FINANCIAL ACCOUNTING
WEEK 11 (LECTURE ELEVEN)

MEASUREMENT OF FINANCIAL HEALTH OF ORGANISATIONS

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Learning Objectives:

Upon completion of this lesson, you will be able to:

- Explain the meaning of Financial Statement Analysis
- Explain the meaning of financial health of an entity.
- Measure Financial health of entities using:
  - Liquidity Ratios or Short-term Solvency Ratios
  - Management Ratios or Activity Ratios or Turnover Ratios
  - Profitability Ratios
  - Financial Structure or Capitalization or Gearing Ratios
  - Market Test ratios/ Valuation ratios

FINANCIAL STATEMENT ANALYSIS

Organisations in the process of working towards meeting their goals and objectives, they come across many obstacles and whether they are internal or external, they affect the organization either positively or negatively and the Financial Statements such as the Income Statement and the statement of Financial Position may not help in detecting such problems or even telling whether the entity is indeed a going concern or not.

Financial Statement Analysis is the process of evaluating businesses, projects, budgets and other finance related transactions to help and determine the entities performance and soundness in their activities. From the previous lessons, the income statement and the Statement of Financial Position alone cannot tell whether an entity is financially healthy or not. This is because an entity could be reading profits in 'Books' but in real sense, the entity has no cash. This is so because

entities report Profit on accrual basis and hence, an entity can report profit yet it could be in financial troubles unable to pay suppliers, workers among other obligations.

Financial Statement Analysis looks deep into an entity and 'read in between the lines' of an entity's financials and give a more coherent status than what the income statement and the Statement of Financial Position. This is done by evaluating an entity's financials from mainly the income statement and the statement of financial Position through use of ratios highlighted above. This lesson will shed light into this topic and help learners understand the art of evaluating entities from basic aspects to the complex aspects of a business. Financial statement analysis of identifies the strength and weaknesses of the firm by establishing and analyzing the relationships between various items in the financial statement. This relationship is expressed by the use of ratios.

BUSINESS SURVIVAL

There are two key factors for business survival i.e. Profitability and Solvency

- **Profitability** is important if the business is to generate revenue (income) in excess of the expenses incurred in operating that business.
- The s**olvency** of a business is important because it looks at the ability of the business in meeting its financial obligations.

Financial Statement Analysis will help business owners and other interested people to analyse the data in financial statements to provide them with better information about such key factors for decision making and ultimate business survival.

IMPORTANCE OF FINANCIAL STATEMENT ANALYSIS

i. To use financial statements to evaluate an organisation's:
    a. Financial performance
    b. Financial position
    c. Prediction of future performance

ii. To have a means of comparative analysis across time in terms of:
    a. Intracompany basis (within the company itself)
    b. Intercompany basis (between companies)
    c. Industry Averages (against that particular industry's averages)

iii. To apply analytical tools and techniques to financial statements to obtain useful information to aid decision making.

iv. To provide information about the organisation's:

- ✔ Past performance
- ✔ Present condition
- ✔ Future performance

v. To assess the organisation's:

- ✔ Earnings in terms of power, persistence, quality and growth
- ✔ Solvency

EFFECTIVE FINANCIAL STATEMENT ANALYSIS (FSA)

(a) To perform an effective financial statement analysis, you need to be aware of the organisation's:

- Business strategy
- Objectives
- Annual report and other documents like articles about the organisation in newspapers and business reviews.

These are called individual organisational factors.

(b) And they require that you:

- Understand the nature of the industry in which the organisation works. This is an industry factor.
- Understand that the overall state of the economy may also have an impact on the performance of the organisation.
- Financial statement analysis is more than just "crunching numbers"; it involves obtaining a broader picture of the organisation in order to evaluate appropriately how that organisation is performing.

Standards of Comparison

These are the modes of interpreting financial ratios:

a) Rule-of-Thumb Indicators: Financial analysts and Bankers use Rule-of-Thumb or Benchmark financial ratios.

b) Past performance of the company

c) Industry Standards

Classification of Financial Ratios

Financial ratios are broadly classified into five categories:

a) Liquidity ratios
b) Turnover/asset management ratios
c) Gearing/capital structure ratios
d) Profitability ratios
e) Valuation/stock market ratios

Important Definitions

a) Net working capital= Current assets – Current Liabilities
b) Equity/net worth = Ordinary share capital +retained earnings + other reserves
c) Operating profits =Profits/earnings before interest and tax (EBIT)
d) Net assets/capital employed = Total assets –Current liabilities (Equity +Long term liabilities)
e) Earnings attributable to ordinary shareholders = Profit after tax and preference dividends
f) Net profits =Profit after tax
g) Fixed return/charge capital = Long term liabilities with a fixed/constant rate of return (debentures (long term debt) + preference share capital.

Sources of Information for FSA

When carrying out Financial Statement Analysis (FSA) for entities, a lot of information is required to achieve this. The sources of this information include:

✔ Company Reports which include;
- Directors Report,
- Financial Statements
- Schedules and notes to the Financial Statements and
- Auditors Reports

✔ Stock Exchanges
✔ Business Periodicals and
✔ Information Services

Tools of Financial Statement Analysis

The commonly used tools for FSA are:

i. Financial Ratio Analysis
ii. Comparative Financial Statements Analysis;
   - ✔ Horizontal Analysis or Trend Analysis
   - ✔ Vertical/Common size Analysis/ Component percentages

In this course, the concentration is on the Ratio Analysis, Horizontal Analysis and Vertical Analysis to measure financial health of organizations.

FINANCIAL RATIO ANALYSIS

Financial ratio analysis involves calculating and analysing ratios that use data from one, two or more financial statements.

Ratio analysis also expresses relationships between different financial statements.

Financial Ratios can be classified into 5 main categories:

- ✔ Profitability Ratios
- ✔ Liquidity or Short-Term Solvency ratios
- ✔ Asset Management or Activity Ratios
- ✔ Financial Structure or Capitalizations Ratios
- ✔ Market Test Ratios

3 elements of the profitability analysis:

- ✔ Analysing on sales and trading margin-focus on gross profit
- ✔ Analysing on the control of expenses-focus on net profit
- ✔ Assessing the return on assets and return on equity

LIQUIDITY OR SHORT-TERM RATIOS

- ✔ The liquidity ratios are used to test the short-term solvency or liquidity position of the business.
- ✔ It enables to know whether short term liabilities can be paid out of short-term assets.
- ✔ It indicates whether a firm has adequate working capital to carry out routine business activity.
- ✔ It is a valuable aid to management in checking the efficiency with which working capital is being employed.

✔ It is also of importance to shareholders and long-term creditors in determining to some extent the prospects of dividend and interest payment.

Important Ratios in Test of Liquidity

a) Current ratio.
b) Quick ratio.
c) Absolute liquid ratio.
d) Cash Ratio

Current ratio

It is the most widely used of all analytical devices based on the balance sheet. It establishes relationship between total current assets and current liabilities.

$$\textbf{Current ratio} = \frac{\textbf{Current assets}}{\textbf{Current liabilities}}$$

This ratio indicates the number of times current liabilities are covered by current assets e.g. a ratio of 1.5 means that current assets are 1.5 times of current liabilities.

Ideal ratio: 2:1

Quick ratio or Acid Test Ratio

$$\textbf{Quick/acid test ratio} = \frac{\textbf{Current assets –stock}}{\textbf{Current liabilities}}$$

This ratio indicates the ability of a firm to meet its current liabilities from the **more** liquid current assets. Stock is excluded for two reasons

1. It is valued at historical cost which may be different from the market value.
2. It may be difficulty to convert stock into cash quickly in order to meet current liabilities.

Usually, a high acid test ratio is an indication that the firm is liquid and has ability to meet its current or liquid liabilities in time and on the other hand a low quick ratio represents that the firm's liquidity position is not good.

$$\textbf{Cash ratio} = \frac{\textbf{Cash in hand \& bank + short term marketable securities}}{\textbf{Current liabilities}}$$

The ratio indicates the ability to meet current liabilities from the most liquid current assets of the firm. Short term marketable securities refer to short term investment of idle cash where such investments can be converted into cash quickly e.g. investment in treasury bills and commercial paper.

ASSET MANAGEMENT OR TURNOVER/ACTIVITY RATIOS

These ratios indicate the efficiency with which the firm is utilizing the resources/assets at its disposal to generate sales revenue. The ratios are associated with the level of sales of the firm. They include:

Stock/inventory turnover = Cost of sales / Cost of Goods sold
Average / closing stock

Where average stock =

(opening stock + closing stock)
2

This ratio indicates the frequency/ number of times the stock was turned over into sales/ the number of times in a year did the 'buy- sell' process occur. The higher the stock turnover ratio, the better the firm. A low stock turnover may be caused by the following:

- Charging higher prices than competitors where the customers will then shift their patronage to the competitors
- Maintenance of high levels of stock which may be absolute/slow moving.
- Where the firm has failed to sell on credit to stimulate sales while competitors are selling on credit.

Stock holding period = 365 days
Stock turnover ratio

Or

= 365 days x average/closing stock

Cost of sales

The ratio indicates the number of days stock was held in the ware house before it was sold. A long holding period indicates slow stock turnover.

Debtors/Accounts receivable turnover = Annual credit sales
Average/closing debtors

The ratio indicates the number of times or the frequency with which customers buy goods/services on credit per annum. The higher the debtors' turnover, the better the firm and the shorter the credit period.

Debtors' collection period = 365 days
Debtors' turnover

or

365 days x average/closing debtors
Annual credit sales

This ratio indicates the length of time in days customers took to pay their dues to the firm. It shows the credit period granted to customers by the firm f. The shorter the period, the higher the debtors' turnover and vice versa.

Creditors turnover = Credit purchases per annum
Average/closing creditors

This ratio indicates the number of times the firm went to buy goods on credit. It's the frequency of credit purchases by the firm. The shorter the credit period granted by suppliers, the higher the creditors turnover and vice versa.

Creditors' payment period = 365 days
Creditors' turnover ratio

Or

= 365 days x Average/closing creditors
Creditors' purchases per annum

This ratio indicates the number of days the firm took before paying suppliers for goods bought on credit. It is the credit period granted by suppliers.

Fixed assets turnover ratio = Sales per annum
Total fixed assets

This ratio indicates the efficiency with which the firm utilized its fixed assets to generate sales revenue e.g. a ratio of 1.6 means that shs.1 of fixed assets was utilized to generate shs.1.60 of sales.

Total assets turnover ratio = Sales per annum
Total assets

This ratio indicates the efficiency with which the firm utilized its total assets to generate sales revenue.

N/B Very low fixed and total assets turnover ratios can be attributed to the following factors.

1. The firm is underutilizing is assets and it is not operating at full capacity.
2. The firm may be having some assets which are non –operational/idle

GEARING/CAPITAL STRUCTURE RATIOS

They are also called leverage ratios. They indicate the extent to which the firm has used externally borrowed fixed return/charge capital (preference share capital and long term debts) to finance the assets of the firm and subsequently increase/gear up/ level up profitability of the firm. They include: -

Debt ratio = Total Liabilities (current + long term liabilities)
Total assets

This ratio indicates the extent to which total assets of a firm are finalized with external liabilities. A ratio of 0.35 means 35% of total assets have been financed with external borrowing while the remaining 65% is financed by owners' equity

Debt/Equity Ratio = Fixed charge capital (long term debt capital)
Equity/Net worth

This ratio indicates the contribution by the owners in relation to contribution by lenders e.g. a ratio of 0.45 means that for every shs.1 of equity there is shs.0.45 of fixed return capital/long term debt capital.

Times Interest Earned Ratio (TIER) = Operating profit (PBIT)
Interest charges on debt

This ratio indicates the number of times interest charges can be paid from operating profits. It also shows the no. of times the interest charges are covered by operating profits. It is one of the

most important ratios for lenders and the higher the ratio, the better the firm. A low TIER can be attributed to: -

- Low operating profits due to high operating expenses
- High interest charges due to high level of gearing associated with high level of long-term debt capital leading to payment of high interest charges.

PROFITABILITY RATIOS

These rations indicate the ability of a firm to generate returns from investment and from sales. Profitability in this expressed in relation to:-

RETURNS FROM SALES

Profitability in relation to sales indicates the ability of a firm to control cost of sales, operating financing expense in form of interest charges. These ratios include;

Gross profit margin = Gross Profit x 100
Sales

This ratio indicates the ability of the firm to control the cost sales expenses e.g. a ratio of 40 % means that for every shs.100 of sales, shs.40 remained as gross while shs.60 cost of sales.

Operating profit margin = Operating Profit (PBIT) X100
Sales

This ratio indicates the ability of a firm to control cost of sales and operating expenses e.g. a ratio of 28% means that for every shs.100 of sales, only shs.28 was operating profit while shs.72 was taken up by cost of sales and operating expense.

Net profit margin= Net Profit X 100
Sales

This ratio indicated the ability of the firm to control cost of sales, operating and financing expenses in the form of interest charges. It also called return on sales or after-tax return on sales e.g. a ratio of 28% means that for every shs.100 of sales only shs.12 remained as net profits. Therefore shs.88 was taken up cost of sales, operating, financing expenses and taxation.

RETURN FROM INVESTMENTS

These ratios determine the percentage yield from investment. They include:

Return on Equity (ROE) / Return on Net worth (RONW)=Net profit x 100
Equity Net worth

This ratio indicates the percentage return on equity of shareholders e.g. a ratio of 10% means that for every shs.100 of equity invested by shareholders, shs.10 net profit was generated.

Return on Investment (ROI) / Return on Total Assets (ROTA) = Net profit x 100
Total Assets

This ratio indicates the percentage return on total capital invested total assets

Return on Capital Employed (ROCE) / Return on Net Assets (RONA) =

Net profit x 100
Net assets/capital employed

This ratio indicates the percentage return in form of net profit on capital investment in the assets.

SECURITY /STOCK MARKET OR VALUATION RATIOS OR GROWTH RATIOS

These ratios are indicators of the value of the firm and the growth of this value in future. The are most important for investors because they also indicate the percentage return on shares. They are computed from earning attributable to ordinary shareholders, dividends paid and the market value of the firm. They include;

Earnings per share (EPS) = Earning to ordinary shares
No of shares issued and outstanding (paid)

It indicates the earning power of a firm and also the earnings or returns attributable to every share held by an investor.

Earning Yield (EY) = Earnings Per Share (EPS) x 100
Market price per share (MPS)

The market price per share is the indicator of the price /investment made per share. Earnings are the expected returns per share. Therefore earnings yield indicates the percentage return for every shilling invested in the firm.

Dividends per share (DPS) = Dividends paid
Number of shares issued outstanding paid

This ratio indicates the dividends returns for every share held by an investor. If the firm pays all its earning attributable to ordinary shareholders then earnings per is equal to dividend per share (EPS=DPS).

Dividends yield (DY) = Dividend per share (DPS) x100
Market price per share (MPS)

This ratio indicates the percentage yield in form of cash dividend foe every shilling invested in the firm. If a firm has 100% dividend yield ratio i.e. all earnings attributable to ordinary shareholders are paid out as dividends, then dividend yield is equal to earnings yield (DY=EY)

Dividend cover = EPS or Earning to ordinary shareholder
DPS Dividends paid

This ratio indicates the number of times dividends can be paid from undistributed earnings. The higher the dividends per share the lower the dividend cover and vice versa.

Dividend payout = DPS X 100
EPS

It indicates the proportion of earning to ordinary shareholders which was paid out as dividend e.g. a ratio of means 60% means 60% of earnings to ordinary shareholders was distributed as dividends while 40% was retained earnings. Therefore retention ration is 100% less dividends payout ratio

Price to earnings (P/E) ratio = MPS or Market value of ordinary shares
EPS Earnings to ordinary shareholder

It is the most important ratio for an investor. The market price per share (MPS) indicates the investment per share in the firm while earnings per share (EPS) indicate the earnings / cash flows generated by the investment. Price to earnings ratios thus indicates the number of years an investor would take to recoup his investment in the firm given the current market price per share and earnings per share. It simply indicated the payback period of an investment and the shorter it is the better the firm.

Book value per share (BVPS) = Net worth / Equity
No. of ordinary shares fully issued & paid.

This is also called liquidating ratio and indicates liquidation dividends attributable to each shareholder assuming the firm was liquidated, all assets sold at their book values and realized

cash amount distributed in the following priority: -

- ✔ Debenture holders
- ✔ Current liabilities
- ✔ Preference shareholders
- ✔ Ordinary shareholders

This ratio indicates what every shareholder receives after paying off the first three stakeholders.

Market value to book value per share (MV-BVPS) = MPS

BVPS

This ratio indicates the amount of goodwill attached to the firm, should the firm be sold as a going concern. If the ratio is greater than one it means that market value is greater than the book value of assets indicating a positive goodwill. However, the ratio is less then indicating a negative goodwill.

Illustration one:
ABC Limited had the following information in their records in the year 2022. Use it to answer the questions that follow;

Profit and loss account	**for the year ended 31.12.2022**	
	$	$
Sales		850,000
Less: Cost of Sales		
Opening stock	99,500	
Purchases	559,500	
	659,000	
Less: Closing stocks	(149,000)	(510,000)
Gross profit		340,000
Less expenses		
Selling and distribution	30,000	
Depreciation	10,000	
Administration expenses	135,000	(175,000)
Earnings before interest & taxes		165,000
Interest		(15,000)
Earnings before tax		150,000
Tax @ 50%		75,000
Less ordinary dividend (0.75 per share)		75,000
Retained profit for the year		(15,000)

		60,000		

ABC
Balance Sheet as at 31 December 2022

Non-Current Assets		**$.**	**Issued share capital**	**$.**
Land and Buildings		250,000	(20000 share of Sh, 10)	200000
Plant & Machinery		80,000	Reserve	90000
		330,000	Retained profit	60000
Current Assets			Long term	100000
Inventory		149,000	**Current liabilities.**	130000
Debtors	75,000			
Less provision	(4,000)	71,000		
Cash		30,000		
		580,000		**580,000**

Additional Note:
Cash Purchases amounted to $ 14,250.

Required:
Compute the relevant ratios for ABC Limited:

LIQUIDITY RATIOS

Current Ratio

= Current Assets
Current Liabilities

Current Ratio = 250,000 = 1.92: 1
130,000

The higher the ratio then the more liquid the firm is.

Quick Ratio/Acid Test Ratio

= Current Assets - Inventories
Current Liabilities

= 250,000 – 149,000 = 101,000
130,000 130,000

= 0.78: 1

This is a more refined ratio that tries to recognize the fact that stakes may not be easily converted into cash. The higher the ratio, the better for the firm as it means an improved liquidity position.

Cash Ratio

= Cash + Marketable Securities
Current Liabilities

= 30,000 = 0.23: 1
130,000

= 0.23: 1

This ratio assumes that stakes may not be converted into cash easily and the debtors may not pay up their accounts on time. The higher the ratio, the better for the firm as the Liquidity position is improved.

Net Working Capital Ratio.

= Net Working Capital
Net Assets

Net Working Capital =CA –CL = 250,000-130,000=120,000

Net Working Capital = 120,000 = 0.27: 1
450,000

The higher the ratio the better for the firm and therefore the improved Liquidity position.

GEARING RATIOS

These measure the financial risk of a firm (the probability that a firm will not be able to pay up its debts). The more debts a business has (non owner supplied funds) the higher the financial risk.

Debt Ratio= Total Liabilities
Total Assets

This ratio measures the proportion of total assets financed by non-owner supplied funds. The higher the ratio, the higher the financial risk.

= 230,000 = 0.4

580,000

40% is supplied by non-owners

Debt Equity Ratio

= Total Liabilities
Net worth (shareholders' funds)

= 230,000 = 0.66
350,000

This ratio measures how much has been financed by the non-owner supplied funds in relation to the amount financed by the owners i.e. for every shilling invested in the business by the owners how much has been financed by the non-owner supplied funds. For ABC Ltd, for every 1 shilling contributed in the business by the owner, the creditor has put in 67 cents.

Long term debt ratio

= Non-Current Liabilities = 100,000 = 0.2
Net Assets 450,000

This measures the proportion of the total net assets financed by the non-owner supplied funds. The higher the ratio, the higher the financial risk.

ACTIVITY RATIOS

Stock Turnover = Cost of Sales
Average Stocks

Where:

Average Stocks = Opening Stock + Closing Stock
2

= 510,000 = 4.1 times
124,250

This is the number of times stock has been converted to sales in a financial year. The higher the ratio the more active the firm is. An alternative formula is

$$= \frac{\text{Sales}}{\text{Closing Stock}}$$

Debtors Turnover = Credit Sales / Average Stock

Average Debtors = (Opening debtors + Closing debtors) / 2

Assume the opening debtors was 89,000 and all sales are on credit

Debtor Turnover = 850,000 / 80,000 = 10.625

The higher the ratio, the more active the firm has been (we had debtors over 10 times to generate the sales)

Note:

Average Collection Period = 360 / Debtors turnover = 34 days

This measure the number of days it takes for debtors to pay up. The lesser the period, the better for the firm as it improves the liquidity position.

Creditors Turnover = Credit Purchases / Average Creditors

= 545,250 / 130,000 = 4.2 times

The ratio tries to measure how many times we have creditors during a financial period. The lesser the ratio the better.

Non-Current Assets Turnover (Fixed Assets Turnover)

= **Sales / Average Fixed Assets**

A.F.A = (340,000 + 330,000) / 2 = 670,000 / 2 = 335,000

= 850,000 / 335,000 = 2.54 times

The ratio measures the efficiency with which the firm is using its fixed/ Non-Current Assets to generate sales. The higher the ratio the more active the firm.

Total Assets Turnover

= Sales
Total Assets

= 850,000 = 1,046 times
580,000

Measures the efficiency with which the firm is using its total assets to generate sales.

PROFITABILITY RATIOS

Profitability in Relation to Sales

Gross Profit Margin

=Gross Profit = 165,000 = 19%

Sales 850,000
The higher the margin, the more profitable the firm is.

Net Profit Margin

= Net Profit after tax = 75,000 = 9%
Sales 850,000

The higher the margin, the more profitable the firm is. Margin affected by:

Operating expenses for the period.

Return On Investment

= Net Profit after tax
Total Assets

= 75,000 = 13%
580,000
Shows how efficient the firm has been in using the total assets to generate returns in the business.
Return On Capital Employed

= Net Profit after tax
Net Assets

= 750,000 = 17%
450,000

How efficient the firm has been in using the net assets to generate returns in the business.

Return On Equity

= Earnings after tax
Net worth

= 75,000 = 21%
850,000
Efficiency of the firm in using the owner's capital to generate returns. The higher the ratio the more efficient is the firm.

EQUITY RATIOS

Earnings Per Share (EPS)

EPS = Earnings attributable to ordinary shareholders
No. of ordinary shares outstanding.

= 75,000
20,000

= 3.75

This is the return expected by an investor for every share held in the firm.

Earnings Yield

= Earnings Per Share
Market price per share

Assume that the market price for the ABC'S shares is Sh20/Share.

= 3.75 * 100% = 19%
20

This is the return amount expected by a shareholder for every shilling invested in the business.

Dividend Per Share (DPS)

= Total Dividend (ordinary shareholders)
Ordinary shares outstanding.

= 15,000
20,000

= 0.75 cts per share

This is the amount expected by an investor for every share held in the firm. The higher the amounts, the better for the firm.

TREND AND INDUSTRIAL ANALYSIS.

Trend analysis involves comparison of the firm's performance in a given year with other past years e.g. comparison of liquidity ratios for the past five years. Industrial analysis involves comparison of the firm's performance in a given year with that of average industrial performance

or norm. When carrying out trend and industrial analysis, the following four critical issues must be noted:

- If a given category of ratios given identify the ratios in this category e.g. when requested to comment on the liquidity position, identify liquidity ratios. If the ratios are given identify the category of the ratios e.g. when requested to comment on times interest earned ration identify it a gearing ratio.
- State the observation made e.g. in case of industrial analysis, state whether the ratio is higher or lower than the norm, and in case of trend analysis state whether the ratios are declining or improving.
- State the reason for the observation made.
- State the implications of the observations made e.g. increasing gearing ratios, implies more use of external capital (borrowing) to finance assets of the firm.

VERTICAL ANALYSIS AND COMMON SIZE STATEMENTS:

Vertical analysis is the procedure of preparing and presenting common size statements. Common size statement is one that shows the items appearing on it in percentage form as well as in dollar form. Each item is stated as a percentage of some total of which that item is a part. Key financial changes and trends can be highlighted by the use of common size statements.

Common size statements are particularly useful when comparing data from different companies. For example, in one year, Wendy's net income was about $110 million, whereas Patrick was $1,427 million. This comparison is somewhat misleading because of the dramatically different size of the two companies. To put this in better perspective, the net income figures can be expressed as a percentage of the sales revenues of each company, Since Wendy's sales revenue were $1,746 million and Patrick were $9,794 million, Wendy's net income as a percentage of sales was about 6.3% and Patrick was about 14.6%.

BENEFITS OF VERTICAL ANALYSIS

Vertical analysis is most commonly used within a financial statement for a single reporting period, e.g., quarterly. It is done so that accountants can ascertain the relative proportions of the

balances of each account.

Vertical analysis is exceptionally useful while charting a regression analysis or a ratio trend analysis. It enables the accountant to see relative changes in company accounts over a given period of time. The analysis is especially convenient to do so on a comparative basis.

ADVANTAGES OF VERTICAL ANALYSIS

1. Vertical analysis simplifies the correlation between single items on a balance sheet and the bottom line, as they are expressed in a percentage. A company's management can use the percentages to set goals and threshold limits. For example, management may consider shutting down a particular unit if profit per unit falls below a particular threshold percentage.
2. It is a relatively more potent tool than horizontal analysis, which shows the corresponding changes in the finances of a particular unit/ account/department over a certain period of time.
3. It is also useful in comparing a company's financial statement to the average trends in the industry. It would be ineffective to use actual dollar amounts while analyzing entire industries. Common-size percentages solve such a problem and facilitate industry comparison.
4. It is also highly effective while comparing two or more companies operating in the same industry but with different sizes. It is often tricky to compare the balance sheet of a $1 billion company to one that is valued at $500,000. Vertical analysis enables accountants to create common-size measures, which enable them to compare and contrast amounts of different magnitudes in a very efficient manner.

HORIZONTAL ANALYSIS

Horizontal analysis is used in financial statement analysis to compare historical data, such as ratios, or line items, over a number of accounting periods. Horizontal analysis can either use absolute comparisons or percentage comparisons, where the numbers in each succeeding period are expressed as a percentage of the amount in the baseline year, with the baseline amount being listed as 100%. This is also known as base-year analysis.

Importance of Horizontal Analysis

1. Horizontal analysis is used in the review of a company's financial statements over multiple periods.
2. It is usually depicted as percentage growth over the same line item in the base year.
3. Horizontal analysis allows financial statement users to easily spot trends and growth patterns.
4. Horizontal analysis shows a company's growth and financial position versus competitors.
5. Horizontal analysis can be manipulated to make the current period look better if specific historical periods of poor performance are chosen as a comparison.

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