Principles of Accounting II ACCT-1105 Chapter 17 Financial Ratio Analysis

Ratio formulas are summarized on page 693 of your text. Not all ratios covered in this chapter are discussed, but those that your instructor felt important to point out are included.

Note that in ratio analysis a single number may not be enough to assess a company's position. Many times some point of reference is required. Recall the standards of comparison discussed on page 676 of your text. Furthermore, higher numbers are not always better.

## Liquidity and Efficiency

<u>Current ratio</u> – a measure of a company's ability to meet current debts. A current ratio of approximately 2 – 2.5 is a comfortable position. Less than 1.5 is risky. More than 3 may mean assets are not working hard enough.

Acid-test ratio (quick ratio) – a measure of a company's ability to meet current debt. Eliminates current assets that may require time to liquidate (convert to cash), such as inventory and supplies, and focuses on **quick assets** which include cash, short-term investments, and current receivables. An acid test ratio of 1.1 - 1.5 is a comfortable position. An acid test ratio less than 1.0 indicates that a company does not have enough current assets to cover current liabilities.

Accounts receivable turnover – a measure of the quality (likelihood of collection) and liquidity of receivables. Measures how frequently a company converts its receivables into cash. This ratio is most meaningful when net *credit* sales are used in the numerator; however, this amount is often difficult for external users to obtain. Therefore net sales is often used for the calculation. A low turnover suggests that management should consider stricter credit and collection policies. Industry comparisons and prior period comparisons will help in evaluating a company's position. The higher the ratio, the better.

<u>Inventory turnover</u> – measures how quickly a company sells its merchandise inventory. This ratio can be used in conjunction with the acid-test ratio to assess liquidity. Industry comparisons and prior period comparisons will help in evaluating a company's position. The higher the ratio, the better.

<u>Days' sales uncollected</u> (days sales in receivables) – measures how quickly accounts receivable are converted into cash. This ratio indicates how much time is likely to pass before a receivable is converted to cash. Again, this ratio is most meaningful when net *credit* sales are used in the numerator; however, this amount is often difficult for external users to obtain. Therefore net sales is often used for the calculation. Industry comparisons and prior period comparisons will help in evaluating a company's position. You may also compare the answer to this ratio against the company's credit terms. Lower ratios are generally better.

<u>Days' sales in inventory</u> (days stock on hand) – indicates how much inventory is available in terms of the number of days' sales. In other words, this ratio indicates the number of days a company can sell inventory if no new inventory is purchased. Can indicate a "buffer" against out-of-stock inventory and also indicates the liquidity of inventory. Depending upon your position, you may want a "buffer". On the other hand, too much inventory on hand may mean you are not using your assets as efficiently as possible.

## Solvency

Recall that companies finance assets with either **debt** or **equity**.

<u>Debt ratio</u> – measures the portion of assets contributed by creditors. A company financing a large portion of assets with debt has a high degree of *financial leverage*. The higher the leverage; the higher the risk that a company may be unable to meet its current obligations. On the other hand, some financial advisors recommend a high degree of leverage with the rationale that you are using "someone else's money" to finance your business.

<u>Equity ratio</u> – measures the portion of assets contributed by owners. This ratio is complimentary to the debt ratio. As the debt ratio decreases, the equity ratio increases and vice versa. A 100% equity ratio would indicate that the company uses no external financing (leverage). Depending on your position, this may or may not be a positive situation.

## **Profitability**

<u>Profit margin ratio</u> (return on sales) – measures a company's operating results. Shows the percent of profit in each dollar of sales. This ratio can be used intracompany, but is most meaningful when compared to competitors and industry. The higher the ratio, the better.

Return on total assets (return on investment) – measures how much income is generated from a company's assets. Competitor and industry analysis is helpful.

Return on common stockholders' equity – measures a company's ability to earn a profit for its investors (owners). Competitor and industry analysis is helpful as well as information on other alternative investments.

<u>Basic earnings per share</u> – measures the amount of income earned per share of a company's outstanding common stock. The weighted-average of outstanding shares is calculated by multiplying the outstanding shares by the time (expressed as a fraction of months out of 12 months) outstanding. Competitor and industry analysis is helpful. Generally, the higher the ratio, the better.

## Market Prospects

A stock's market value is partially determined by its expected future cash flows.

<u>Price-earnings ratio</u> – expresses price (market value) per share relative to earnings per share. Some analysts feel high PE ratios (higher than 20-25) indicate overpriced stock, while lower PE ratios (less than 5-8) may indicate underpriced stock.

<u>Dividend yield</u> – measures the cash return per common share. This is an important measurement if you are interested in receiving dividend income from your investment. Generally, the higher the ratio, the better.