FIN 2601- Answers to Practice Questions

Financial Ratio Analysis

Question 1

Retained earnings would increase

AND

Assets will increase OR Debt will be lowered

Question 2

1. Shareholders

2. Creditors

3. Unions

4. Students

5. Job hunters

6. Financial analysts / bankers/ investors

There may be more users of the statements, this list is not exhaustive.

Question 3

i.

All other factors being the same, one would choose the firm with the higher return on equity:

Firm 1 ROE = 24,5%; Firm 2 ROE = 31,5%

Therefore, choose firm 2 based on the higher return.

ii.

Firm 1 Tie = 1 200 000 ÷ 150 000 = 8 ; Debt ratio = 1 000 000 ÷ 4 000 000 = 0,25

Firm 2 Tie = 1 800 000 ÷ 450 000 = 4 ; Debt ratio = 3 000 000 ÷ 6 000 000 = 0,5

Choose firm 1 as it has a lower level of risk based on its debt ratio and TIE ratio. In spite of the higher earnings offered by firm 2, it has a higher chance of not being able to serve its debt obligations than firm 1. This is because of the relationship between debt and leverage. More debt leads to a higher return on equity or the initial investment, but also to more risk because of debt financing.

Question 4

i.

In order to calculate the P/E ratio for the firm you first needed to calculate the firms EPS.

> EPS = Earnings available to ordinary shareholders ÷ Number of shares outstanding
>
> > = 500 000 ÷ 200 000 = R 2, 50
>
> P/E = (Market price per ordinary share) ÷ (EPS)
>
> > = R 55 ÷ 2, 50 = 22

ii.

In order to calculate the M/B ratio you first needed to find the book value per share.

> Book value per share = (Equity – preference share capital) ÷ Number of ordinary shares outstanding
>
> > = R 2000 000 ÷ 200 000 = R 10
>
> Market to book ratio = Market price per share ÷ Book value per share
>
> > = R 55 ÷ R 10 = 5.5

iii.

The market may place a higher value on the assets of the firm than the book value.

The future growth potential of the firm may entice investors to buy shares in the firm in order to reap later benefits of growth.

Question 5

i.

Current ratio = Current assets ÷ Current liabilities

= (50 000 + 300 000 + 2 400 000) / 800 000

= 2 750 000 ÷ 800 000 = 3, 44

Inventory turnover ratio = Cost of goods sold ÷ Inventory

= 3 200 000 ÷ 2 400 000 = 1.33

ii.

A decrease in inventory held would lead to a higher inventory turnover rate and a lower current ratio.

While holding onto more inventory may increase the perceived liquidity of some firms, it may also be difficult to actually sell the inventory when necessary. A inventory turnover of 1,33 translates to an average age of inventory of 271 days (360 day year) indicating that although current liabilities looks well covered, it may take long to convert inventory into cash sometimes.

A firm with a higher inventory turnover ratio may more readily convert inventory into cash although the current ratio would be lower.

iii.

ACP = Trade receivables / Average sales per day

= 300 000 ÷ 13 333,33 = 22, 5 days

APP = Trade payable ÷ Average purchases per day

= 800 000 ÷ 7 222,22 = 110, 77 days

iv.

Quick ratio = (Current assets – Inventory) ÷ Current liabilities

= 350 000 ÷ 800 000 = 0, 44

v.

The low inventory turnover ratio (and high average age of inventory ratio) indicates that the firm would not be able to convert its inventory into cash in a short time.

The quick ratio would indicate that there may not be enough other liquid assets to cover short term debts if there is a sudden drop in sales.

This could be a possible problem for the firm as it may struggle to service short term obligations if it struggles to convert inventory into cash.

Question 6

i.

Sales = Net profit ÷ Net profit margin

= R 2 118 020

ii.

Total Asset Turnover = Sales ÷ Total assets

2 118 020 ÷ 1,62 = R 1 307 419 , 75

iii.

FLM = Total assets ÷ Equity = 1 307 419,75 ÷ 608 102, 21 = 2, 15

ROE = FLM X ROA = 8,1 X 2,15 = 17, 42%