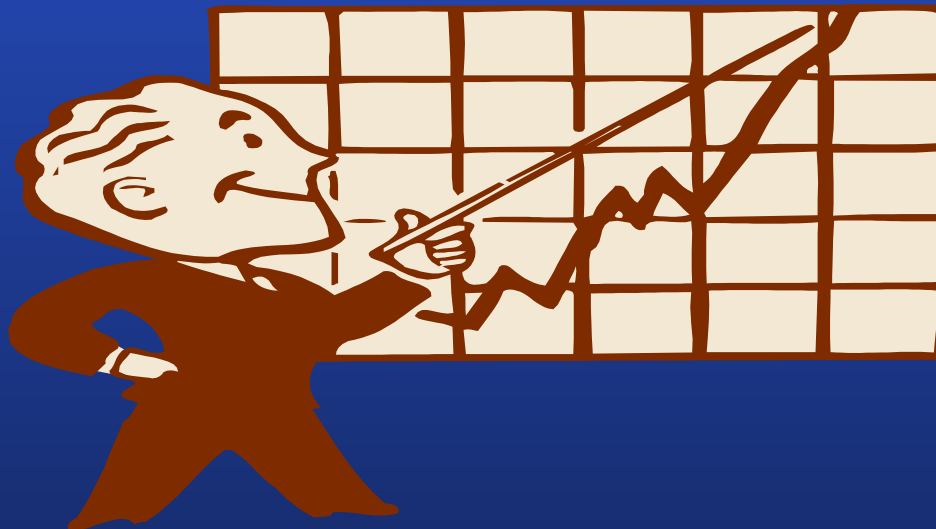


How to Read Financial Statements



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What is Financial Statements ?

- **Financial statements :**
- ✓ **a structured financial representation of the financial position of and the transactions undertaken by an enterprise.**
- ✓ **A complete set of financial statements includes:**
 - a) **Balance sheet - (Estimates the firm's worth on a given date; built on the accounting equation:
$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity} ;$$**
 - b) **Income statement – (Compares the firm's expenses against its revenue over a period of time to show its net profit (or loss):
$$\text{Net Profit} = \text{Sales Revenue} - \text{Expenses};$$**
 - c) **A statement showing changes in equity;**
 - d) **Cash flow statement-(Shows the change in the firm's working capital over a period of time by listing the *sources* of funds and the *uses* of these funds); and**
 - e) **Accounting policies and explanatory notes.**

Objectives of Financial Statements:

- ✓ To provide information about the financial position, performance and cash flows of an enterprise that is useful to a wide range of users in making economic decisions;
- ✓ To show the results of management's stewardship of the resources entrusted to it.

Reading a financial statement:

- The basic techniques to extract information from financial statements are:
 - ✓ Examination of comparative financial statements; and
 - ✓ Ratio analysis.
- Both techniques are based on:
 - ✓ Comparison of performance of period with another period; or
 - ✓ Comparison of performance of one business with that of similar business, in either current or past period.

Examination of comparative financial statements:

- **Comparative financial statements are side-by-side presentations of consecutive financial statements of the same type (balance sheets, income statements, and so forth).**
- **They permit period-to-period comparisons of important accounts and account groups.**
- **Thus they help statement users to identify the causes of changes in a business' future profitability and financial position.**

Ratio Analysis:

- Ratio is the relationship between two or more things.
- In financial analysis, a ratio is used as a benchmark for evaluating the financial position and performance of a firm.
- Ratio analysis is an examination of financial statements conducted by preparing and evaluating a series of ratios.
- Ratios (or financial ratios), like other financial analysis data, normally provide meaningful information only when compared with ratios for the same firm (using previous statements) or similar firms.

Ratio Analysis:

(Contd.)

- Liquidity Ratios - Tell whether or not the business will be able to meet its maturing obligations as they come due.

1. Current Ratio - Measures solvency by showing the firm's ability to pay current liabilities out of current assets.

✓ Calculation:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{\text{Tk.686,985}}{\text{Tk.367,850}} = 1.87:1$$

✓ Suppose Industry Average Current ratio = 1.50:1

✓ Interpretation:

Although the company's Current Ratio falls short of the rule of thumb of 2:1, its current ratio is above the industry average by a significant amount. The company should have no problem meeting short-term debts as they come due.

Ratio Analysis:

(Contd.)

2. Quick Ratio - Shows the extent to which the firm's most liquid assets cover its current liabilities.

✓ Calculation:

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}} = \frac{\text{Tk. 231,530}}{\text{Tk.367,850}} = .63:1$$

✓ Suppose Industry Average Quick Ratio = 0.50:1

✓ Interpretation:

Again, the company's Quick Ratio is below the rule of thumb of 1:1, but the company passes this test of liquidity when measured against industry standards. The company relies on selling inventory to satisfy short-term debt. If sales slump, the result could be liquidity problems for the company.

Ratio Analysis:

(Contd.)

- Leverage Ratios - Measure the financing provided by the firm's owners against that supplied by its creditors; a gauge of the depth of the company's debt.
- 1. Debt Ratio - Measures the percentage of total assets financed by creditors rather than owners.

✓ Calculation:

$$\text{Debt Ratio} = \frac{\text{Total Debt}}{\text{Total Assets}} = \frac{\text{Tk. 580,000}}{\text{Tk. 847,655}} = .68:1$$

✓ Suppose Industry Average Debt Ratio = 0.64:1

✓ Interpretation:

Creditors provide 68% of company's total assets. Very close to the industry average of 64%. Although the company does not appear to be overburdened with debt, it might have difficulty borrowing, especially from conservative lenders.

Ratio Analysis:

(Contd.)

2. Debt to Net Worth Ratio - Compares what the business “owes” to what it “owns.”

✓ Calculation:

$$\text{Debt to Net Worth Ratio} = \frac{\text{Total Debt}}{\text{Tangible Net Worth}} = \frac{\text{Tk. 580,000}}{\text{Tk. 264,155}} = 2.20:1$$

✓ Suppose Industry Average Debt to Net Worth Ratio = 1.90:1

✓ Interpretation:

The company owes Tk. 2.20 to creditors for every Tk. 1.00 the owner has invested in the business (compared to Tk. 1.90 to every Tk. 1.00 in equity for the typical business). Many lenders will see the Company as “borrowed up,” having reached its borrowing capacity. Creditor’s claims are more than twice those of the owners.

Ratio Analysis:

(Contd.)

3. Times Interest Earned - Measures the firm's ability to make the interest payments on its debt.

✓ Calculation:

$$\text{Times Interest Earned} = \frac{\text{EBIT}^*}{\text{Total Interest Expense}} = \frac{\text{Tk. 80,479}}{\text{Tk. 19,850}} = 4.05:1$$

*Earnings Before Interest and Taxes

✓ Suppose Industry Average Times Interest Earned = 4.0:1

✓ Interpretation:

The company's earnings are high enough to cover the interest payments on its debt by a factor of 4.05:1, slightly better than the typical firm in the industry. The company has a cushion (although a small one) in meeting its interest payments.

Ratio Analysis:

(Contd.)

- Operating Ratios - Evaluate the firm's overall performance and show how effectively it is putting its resources to work.
- 1. Average Inventory Turnover Ratio - Tells the average number of times the firm's inventory is "turned over" or sold out during the accounting period.

✓ **Calculation:**

$$\text{Average Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Inventory}^*} = \frac{\text{Tk.1,290.117}}{\text{Tk. 630,600}} = 2.05 \text{ times a year}$$

*Average Inventory = $\frac{\text{Beginning Inventory} + \text{Ending Inventory}}{2}$

- ✓ **Suppose Industry Average Inventory Turnover Ratio = 4.0 times per year**
- ✓ **Interpretation:**
Inventory is moving at a very slow pace.

Ratio Analysis:

(Contd.)

2. Average Collection Period Ratio - Tells the average number of days required to collect accounts receivable.

✓ Calculation:

Two Steps:

○ Receivables Turnover = $\frac{\text{Credit Sales}}{\text{Accounts Receivable}}$ = $\frac{\text{Tk. 1,309,589}}{\text{Tk. 179,225}}$ = 7.31 times Ratio a year

○ Average Collection Period Ratio = $\frac{\text{Days in Accounting Period}}{\text{Receivables Turnover Ratio}}$ = $\frac{365}{7.31}$ = 50.0 days

✓ Suppose Industry Average Collection Period Ratio = 19.30 days

✓ Interpretation:

The company collects the average account receivable after 50 days compared to the industry average of 19 days – more than 2.5 times longer.

Ratio Analysis:

(Contd.)

3. Average Payable Period Ratio - Tells the average number of days required to pay accounts payable.

✓ Calculation:

Two Steps:

o Payables Turnover = $\frac{\text{Purchases}}{\text{Accounts Payable}} = \frac{\text{Tk. 939,827}}{\text{Tk. 152,580}} = 6.16$ times a year

o Average Payable = $\frac{\text{Days in Accounting Period}}{\text{Payables Turnover Ratio}} = \frac{365}{6.16} = 59.3$ days

✓ Suppose Industry Average payable period ratio = 43 days

✓ Interpretation:

The company's payables are nearly 40 percent slower than those of the typical firm in the industry. Stretching payables too far could seriously damage the company's credit rating.

Ratio Analysis:

(Contd.)

4. Net Sales to Total Assets Ratio - Measures the firm's ability to generate sales given its asset base.

✓ Calculation:

$$\text{Net Sales to Total Assets} = \frac{\text{Net Sales}}{\text{Total Assets}} = \text{Tk. } \frac{1,870,841}{847,655} = 2.21:1$$

✓ Suppose Industry Average Net Sales to Total Assets Ratio = 2.7:1

✓ Interpretation:

The company is not generating enough sales, given the size of its asset base.

Ratio Analysis:

(Contd.)

5. Net Sales to Working Capital Ratio - Measures how many Taka in sales the company generates for every Taka of working capital.

✓ Calculation:

$$\frac{\text{Net Sales to Total Assets}}{\text{Working Capital}^*} = \frac{\text{Tk. } 1,870,841}{\text{Tk. } 847,655} = 5.86:1$$

*Working Capital = Current Assets - Current Liabilities

✓ Suppose Industry Average Net Sales to Working Capital Ratio = 10.8:1

✓ Interpretation:

The company generates just Tk. 5.86 in sales for every Tk. 1 of working capital, just over half of what the typical firm in the industry does. The message is clear: the company is not producing an adequate volume of sales.

Ratio Analysis:

(Contd.)

- **Profitability Ratios** - Measure how efficiently the firm is operating; offer information about the firm's "bottom line."

1. **Net Profit on Sales Ratio** - Measures the firm's profit per dollar of sales revenue.

- ✓ **Calculation:**

$$\text{Net Profit on Sales} = \frac{\text{Net Income}}{\text{Net Sales}} = \frac{\text{Tk. 60,629}}{\text{Tk. 1,870,841}} = 3.24\%$$

- ✓ **Suppose Industry Average Net profit on sale ratio = 7.6%**

- ✓ **Interpretation:**

After deducting all expenses, the company has just Tk. 3.24 of every sales of Tk. 100.00 left as profit – less than half the industry average.

Ratio Analysis:

(Contd.)

2. Net Profit to Equity Ratio - Measures the owner's rate of return on the investment in the business.

✓ **Calculation:**

$$\text{Net Profit to Equity} = \frac{\text{Net Income}}{\text{Owner's Equity}^*} = \frac{\text{Tk. } 60,629}{\text{Tk. } 267,655} = 22.65\%$$

* Also called net worth

✓ **Suppose Industry Average Net profit on equity ratio = 12.6%**

✓ **Interpretation:**

The company's return on owner's investment in the business is an impressive 22.65%, compared to an industry average of just 12.6%.

Ratio Analysis:

(Contd.)

■ Stockholder Ratios:

Measures the firm's performance and stock returns relevant to investors.

1. **Earning-per-Share Ratio (EPS)**- Measures the income available to common stockholders on a per-share basis.

✓ Calculation:

$$\text{EPS} = \frac{\text{Net Income after preferred dividend}}{\text{Average number of Common shares}} = \text{Tk. } \frac{50,000}{10,000} = \text{Tk. } 5.00$$

✓ Suppose Industry Average EPS = Tk. 10.00

✓ Interpretation:

The company earns Tk. 5.00 only for each share – just half the industry average.

Ratio Analysis:

(Contd.)

2. **Dividend Yield Ratio-** Measures the rate at which dividends provide a return to stockholders.

✓ **Calculation:**

$$\text{Dividend Yield} = \frac{\text{Dividend per Share}}{\text{Market Price per Share}} = \frac{\text{Tk. } 10}{\text{Tk. } 200} = 5\%$$

✓ **Suppose Industry Average Dividend Yield Ratio = 10%**

✓ **Interpretation:**

The company's dividend provides 5% return to shareholders— just half the industry average.

Ratio Analysis:

(Contd.)

3. **Price-Earning Ratio-** Price-Earning Ratio is the measurement of the future income growth and risk prospects relative to its current income.

✓ **Calculation:**

$$\text{PE Ratio} = \frac{\text{Market Price per Share}}{\text{Earning per Share}} = \frac{\text{Tk. } 200}{\text{Tk. } 10} = 20$$

✓ **Suppose Industry Average PE Ratio = 10**

✓ **Interpretation:**

The pay back period of the investment in the company's share, in terms of dividend income, is very long -just double than the industry average, which indicates that investment in the share is risky.

Thank You