Financial Statements and Ratio Analysis

WORK PROBLEMS

The Income Statement

All numbers are annual (what happened over a year) and in millions. A company's revenues, or sales, are $500. All costs are $400. Interest expense is $10 and tax expense is $30. The number of shares is 50.

1. What are earnings before interest and taxes? (EBIT)?
2. What is the EBIT Margin (EBIT/Sales)?
3. Interest on debt in the US is tax deductible. What is taxable income? What is the tax rate? (taxes/taxable income).
4. Now determine Net Income and earnings per share, EPS.

The Balance Sheet

All numbers are in millions and at a point in time – the end of the year. A company has $200 in Property Plant and Equipment. It also has cash, accounts receivable, and inventory of $200. The company has long term debt of $150 and accounts payable of $50.

1. What is the total of all assets– long term and short term?

2. What is the total of all liabilities– long term and short term?

3. If you take assets and subtract liabilities, this must be equal to owner's equity. What is this number?

4. Determine the Assets to Equity Number.

5. Which is riskier A/E = 1 or A/E = 3? Explain.

ROA and ROE

All numbers are in millions. A company has sales of $500 and net income equal to $100. From the balance sheet, assets are $2,000 of which $1,000 is debt (liabilities) and the other $1,000 is equity.

1. What is the net profit margin (NI/Sales)?

2. What is the Asset Turnover ratio (Sales/Assets)?

3. What is the Return on Assets, ROA (NI/Assets)?

4. What is the Return on Equity, ROE (NI/E)?

5. Now take net profit margin times Asset Turnover. Confirm it is equal to ROA. Why does this have to be the case?

EPS Forecasts –

1. Use the EPS that you calculated from the Income Statement, $1.20. The average analyst expects EPS to grow this coming year at 8%. There are two analysts you are following. Analyst "Sell" expects EPS growth over this coming year will be 4%. Analyst "Buy" believes EPS growth will be 12%. Forecast EPS for each of the two analysts.

2. The stock price is valued at the average analyst's expectations– an average of everyone's beliefs. After the fact, instead of growing at the average expected rate of 8%, EPS actually grew at 5%. Is it most likely that the stock price will increase or decrease? Who was closer to being right– the average analyst, or Analyst Buy or Analyst Sell?