: | :---: | :--- |
| Net deferred tax asset | $\$ 8,293$ |  |
| Income tax payable |  | $\$ 17,686$ |

ii. | Income tax expense | $\$ 9,393$ |  |
| :--- | ---: | ---: |
| Deferred tax asset | $\$ 8,002$ |  |
| Deferred tax liability | $\$ 291$ |  |
|  | Income tax payable |  |
| $\$ 17,686$ |  |  |

iii. ETR = Tax expense / Pre-tax Income
$\mathrm{ETR}=\$ 9,393 / 23,898=39.31 \%$
The permanent differences between book income and taxable income make up the $4.31 \%$ difference between the effective tax rate and the statutory rate.
iv. The current portion of deferred income tax assets is listed under current assets at $\$ 6,912$, while the non-current portion is listed as an asset on the balance sheet at $\$ 6,596$.

## Case 12: Accounting for Leases: Build-A-Bear Workshop

a. Leasing assets provides many advantages over buying assets, including financing one hundred percent of the cost at a fixed rate. Leasing assets also protects the company from obsolescence of assets and provides the company with flexibility regarding the asset. Leases are also less costly to finance than purchasing assets, and leases often have tax benefits that purchases do not have. For some leases, companies can also do off-balance-sheet financing, which is advantageous in some cases.
b. Operating lease - This is a lease with a term shorter than the useful life of the asset. These leases do not meet the four criteria used to define a capital lease. In this case, the lessees are not effectively purchasing the use of the asset for its useful life.

Capital lease - This is a lease with a term relatively similar to the useful life of the asset. These leases meet the four criteria that define a capital lease. The lessees are essentially purchasing the use of the asset for the majority of its useful life.

The four criteria are as follows:

1. Transfers ownership of the property to the lessee.
2. Contains a bargain purchase option.
3. Is equal to seventy-five percent or more of the estimated economic life of the leased property.
4. The present value of the minimum lease payments equals or exceeds ninety percent of the fair value of the leased property.

Direct-financing lease - This is a lease where the cost of the asset equals the fair value of the asset, and interest revenue is the only revenue earned on the lease. Sales-type lease - This is a lease where the sales price of the asset is not equal to the fair value of the asset. The lessor earns interest revenue as well as an additional profit from the lease.
c. Different types of leases are accounted for differently because the leased asset can be treated differently based on the time of the lease. For a capital lease, the lessee is effectively using the asset for most of its useful life while an operating lease is typically for less than the useful life of the asset. Lessees with capital leases own the majority of the use of the asset, which is not the case with operating leases.
d. Build-A-Bear's hypothetical lease
i. This lease is an operating lease because it does not meet any of the four criteria to be considered a capital lease.
ii.

| Lease expense <br> Cash | $\$ 100,000$ |  |
| :---: | :---: | :---: |

## iii. For year one:

| Lease expense | $\$ 100,000$ |  |
| :---: | :---: | :---: |
| Deferred rent |  | $\$ 100,000$ |

For years two through five:

| Lease expense | $\$ 100,000$ |  |
| :---: | ---: | ---: |
| Deferred rent | 25,000 |  |
| Cash |  | 125,000 |

e. Build-A-Bear's operating leases
i. Rent expense for fiscal year 2009 was $\$ 46.8$ million.
ii. This expense appears in selling, general, and administrative expenses on the income statement.
f. Build-A-Bear's operating leases
i.

| Period | Lease <br> payment | Present value <br> factor | Present value of the <br> payment | Discount <br> rate |
| ---: | ---: | ---: | ---: | ---: |
| 1 | $\$ 50,651$ | 0.9346 | $\$ 47,337.38$ | $7 \%$ |
| 2 | $\$ 47,107$ | 0.8734 | $\$ 41,145.08$ |  |
| 3 | $\$ 42,345$ | 0.8163 | $\$ 34,566.13$ |  |
| 4 | $\$ 35,469$ | 0.7629 | $\$ 27,059.13$ |  |
| 5 | $\$ 31,319$ | 0.7130 | $\$ 22,330.01$ |  |
| 6 | $\$ 25,229$ | 0.6663 | $\$ 16,811.15$ |  |
| 7 | $\$ 25,229$ | 0.6227 | $\$ 15,711.35$ |  |
| 8 | $\$ 25,229$ | 0.5820 | $\$ 14,683.51$ |  |
|  |  |  | $\$ 219,644$ |  |
|  |  |  |  |  |

ii.

| Leased asset | $\$ 219,644$ |  |
| :---: | :---: | :---: |
| Lease obligation |  | $\$ 219,644$ |

v.

| Lease obligation | $\$ 35,186$ |  |
| :---: | ---: | ---: |
| Interest expense | 15,375 |  |
| $\quad$ Cash |  | 50,561 |


| Depreciation expense | $\$ 27,455$ |  |
| :---: | :---: | :---: |
| Accumulated depreciation |  | 27,455 |

g. If Build-A-Bear considers its leases as operating leases, they appear on the income statement as expenses, which lowers their net income. This lower net income results in paying less in taxes to the government.
h. Financial ratios
i.

| Ratios | Ratios with an <br> operating lease | Ratios with a <br> capital lease |
| :--- | ---: | ---: |
| Current ratio | 1.66 | 1.68 |
| Debt to equity ratio <br> Long term debt to <br> assets ratio | 0.73 | 1.84 |

The current ratio will increase slightly, while the debt to equity ratio and long term debt to assets ratio will increase significantly. The ratios with a capital lease are weaker, but the current ratio is not much different from the current ratio with an operating lease. Capitalizing leases does not always lead to weaker liquidity and solvency ratios, but it can often.

