

# SMN224 - Tutorial assignment for topic 2

## *Topic 2: Financial ratios and analysis*

1. The financial ratio measured as earnings before interest and taxes, divided by interest expense is the:
  - A. cash coverage ratio.
  - B. debt-equity ratio.
  - C. times interest earned ratio.
  - D. gross margin.
  - E. total debt ratio.
2. The financial ratio measured as earnings before interest and taxes, plus depreciation, divided by interest expense, is the:
  - A. cash coverage ratio.
  - B. debt-equity ratio.
  - C. times interest earned ratio.
  - D. gross margin.
  - E. total debt ratio.
3. The market-to-book ratio is measured as:
  - A. total equity divided by total assets.
  - B. net income times market price per share of stock.
  - C. net income divided by market price per share of stock.
  - D. market price per share of stock divided by earnings per share.
  - E. market value of equity per share divided by book value of equity per share.
4. Which of the following will increase sustainable growth?
  - A. Buy back existing stock
  - B. Decrease debt
  - C. Increase profit margin
  - D. Increase asset requirement ratio
  - E. Increase dividend payout ratio
5. Which of the following are liquidity ratios?
  - (I) cash coverage ratio
  - (II) current ratio
  - (III) quick ratio
  - (IV) inventory turnover
  - A. II and III only
  - B. I and II only
  - C. II, III, and IV only
  - D. I, III, and IV only
  - E. I, II, III, and IV

6. A supplier, who requires payment within ten days, is most concerned with which one of the following ratios when granting credit?
- A. current
  - B. cash
  - C. debt-equity
  - D. quick
  - E. total debt
7. A firm has a total debt ratio of .47. This means that that firm has 47 pence in debt for every:
- A. £1 in equity.
  - B. £1 in total sales.
  - C. £1 in current assets.
  - D. £.53 in equity.
  - E. £.53 in total assets.
8. A banker considering loaning a firm money for ten years would most likely prefer the firm have a debt ratio of \_\_\_\_\_ and a times interest earned ratio of \_\_\_\_\_ .
- A. .75; .75
  - B. .50; 1.00
  - C. .45; 1.75
  - D. .40; 2.50
  - E. .35; 3.00
9. Marlowe Pastries generates five pence of net income for every £1 in sales. Thus, Marlowe has a \_\_\_\_\_ of 5%.
- A. return on assets
  - B. return on equity
  - C. profit margin
  - D. Du Pont measure
  - E. total asset turnover
10. If a firm produces a 10% return on assets and also a 10% return on equity, then the firm:
- A. has no debt of any kind.
  - B. is using its assets as efficiently as possible.
  - C. has no net working capital.
  - D. also has a current ratio of 10.
  - E. has an equity multiplier of 2.
11. If shareholders want to know how much profit a firm is making on their entire investment in the firm, the shareholders should look at the:
- A. profit margin.
  - B. return on assets.
  - C. return on equity.
  - D. equity multiplier.
  - E. earnings per share.

12. Spade Inc. has a price-earnings ratio of 16. Continental Op Ltd. has a price-earnings ratio of 19. Thus, you can state with certainty that one share of stock in Continental Op:

- A. has a higher market price than one share of stock in Spade.
- B. has a higher market price per dollar of earnings than does one share of Spade.
- C. sells at a lower price per share than one share of Spade.
- D. represents a larger percentage of firm ownership than does one share of Spade stock.
- E. earns a greater profit per share than does one share of Spade stock.

13. Which two of the following are most apt to cause a firm to have a higher price-earnings ratio?

- (I) slow industry outlook
- (II) high prospect of firm growth
- (III) very low current earnings
- (IV) investors with a low opinion of the firm

- A. I and II only
- B. II and III only
- C. II and IV only
- D. I and III only
- E. III and IV only

14. The three parts of the Du Pont identity can be generally described as:

- (I) operating efficiency, asset use efficiency and firm profitability.
- (II) financial leverage, operating efficiency and asset use efficiency.
- (III) the equity multiplier, the profit margin and the total asset turnover.
- (IV) the debt-equity ratio, the capital intensity ratio and the profit margin.

- A. I and II only
- B. II and III only
- C. I and IV only
- D. I and III only
- E. III and IV only

15. A firm has a debt-equity ratio of .40. What is the total debt ratio?

- A. .29
- B. .33
- C. .67
- D. 1.40
- E. 1.50

16. A firm has sales of £3,600, costs of £2,800, interest paid of £100, and depreciation of £400. The tax rate is 34%. What is the value of the cash coverage ratio?

- A. 2
- B. 4
- C. 6
- D. 8
- E. 10

17. Alice's Restaurant has sales of £4,500, total debt of £1,300, total equity of £2,400, and a profit margin of 5%. What is the return on assets?

- A. 5.00%
- B. 6.08%
- C. 7.39%
- D. 9.38%
- E. 17.31%

18. Bogarde and sons Ltd. has sales of £3,000, total assets of £2,500, and a profit margin of 5%. The firm has a total debt ratio of 40%. What is the return on equity?

- A. 6%
- B. 8%
- C. 10%
- D. 12%
- E. 15%

19. Losey & Pinter has £6,400 in sales. The profit margin is 4%. There are 6,400 shares of stock outstanding. The market price per share is £1.20. What is the price-earnings ratio?

- A. 13
- B. 14
- C. 21
- D. 30
- E. 48

20. A firm has 5,000 shares of stock outstanding, sales of £6,000, net income of £800, a price-earnings ratio of 10, and a book value per share of £0.50. What is the market-to-book ratio?

- A. 1.6
- B. 2.4
- C. 3.0
- D. 3.2
- E. 3.6

21. Baskerville's has a profit margin of 6%, a return on assets of 8%, and an equity multiplier of 1.4. What is the return on equity?

- A. 6.7%
- B. 8.4%
- C. 11.2%
- D. 14.6%
- E. 19.6%

22. Red Harvest, Ltd. has 90 million shares of stock outstanding. Its price-earnings ratio for 2006 is 12. Net income for 2006 is £481 million. What is the market price per share of stock?

- A. £57.12
- B. £59.94
- C. £62.82
- D. £64.13
- E. £65.03

23. Ophelia's Nails has an 11% return on assets and a 30% dividend payout ratio. What is the internal growth rate?

- A. 7.11%
- B. 7.70%
- C. 8.34%
- D. 8.46%
- E. 11.9

As a financial analyst you are given the following information about Tamburlaine Ltd.:

<b>Tamburlaine Ltd Income Statement</b>	
Sales	€1,000
Costs	<u>850</u>
Taxable income	€ 150
Taxes(34%)	<u>51</u>
Net income	<u>€ 99</u>
Dividends	€49
Addition to retained earnings	<u>50</u>

<b>Tamburlaine Ltd Balance sheet</b>				
<b>Assets</b>			<b>Liabilities and Owners' Equity</b>	
	€	%Sales		€ %Sales
Current assets			Current liabilities	
Cash	€180	18%	Trade payables	€ 200 20%
Trade receivables	€500	50%	Notes payable	<u>250</u> n/a
Inventory	€550	55%	Total	€ 450 n/a
Total	<u>€1,230</u>	<u>123%</u>	Non-current Liabilities	€ 850 n/a
Non-current assets			Owners' equity	
Plant and equipment	€2,000	200%	Ordinary shares	€830 n/a
			Retained earnings	<u>1,100</u> n/a
			Total	<u>€1,930</u> n/a
Total assets	<u>€3,230</u>	<u>323%</u>	Total liabilities and owners' equity	<u>€3,230</u> n/a

You know that there is a constant profit margin (i.e. costs are a fixed percentage of sales) and that the dividend payout ratio is constant.

24. Use the financial statement information above to calculate the external financial needed for a projected 20% increase in sales. Assume that the new funds will be raised on the debt market. What will be the new debt-to-equity ratio?