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**APPLICATIONS OF FINANCIAL  
STATEMENT ANALYSIS**

1. Portsmouth Industries has stated that in the market for their medical imaging product, their strategy is to grow their market share in the premium segment by leveraging their research and development capabilities to produce machines with greater resolution for the most challenging cases of spinal degeneration. An analyst examining their financials for subsequent periods would most likely conclude that they are successfully pursuing this strategy if she finds:
  - (A) an increase in revenue and operating margins.
  - (B) an increase in gross margins greater than the increase in operating margins.
  - (C) increasing research and development expense and decreasing operating margins.
  
2. The most likely problem with using financial statement ratios to screen for stocks to include in a portfolio is that:
  - (A) specific industries are often over-represented.
  - (B) firms with undesirable characteristics will be included.
  - (C) firm characteristics are not identified well by financial statement measures.
  
3. Patch Grove Nursery uses the LIFO inventory accounting method. Maria Huff, president, wants to determine the financial statement impact of changing to the FIFO accounting method. Selected company information follows:
  - Year-end inventory: \$22,000
  - LIFO reserve: \$4,000
  - Change in LIFO reserve: \$1,000
  - LIFO cost of goods sold: \$18,000
  - After-tax income: \$2,000
  - Tax rate: 40%

Under FIFO, the nursery's ending inventory and after-tax profit for the year would have been:

FIFO ending inventory	FIFO after tax profit
(A) \$26,000	\$1,400
(B) \$18,000	\$2,600
(C) \$26,000	\$2,600

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4. To adjust for operating leases before calculating financial statement ratios, what value should an analyst add to a firm's liabilities?
- (A) Difference between present values of lease payments and the asset's future earnings.
- (B) Present value of future operating lease payments.
- (C) Sum of future operating lease obligations.
5. At the end of 2007, Decatur Corporation reported last-in, first-out (LIFO) inventory of \$20 million, cost of goods sold (COGS) of \$64 million, and inventory purchases of \$58 million. If the LIFO reserve was \$6 million at the end of 2006 and \$16 million at the end of 2007, compute first-in, first-out (FIFO) inventory at the end of 2007 and FIFO COGS for the year ended 2007.

FIFO Inventory	FIFO COGS
(A) \$36 million	\$74 million
(B) \$36 million	\$54 million
(C) \$26 million	\$54 million

6. In estimating pro forma cash flows for a company, analysts typically hold which of the following factors constant?
- (A) Noncash working capital as a percentage of sales.
- (B) Sales.
- (C) Repayments of debt.
7. Jane Epworth, CFA, is preparing pro forma financial statements for Gavin Industries, a mature U.S. manufacturing firm with three distinct geographic divisions in the Midwest, South and West. Epworth prepares estimates of sales for each of Gavin's divisions using economists' estimates of next-period GDP growth and sums the three estimates to forecast Gavin's sales. Epworth's approach to estimating Gavin's sales is:
- (A) inappropriate, because sales should be forecast on a firm-wide basis and are unlikely to be related to GDP growth.
- (B) appropriate.
- (C) inappropriate, because sales should be forecast on a firm-wide basis.
8. Sterling Company is a start-up technology firm that has been experiencing super-normal growth over the past two years. Selected common-size financial information follows:

	2007 Actual % of sales	2008 Forecast % of sales
sales	100%	100%
Cost of goods sold	60%	55%
Selling And administration expenses	25%	20%

Depreciation expense	10%	10%
Net income	5%	15%
Non-cash operating working capital <sup>a</sup>	20%	25%

Non-cash operating working capital = Receivables + Inventory – Payables

For the year ended 2007, Sterling reported sales of \$20 million. Sterling expects that sales will increase 50% in 2008. Ignoring income taxes, what is Sterling's forecast operating cash flow for the year ended 2008, and is this forecast likely to be as reliable as a forecast for a large, well diversified, firm operating in mature industries?

Operating cash flow	Reliable forecast
(A) \$4.0 million	No
(B) \$4.5 million	No
(C) \$4.0 million	Yes

9. For 2007, Morris Company had 73 days of inventory on hand. Morris would like to decrease its days of inventory on hand to 50. Morris' cost of goods sold for 2007 was \$100 million. Morris expects cost of goods sold to be \$124.1 million in 2008. Assuming a 365 day year, compute the impact on Morris' operating cash flow of the change in average inventory for 2008.

- (A) \$3.0 million source of cash.
- (B) \$6.3 million source of cash.
- (C) \$3.0 million use of cash.

10. An analyst screening potential equity investments to identify value stocks is most likely to exclude companies with:

- (A) low earnings growth rates.
- (B) high dividend payout ratios.
- (C) high price-to-earnings ratios.

11. A firm that uses higher estimates of assets' useful lives or salvage values relative to its peers will report:

- (A) lower depreciation expense and higher net income.
- (B) lower depreciation expense and lower net income.
- (C) higher depreciation expense and higher net income.

12. Baetica Company reported the following selected financial statement data for the year ended December 31, 20X7:

in millions		% of Sales
For the year ended December 31, 20X7:		
Sales	\$500	100%
Cost of goods sold	(300)	60%
Selling and administration expenses	(125)	25%

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Depreciation	(50)	10%
Net income	\$25	5%
As of December 31, 20X7		
Non-cash operating working capital <sup>a</sup>	\$100	20%
Cash balance	\$35	N/A

<sup>a</sup>Non-cash operating working capital = Receivables + Inventory - Payables

Baetica expects that sales will increase 20% in 20X8. In addition, Baetica expects to make fixed capital expenditures of \$75 million in 20X8. Ignoring taxes, calculate Baetica's expected cash balance, as of December 31, 2008, assuming all of the common-size percentages remain constant.

- (A) \$30 million.
- (B) \$40 million.
- (C) \$80 million.

13. When assessing credit risk, which of the following ratios would best measure a firm's tolerance for additional debt and a firm's operational efficiency?

**Ratio #1** - Retained cash flow (CFO - dividends) divided by total debt.

**Ratio #2** - Current assets divided by current liabilities.

**Ratio #3** - Earnings before interest, taxes, depreciation, and amortization divided by revenues.

Tolerance for leverage	Operational efficiency
(A) Ratio #2	Ratio #3
(B) Ratio #1	Ratio #3
(C) Ratio #3	Ratio #1

14. LIFO ending inventory can be adjusted to a FIFO basis by:

- (A) adding the LIFO reserve.
- (B) subtracting the change in the LIFO reserve.
- (C) adding the change in the LIFO reserve.

15. Falcon Financial Group is considering the purchase of Company A or Company B based on a low price-to-book investment strategy that also considers differences in solvency. Selected financial data for both firms, as of December 31, 20X7, follows:

in millions, except per-share data	Company A	Company B
Current assets	\$3,000	\$5,500
Fixed assets	\$5,700	\$5,500
Total debt	\$2,700	\$3,500

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Common equity	\$6,000	\$7,500
Outstanding shares	500	750
Market price per share	\$26.00	\$22.50

The firms' financial statement footnotes contain the following:

- Company A values its inventory using the first in, first out (FIFO) method.
- Company B's inventory is based on the last in, first out (LIFO) method. Had Company B used FIFO, its inventory would have been \$700 million higher.
- Company A leases its manufacturing plant. The remaining operating lease payments total \$1,600 million. Discounted at 10%, the present value of the remaining payments is \$1,000 million.
- Company B owns its manufacturing plant.

To make the firms financial ratios comparable, calculate the adjusted price-to-book ratios for Company A and Company B.

	Company A	Company B
(A)	\$1.63	\$2.06
(B)	\$2.17	\$2.81
(C)	\$2.17	\$2.06

16. A firm recognizes a goodwill impairment in its most recent financial statement, reducing goodwill from \$50 million to \$40 million. How should an analyst most appropriately adjust this financial statement for goodwill when calculating financial ratios?
- (A) Make no adjustments to assets or earnings because both reflect the impairment.  
 (B) Decrease assets and increase earnings.  
 (C) Decrease earnings but make no adjustment to assets.
17. A firm has a debt-to-equity ratio of 0.50 and debt equal to \$35 million. The firm acquires new equipment with a 3-year operating lease that has a present value of lease payments of \$12 million. The most appropriate analyst treatment of this operating lease will:
- (A) increase the debt-to-equity ratio to 0.57.  
 (B) increase the debt-to-equity ratio to 0.67.  
 (C) leave the debt-to-equity ratio unchanged at 0.5.
18. Among companies in a peer group for analysis, which of the following accounting differences would make the estimated useful life of property, plant, and equipment appear to be lower if an analyst does not adjust for them?
- (A) Higher estimated salvage values compared to those of peer companies.  
 (B) Accelerated depreciation, if peer companies use straight-line depreciation.  
 (C) U.S. GAAP cost model, if peer companies use the IFRS cost model.

19. Comet Corporation is a capital intensive, growing firm. Comet operates in an inflationary environment and its inventory quantities are stable. Which of the following accounting methods will cause Comet to report a lower price-to-book ratio, all else equal?

Inventory method	Depreciation method
(A) First-in, First-out	Accelerated
(B) Last-in, First-out	Accelerated
(C) First-in, First-out	Straight-line

20. National Scooter Company and Continental Chopper Company are motorcycle manufacturing companies. National's target market includes consumers that are switching to motorcycles because of the high cost of operating automobiles and they compete on price with other manufacturers. The average age of National's customers is 24 years.

Continental manufactures premium motorcycles and aftermarket accessories and competes on the basis of quality and innovative design. Continental is in the third year of a five-year project to develop a customized hybrid motorcycle. Which of the two firms would most likely report higher gross profit margin, and which firm would most likely report higher operating expense stated as a percentage of total cost?

Higher gross profit margin	Higher percentage operating expense
(A) National	Continental
(B) Continental	National
(C) Continental	Continental

21. An analyst makes the following two statements:

Statement #1 - From a lender's perspective, higher volatility of a borrower's profit margins is undesirable for floating-rate debt but not for fixed-rate debt.

Statement #2 - Product and geographic diversification should lower a borrower's credit risk. With respect to these statements:

- (A) both are correct.
- (B) both are incorrect.
- (C) only one is correct.

22. An analyst has decided to identify value stocks for investment by screening for companies with high book-to-market ratios and high dividend yields. A potential drawback of using these screens to find value stocks is that the firms selected may:

- (A) be concentrated in specific industries.
- (B) be those that have significantly underperformed the market.
- (C) have unsustainable dividend payments.

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23. Selected financial information gathered from Alpha Company and Omega Corporation follows:

	Alpha	Omega
Revenue	\$1,650,000	\$1,452,000
Earnings before interest, taxes, depreciation, and amortization	69,400	79,300
Quick assets	216,700	211,300
Average fixed assets	300,000	323,000
Current liabilities	361,000	404,400
Interest expense	44,000	58,100

Which of the following statements is most accurate?

- (A) Omega has lower interest coverage than Alpha.
  - (B) Alpha has a higher operating profit margin than Omega.
  - (C) Omega uses its fixed assets more efficiently than Alpha.
24. Other things equal, which of the following firm characteristics are most likely to be viewed favorably by credit rating agencies?
- (A) Focused product line in widespread geographic regions.
  - (B) Large size in a concentrated geographic region.
  - (C) Large size and diverse product lines.

