

SOLUTIONS MANUAL

JONATHAN BERK
PETER DEMARZO



CORPORATE FINANCE
SECOND EDITION

Chapter 2

Introduction to Financial Statement Analysis

2-1. What are the four main financial statements? What checks are there on the accuracy of these statements?

The four financial statements are: the balance sheet, the income statement, the statement of cash flows, and the statement of changes in shareholders' equity. Financials are required to be audited by a neutral third party, who checks and ensures that the financial statements are prepared according to GAAP or accounting standards and that the information contained is reliable.

2-2. Who reads financial statements? List at least three different categories of user. For each category, provide an example of the type of information they might be interested in and discuss why.

Users of financial statements include present and potential investors, financial analysts, and other interested outside parties (such as lenders, suppliers and other trade creditors, and customers). Financial managers within the firm also use the financial statements when making financial decisions.

Investors. Investors are concerned with the risk inherent in and return provided by their investments. Bondholders use the firm's financial statements to assess the ability of the company to make its debt payments. Stockholders use the statements to assess the firm's profitability and ability to make future dividend payments.

Financial analysts. Financial analysts gather financial information, analyze it, and make recommendations. They read financial statements to determine a firm's value and project future earnings, so that they can provide guidance to businesses and individuals to help them with their investment decisions.

Managers. Managers use financial statement to look at trends in their own business, and to compare their own results with that of competitors.

2-3. Find the most recent financial statements for Starbucks' corporation (SBUX) using the following sources:

- a. From the company's Web site www.starbucks.com (*Hint* : Search for "investor relations.")
- b. From the SEC Web site www.sec.gov. (*Hint* : Search for company filings in the EDGAR database.)
- c. From the Yahoo! Finance Web site <http://finance.yahoo.com>.
- d. From at least one other source. (*Hint* : Enter "SBUX 10K" at www.google.com.)

Each method will help find the same SEC filings. Yahoo! Finance also provides some analysis such as charts and key statistics.

- 2-4. Consider the following potential events that might have occurred to Nokia on December 30, 2007. For each one, indicate which line items in Nokia's balance sheet would be affected and by how much. Also indicate the change to Nokia's book value of equity.**
- Nokia used \$20 million of its available cash to repay \$20 million of its long-term debt.**
 - A warehouse fire destroyed \$5 million worth of uninsured inventory.**
 - Nokia used \$5 million in cash and \$5 million in new long-term debt to purchase a \$10 million building.**
 - A large customer owing \$3 million for products it already received declared bankruptcy, leaving no possibility that Nokia would ever receive payment.**
 - Nokia's engineers discover a new manufacturing process that will cut the cost of its flagship product by over 50%.**
 - A key competitor announces a radical new pricing policy that will drastically undercut Nokia's prices.**
- Non-current liabilities would decrease by \$20 million, and cash would decrease by the same amount. The book value of equity would be unchanged.
 - Inventory would decrease by \$5 million, as would the book value of equity.
 - Non-current assets would increase by \$10 million, cash would decrease by \$5 million, and non-current liabilities would increase by \$5 million. There would be no change to the book value of equity.
 - Accounts receivable would decrease by \$3 million, as would the book value of equity.
 - This event would not affect the balance sheet.
 - This event would not affect the balance sheet.
- 2-5. What was the change in Nokia's book value of equity from 2006 to 2007 according to Table 2.1? Does this imply that the market price of Nokia's shares increased in 2007? Explain.**

Nokia's book value of equity increased by €5,278 million from 2006 to 2007. An increase in book value does not necessarily indicate an increase in Nokia's share price. The market value of a share does not depend on the historical cost of the firm's assets, but on investors' expectation of the firm's future performance. There are many events that may affect Nokia's future profitability, and hence its share price, that do not show up on the balance sheet.

- 2-6. Use EDGAR to find Qualcomm's 10K filing for 2009. From the balance sheet, answer the following questions:**
- How much did Qualcomm have in cash and short-term investments?**
 - What were Qualcomm's total accounts receivable?**
 - What were Qualcomm's total assets?**
 - What were Qualcomm's total liabilities? How much of this was long-term debt?**
 - What was the book value of Qualcomm's equity?**
- \$2,717 million (cash) and \$8,352 million (short-term investments/marketable securities) for a total of \$11,069 million
 - \$700 million
 - \$27,445 million
 - 7,129 million, nothing
 - \$20,316 million

2-7. Find online the annual report of Cadbury from www.cadburyinvestors.com for 2007. Answer the following questions from their balance sheet:

- a. How much cash did Cadbury have at the start of 2007?
- b. What were Cadbury's total assets?
- c. What were Cadbury's total liabilities? How much debt did Cadbury have?
- d. What was the book value of Cadbury's equity?

- a. At the end of 2007, Cadbury's had cash and short-term investments of €495 million.
- b. Cadbury's total assets were €11,338 million..
- c. Cadbury's total liabilities were €3,118 million, and it had gross borrowings of €3,714 million.
- d. The book value of Cadbury's equity was €4,162 million.

2-8. In March 2005, General Electric (GE) had a book value of equity of \$113 billion, 10.6 billion shares outstanding, and a market price of \$36 per share. GE also had cash of \$13 billion, and total debt of \$370 billion. Four years later, in early 2009, GE had a book value of equity of \$105 billion, 10.5 billion shares outstanding with a market price of \$10.80 per share, cash of \$48 billion, and total debt of \$524 billion. Over this period, what was the change in GE's

- a. market capitalization?
- b. market-to-book ratio?
- c. book debt-equity ratio?
- d. market debt-equity ratio?
- e. enterprise value?

a. 2005 Market Capitalization: 10.6 billion shares x \$36.00/share = \$381.6 billion. 2009 Market Capitalization: 10.5 billion shares x \$10.80/share = \$113.4. The change over the period is \$113.4 - \$381.6 = -\$268.2 billion.

b. 2005 Market-to-Book = $\frac{381.6}{113} = 3.38$. 2009 Market-to-Book = $\frac{113.4}{105} = 1.08$. The change over the period is: 1.08 - 3.38 = -2.3.

c. 2005 Book Debt-to-Equity = $\frac{370}{113} = 3.27$. 2009 Book Debt-to-Equity = $\frac{524}{105} = 4.99$. The change over the period is: 4.99 - 3.27 = 1.72.


d. 2005 Market Debt-to-Equity = $\frac{370}{381.6} = 0.97$. 2009 Market Debt-to-Equity = $\frac{524}{113.4} = 4.62$. The change over the period is: 4.62 - 0.97 = 3.65.

e. 2005 Enterprise Value = \$381.6 - 13 + 370 = \$738.6 billion. 2009 Enterprise Value = \$113.4 - 48 + 524 = \$589.4 billion. The change over the period is: \$589.4 - 738.6 = - \$149.2 billion.

2-9. In July 2007, Apple had cash of \$7.12 billion, current assets of \$18.75 billion, current liabilities of \$6.99 billion, and inventories of \$0.25 billion.

- a. What was Apple's current ratio?
- b. What was Apple's quick ratio?
- c. In July 2007, Dell had a quick ratio of 1.25 and a current ratio of 1.30. What can you say about the asset liquidity of Apple relative to Dell?

- a. Apple's current ratio = $\frac{18.75}{6.99} = 2.68$
- b. Apple's quick ratio = $\frac{18.75 - 0.25}{6.99} = 2.65$
- c. Apple has significantly more liquid assets than Dell relative to current liabilities.
- 2-10. In November 2007, Abercrombie and Fitch (ANF) had a book equity of \$1458 million, a price per share of \$75.01, and 86.67 million shares outstanding. At the same time, The Gap (GPS) had a book equity of \$5194 million, a share price of \$20.09, and 798.22 million shares outstanding.**
- a. **What is the market-to-book ratio of each of these clothing retailers?**
- b. **What conclusions can you draw by comparing the two ratios?**
- a. ANF's market-to-book ratio = $\frac{75.01 \times 86.67}{1,458} = 4.59$
- GPS's market-to-book ratio = $\frac{20.09 \times 798.22}{5,194} = 3.09$
- b. The market values, in a relative sense, the outlook of Abercrombie and Fitch more favorably than it does The Gap. For every dollar of equity invested in ANF, the market values that dollar today at \$4.59 versus \$3.09 for a dollar invested in the GPS. Equity investors are willing to pay relatively more today for shares of ANF than for GPS because they expect ANF to produce superior performance in the future.
- 2-11. Find online the annual 10-K report for Peet's Coffee and Tea (PEET) for 2008. Answer the following questions from the income statement:**
- a. **What were Peet's revenues for 2008? By what percentage did revenues grow from 2007?**
- b. **What were Peet's operating and net profit margin in 2008? How do they compare with its margins in 2007?**
- c. **What were Peet's diluted earnings per share in 2008? What number of shares is this EPS based on?**
- a. Increase in revenues = $\frac{284,822}{249,349} - 1 = 14.23\%$
- b. Operating margin (2007) = $\frac{11,606}{249,349} = 4.66\%$
- Operating margin (2008) = $\frac{17,001}{284,822} = 5.97\%$
- Net profit margin (2007) = $\frac{8,377}{249,349} = 3.36\%$
- Net profit margin (2008) = $\frac{11,165}{284,822} = 3.92\%$
- Both margins increased compared with the year before.
- c. The diluted earnings per share in 2008 was \$0.80. The number of shares used in this calculation of diluted EPS was 13.997 million.

-  **2-12.** Suppose that in 2008, Nokia launched an aggressive marketing campaign that boosts sales by 15%. However, their operating margin falls from 5.6% to just 4.5%. Suppose that they have no other income, interest expenses are unchanged, and taxes are the same percentage of pretax income as in 2007.

- What is Nokia's EBIT in 2008?
- What is Nokia's income in 2008?
- If Nokia's P/E ratio and number of shares outstanding remains unchanged, what is Nokia's share price in 2008?


a. Revenues in 2007 = $1.15 \times 51,058 = \text{€}58,717$ million

EBIT = $4.50\% \times 58,717 = \text{€}2,642$ million (there is no other income)

b. Net Income = EBIT – Interest Expenses – Taxes = $(2,642 - 239) \times (1 - 18\%) = \text{€}1,970$ million

c. Share price = (P/E Ratio in 2007) \times (EPS in 2008) = $14.6 \times \left(\frac{1,970}{3,890}\right) = \text{€}7.39$

- 2-13.** Suppose a firm's tax rate is 35%.

-  **a.** What effect would a \$10 million operating expense have on this year's earnings? What effect would it have on next year's earnings?
- b.** What effect would a \$10 million capital expense have on this year's earnings if the capital is depreciated at a rate of \$2 million per year for five years? What effect would it have on next year's earnings?

a. A \$10 million operating expense would be immediately expensed, increasing operating expenses by \$10 million. This would lead to a reduction in taxes of $35\% \times \$10 \text{ million} = \3.5 million . Thus, earnings would decline by $10 - 3.5 = \$6.5 \text{ million}$. There would be no effect on next year's earnings.

b. Capital expenses do not affect earnings directly. However, the depreciation of \$2 million would appear each year as an operating expense. With a reduction in taxes of $2 \times 35\% = \$0.7 \text{ million}$, earnings would be lower by $2 - 0.7 = \$1.3 \text{ million}$ for each of the next 5 years.

- 2-14.** You are analyzing the leverage of two firms and you note the following (all values in millions of dollars):

	Debt	Book Equity	Market Equity	Operating Income	Interest Expense
Firm A	500	300	400	100	50
Firm B	80	35	40	8	7

- What is the market debt-to-equity ratio of each firm?
- What is the book debt-to-equity ratio of each firm?
- What is the interest coverage ratio of each firm?
- Which firm may have more difficulty meeting its debt obligations? Explain.

a. **Firm A:** Market debt-equity ratio = $\frac{500}{400} = 1.25$

Firm B: Market debt-equity ratio = $\frac{80}{40} = 2.00$

b. **Firm A:** Book debt-equity ratio = $\frac{500}{300} = 1.67$

Firm B: Book debt-equity ratio = $\frac{80}{35} = 2.29$

c. **Firm A:** Interest coverage ratio = $\frac{100}{50} = 2.00$

Firm B: Interest coverage ratio = $\frac{8}{7} = 1.14$

- d. Firm B has a lower coverage ratio and will have slightly more difficulty meeting its debt obligations than Firm A.
- 2-15. Quisco Systems has 6.5 billion shares outstanding and a share price of \$18. Quisco is considering developing a new networking product in house at a cost of \$500 million. Alternatively, Quisco can acquire a firm that already has the technology for \$900 million worth (at the current price) of Quisco stock. Suppose that absent the expense of the new technology, Quisco will have EPS of \$0.80.**

- a. Suppose Quisco develops the product in house. What impact would the development cost have on Quisco's EPS? Assume all costs are incurred this year and are treated as an R&D expense, Quisco's tax rate is 35%, and the number of shares outstanding is unchanged.
- b. Suppose Quisco does not develop the product in house but instead acquires the technology. What effect would the acquisition have on Quisco's EPS this year? (Note that acquisition expenses do not appear directly on the income statement. Assume the firm was acquired at the start of the year and has no revenues or expenses of its own, so that the only effect on EPS is due to the change in the number of shares outstanding.)
- c. Which method of acquiring the technology has a smaller impact on earnings? Is this method cheaper? Explain.
- a. If Quisco develops the product in-house, its earnings would fall by $500 \times (1 - 35\%) = \325 million. With no change to the number of shares outstanding, its EPS would decrease by $\$0.05 = \frac{\$325}{6500}$ to \$0.75. (Assume the new product would not change this year's revenues.)
- b. If Quisco acquires the technology for \$900 million worth of its stock, it will issue $900 / 18 = 50$ million new shares. Since earnings without this transaction are $\$0.80 \times 6.5 \text{ billion} = \5.2 billion , its EPS with the purchase is $\frac{5.2}{6.55} = \$0.794$.
- c. Acquiring the technology would have a smaller impact on earnings. But this method is not cheaper. Developing it in-house is less costly and provides an immediate tax benefit. The earnings impact is not a good measure of the expense. In addition, note that because the acquisition permanently increases the number of shares outstanding, it will reduce Quisco's earnings per share in future years as well.

- 2-16. In January 2009, American Airlines (AMR) had a market capitalization of \$1.7 billion, debt of \$11.1 billion, and cash of \$4.6 billion. American Airlines had revenues of \$23.8 billion. British Airways (BABWF) had a market capitalization of \$2.2 billion, debt of \$4.7 billion, cash of \$2.6 billion, and revenues of \$13.1 billion.**

- a. Compare the market capitalization-to-revenue ratio (also called the price-to-sales ratio) for American Airlines and British Airways.
- b. Compare the enterprise value-to-revenue ratio for American Airlines and British Airways.
- c. Which of these comparisons is more meaningful? Explain.
- a. Market capitalization-to-revenue ratio

$$= \frac{1.7}{23.8} = 0.07 \text{ for American Airlines}$$

$$= \frac{2.2}{13.1} = 0.17 \text{ for British Airways}$$

- b. Enterprise value-to-revenue ratio

$$= \frac{(1.7 + 11.1 - 4.6)}{23.8} = 0.35 \text{ for American Airlines}$$

$$= \frac{(2.2 + 4.7 - 2.6)}{13.1} = 0.33 \text{ for British Airways}$$

- c. The market capitalization to revenue ratio cannot be meaningfully compared when the firms have different amounts of leverage, as market capitalization measures only the value of the firm's equity. The enterprise value to revenue ratio is therefore more useful when firm's leverage is quite different, as it is here.

2-17. Find online the annual 10-K for Peet's Coffee and Tea (PEET) for 2008.

- Compute Peet's net profit margin, total asset turnover, and equity multiplier.
- Use this data to compute Peet's ROE using the DuPont Identity.
- If Peet's managers wanted to increase its ROE by one percentage point, how much higher would their asset turnover need to be?
- If Peet's net profit margin fell by one percentage point, by how much would their asset turnover need to increase to maintain their ROE?

a. Net profit margin = $\frac{11,165}{284,822} = 3.92\%$

$$\text{Asset Turnover} = \frac{284,822}{176,352} = 1.62$$

$$\text{Asset Multiplier} = \frac{176,352}{143,907} = 1.23$$

b. Peet's ROE (DuPont) = $3.92\% \times 1.62 \times 1.23 = 7.81\%$

c. Peet's Revised ROE = $3.92\% \times 1.83 \times 1.23 = 8.82\%$.

Peet's would need to increase asset turnover to 1.83 times.

d. Peet's Maintained ROE = $2.92\% \times 2.18 \times 1.23 = 7.83\%$.

To maintain ROE at 7.81%, asset turnover would need to increase to 2.18 times (differences due to rounding).

2-18. Repeat the analysis of parts (a) and (b) in Problem 17 for Starbucks Coffee (SBUX). Use the DuPont Identity to understand the difference between the two firms' ROEs.

$$\text{Net profit margin} = \frac{315.5}{10,383.0} = 3.04\%$$

$$\text{Asset Turnover} = \frac{10,383}{5,672.6} = 1.83$$

$$\text{Asset Multiplier} = \frac{5,673.6}{2,490.9} = 2.28$$

Starbucks's ROE (DuPont) = 3.04% x 1.83% x 2.28% = 12.67%

The two firms' ROEs differ mainly because the firms have different asset multipliers, implying that the difference in the ROE might be due to leverage.

2-19. Consider a retailing firm with a net profit margin of 3.5%, a total asset turnover of 1.8, total assets of \$44 million, and a book value of equity of \$18 million.

- a. What is the firm's current ROE?
 - b. If the firm increased its net profit margin to 4%, what would be its ROE?
 - c. If, in addition, the firm increased its revenues by 20% (while maintaining this higher profit margin and without changing its assets or liabilities), what would be its ROE?
- a. $3.5 \times 1.8 \times 44/18 = 15.4\%$
 - b. $4 \times 1.8 \times 44/18 = 17.6\%$
 - c. $4 \times (1.8 \times 1.2) \times 44/18 = 21.1\%$

2-20. Find online the annual 10-K report for Peet's Coffee and Tea (PEET) for 2008. Answer the following questions from their cash flow statement:

- a. How much cash did Peet's generate from operating activities in 2008?
 - b. What was Peet's depreciation expense in 2008?
 - c. How much cash was invested in new property and equipment (net of any sales) in 2008?
 - d. How much did Peet's raise from the sale of shares of its stock (net of any purchases) in 2008?
- a. Net cash provided by operating activities was \$25.444 million in 2008.
 - b. Depreciation and amortization expenses were \$15.113 million in 2008.
 - c. Net cash used in new property and equipment was \$25.863 million in 2008.
 - d. Peet's raised \$3.138 million from sale of shares of its stock, while it spent \$20.627 million on the purchase of common stock. Net of purchases Peet's raised -\$17.489 million from the sale of its shares of stock (net of any purchases).

2-21. Can a firm with positive net income run out of cash? Explain.

A firm can have positive net income but still run out of cash. For example, to expand its current production, a profitable company may spend more on investment activities than it generates from operating activities and financing activities. Net cash flow for that period would be negative, although its net income is positive. It could also run out of cash if it spends a lot on financing activities, perhaps by paying off other maturing long-term debt, repurchasing shares, or paying dividends.

2-22. See the cash flow statement here for H. J. Heinz (HNZ) (in \$ thousands):

PERIOD ENDING	29-Oct-08	30-Jul-08	30-Apr-08	30-Jan-08
Net Income	276,710	228,964	194,062	218,532
Operating Activities, Cash Flows Provided By or Used In				
Depreciation	69,997	75,733	74,570	73,173
Adjustments to net income	14,359	(13,142)	48,826	(47,993)
Changes in accounts receivables	(38,869)	(53,218)	100,732	(84,711)
Changes in liabilities	82,816	(111,577)	201,725	39,949
Changes in inventories	(195,186)	(114,121)	85,028	57,681
Changes in other operating activities	17,675	(26,574)	12,692	(2,097)
Total Cash Flow from Operating Activities	227,502	(13,935)	717,635	254,534
Investing Activities, Cash Flows Provided By or Used In				
Capital expenditures	(82,584)	(41,634)	(100,109)	(69,170)
Investments	(5,465)	5,465	(93,153)	(48,330)
Other cash flows from investing activities	(108,903)	732	(58,069)	20,652
Total Cash Flows from Investing Activities	(196,952)	(35,437)	(251,331)	(96,848)
Financing Activities, Cash Flows Provided By or Used In				
Dividends paid	(131,483)	(131,333)	(119,452)	(121,404)
Sale purchase of stock	78,774	1,210	(76,807)	(79,288)
Net borrowings	515,709	114,766	(283,696)	64,885
Other cash flows from financing activities	(282)	2,000	(46,234)	39,763
Activities	462,718	(13,357)	(526,189)	(96,044)
Effect of exchange rate changes	(119,960)	(610)	32,807	6,890
Change in Cash and Cash Equivalents	\$373,308	(63,339)	(27,078)	\$68,532

- What were Heinz's cumulative earnings over these four quarters? What were its cumulative cash flows from operating activities?
- What fraction of the cumulative cash flows from operating activities was used for investment over the four quarters?
- What fraction of the cumulative cash flows from operating activities was used for financing activities over the four quarters?

- Heinz's cumulative earnings over these four quarters was \$871 million. Its cumulative cash flows from operating activities was \$1.19 billion
- Fraction of cash from operating activities used for investment over the 4 quarters:

	29-Oct-08	30-Jul-08	30-Apr-08	30-Jan-08	4 quarters
Operating Activities	227,502	-13,935	717,635	254,534	1,185,736
Investing Activities	-196,952	-35,437	-251,331	-96,848	-580,568
CFI/CFO	86.57%	-254.30%	35.02%	38.05%	48.96%

- Fraction of cash from operating activities used for financing over the 4 quarters:

	29-Oct-08	30-Jul-08	30-Apr-08	30-Jan-08	4 quarters
Operating Activities	227,502	-13,935	717,635	254,534	1,185,736
Financing Activities	462,718	-13,357	-526,189	-96,044	-1,050,885
CFF/CFO	-203.39%	-95.85%	79.32%	37.73%	14.58%

- 2-23. Suppose your firm receives a \$5 million order on the last day of the year. You fill the order with \$2 million worth of inventory. The customer picks up the entire order the same day and pays \$1 million upfront in cash; you also issue a bill for the customer to pay the remaining balance of \$4 million in 30 days. Suppose your firm's tax rate is 0% (i.e., ignore taxes). Determine the consequences of this transaction for each of the following:
- Revenues
 - Earnings
 - Receivables
 - Inventory
 - Cash
- Revenues: increase by \$5 million
 - Earnings: increase by \$3 million
 - Receivables: increase by \$4 million
 - Inventory: decrease by \$2 million
 - Cash: increase by \$3 million (earnings) – \$4 million (receivables) + \$2 million (inventory) = \$1 million (cash).
- 2-24. Nokela Industries purchases a \$40 million cyclo-converter. The cyclo-converter will be depreciated by \$10 million per year over four years, starting this year. Suppose Nokela's tax rate is 40%.
- What impact will the cost of the purchase have on earnings for each of the next four years?
 - What impact will the cost of the purchase have on the firm's cash flow for the next four years?
- Earnings for the next 4 years would have to deduct the depreciation expense. After taxes, this would lead to a decline of $10 \times (1 - 40\%) = \$6$ million each year for the next 4 years.
 - Cash flow for the next four years: less \$36 million ($-6 + 10 - 40$) this year, and add \$4 million ($-6 + 10$) for three following years.

2-25. The balance sheet information for Clorox Co. (CLX) in 2004–2005 is shown here, with data in \$ thousands:

Balance Sheet:	31-Mar-05	31-Dec-04	30-Sep-04	30-Jun-04
Assets				
Current Assets				
Cash and cash equivalents	293,000	300,000	255,000	232,000
Net receivables	401,000	362,000	385,000	460,000
Inventory	374,000	342,000	437,000	306,000
Other current assets	60,000	43,000	53,000	45,000
Total Current Assets	1,128,000	1,047,000	1,130,000	1,043,000
Long-term investments	128,000	97,000	—	200,000
Property, plant, and equipment	979,000	991,000	995,000	1,052,000
Goodwill	744,000	748,000	736,000	742,000
Other assets	777,000	827,000	911,000	797,000
Total Assets	3,756,000	3,710,000	3,772,000	3,834,000
Liabilities				
Current Liabilities				
Accounts payable	876,000	1,467,000	922,000	980,000
Short/current long-term debt	410,000	2,000	173,000	288,000
Other current liabilities	—	—	—	—
Total Current Liabilities	1,286,000	1,469,000	1,095,000	1,268,000
Long-term debt	2,381,000	2,124,000	474,000	475,000
Other liabilities	435,000	574,000	559,000	551,000
Total Liabilities	4,102,000	4,167,000	2,128,000	2,294,000
Total Stockholder Equity	–346,000	–457,000	1,644,000	1,540,000
Total Liabilities & Stockholder Equity	\$3,756,000	\$3,710,000	\$3,772,000	\$3,834,000

- a. What change in the book value of Clorox's equity took place at the end of 2004?
 - b. Is Clorox's market-to-book ratio meaningful? Is its book debt-equity ratio meaningful? Explain.
 - c. Find online Clorox's other financial statements from that time. What was the cause of the change to Clorox's book value of equity at the end of 2004?
 - d. Does Clorox's book value of equity in 2005 imply that the firm is unprofitable? Explain.
 - a. The book value of Clorox's equity decreased by \$2.101 billion compared with that at the end of previous quarter, and was negative.
 - b. Because the book value of equity is negative in this case, Clorox's market-to-book ratio and its book debt-equity ratio are not meaningful. Its market debt-equity ratio may be used in comparison.
 - c. Information from the statement of cash flows helped explain that the decrease of book value of equity resulted from an increase in debt that was used to repurchase \$2.110 billion worth of the firm's shares.
 - d. Negative book value of equity does not necessarily mean the firm is unprofitable. Loss in gross profit is only one possible cause. If a firm borrows to repurchase shares or invest in intangible assets (such as R&D), it can have a negative book value of equity.
- 2-26. Find online the annual 10-K report for Peet's Coffee and Tea (PEET) for 2008. Answer the following questions from the notes to their financial statements:**
- a. What was Peet's inventory of green coffee at the end of 2008?
 - b. What property does Peet's lease? What are the minimum lease payments due in 2009?
 - c. What was the fair value of all stock-based compensation Peet's granted to employees in 2008? How many stock options did Peet's have outstanding at the end of 2008?

- d. What fraction of Peet's 2008 sales came from specialty sales rather than its retail stores? What fraction came from coffee and tea products?**
- a. Peet's coffee carried \$17.732 million of green coffee beans in their inventory at the end of 2008.
 - b. Peet's leases its Emeryville, California, administrative offices and its retail stores and certain equipment under operating leases that expire from 2009 through 2019. The minimum lease payments due in 2009 are \$15.222 million.
 - c. The fair value of all stock-based compensation Peet's granted to its employees in 2008 is \$2.711 million. Peet's had 2,696,019 stock options outstanding at the end of 2008.
 - d. 34.1% of Peet's 2008 sales came from specialty sales rather than its retail stores. 53% of Peet's 2008 sales came from coffee and tea products.
- 2-27. Find online the annual 10-K report for Peet's Coffee and Tea (PEET) for 2008.**
- a. Which auditing firm certified these financial statements?**
 - b. Which officers of Peet's certified the financial statements?**
- a. Deloitte & Touche LLP certified Peet's financial statements.
 - b. The CEO, Patrick J. O'Dea, and the CFO, Thomas P. Cawley certified Peet's financial statements.
- 2-28. WorldCom reclassified \$3.85 billion of operating expenses as capital expenditures. Explain the effect this reclassification would have on WorldCom's cash flows. (Hint: Consider taxes.) WorldCom's actions were illegal and clearly designed to deceive investors. But if a firm could legitimately choose how to classify an expense for tax purposes, which choice is truly better for the firm's investors?**

By reclassifying \$3.85 billion operating expenses as capital expenditures, WorldCom increased its net income but lowered its cash flow for that period. If a firm could legitimately choose how to classify an expense, expensing as much as possible in a profitable period rather than capitalizing them will save more on taxes, which results in higher cash flows, and thus is better for the firm's investors.