

FINANCIAL ANALYSIS



Financial Analysis

- Financial Statement
- Definition of Financial Analysis
- The Importance of Financial Analysis
- Tools of Financial Analysis
- The Limitations of Financial Analysis
- Summary of Financial Analysis



Financial Statement

- A financial statement is a report that shows the financial activities and performance of a business. It is used by lenders and investors to check a business's financial health and earnings potential.



The Importance of Financial Statement

- Financial statements provide a snapshot of a corporation's financial health, giving insight into its performance, operations, and cash flow. Financial statements are essential since they provide information about a company's revenue, expenses, profitability, and debt.



The Components of The Financial Statements

- There are 5 types of financial statements as :
- Balance sheet.
- Income statement. Arguably the most important.
- Cash flow statement.
- Statement of change in equity.
- Note to Financial Statements.



The Balance Sheet

- Provides a snapshot of the firm's financial position at a specific point in time
- Report a company's accounting book value
- Presenting its assets , liabilities and stockholders' equity. In its simplest form is represented by the following balance sheet "equation" :

Total assets =total debt + total shareholder equity

- Type of Items in the balance sheet are :
 - Types of Assets (Current Assets , Long-term Assets and Other Long-term Assets)
 - Types of Financing : Debt and equity

Liabilities /debt (Current Liability and Long-term Liability)

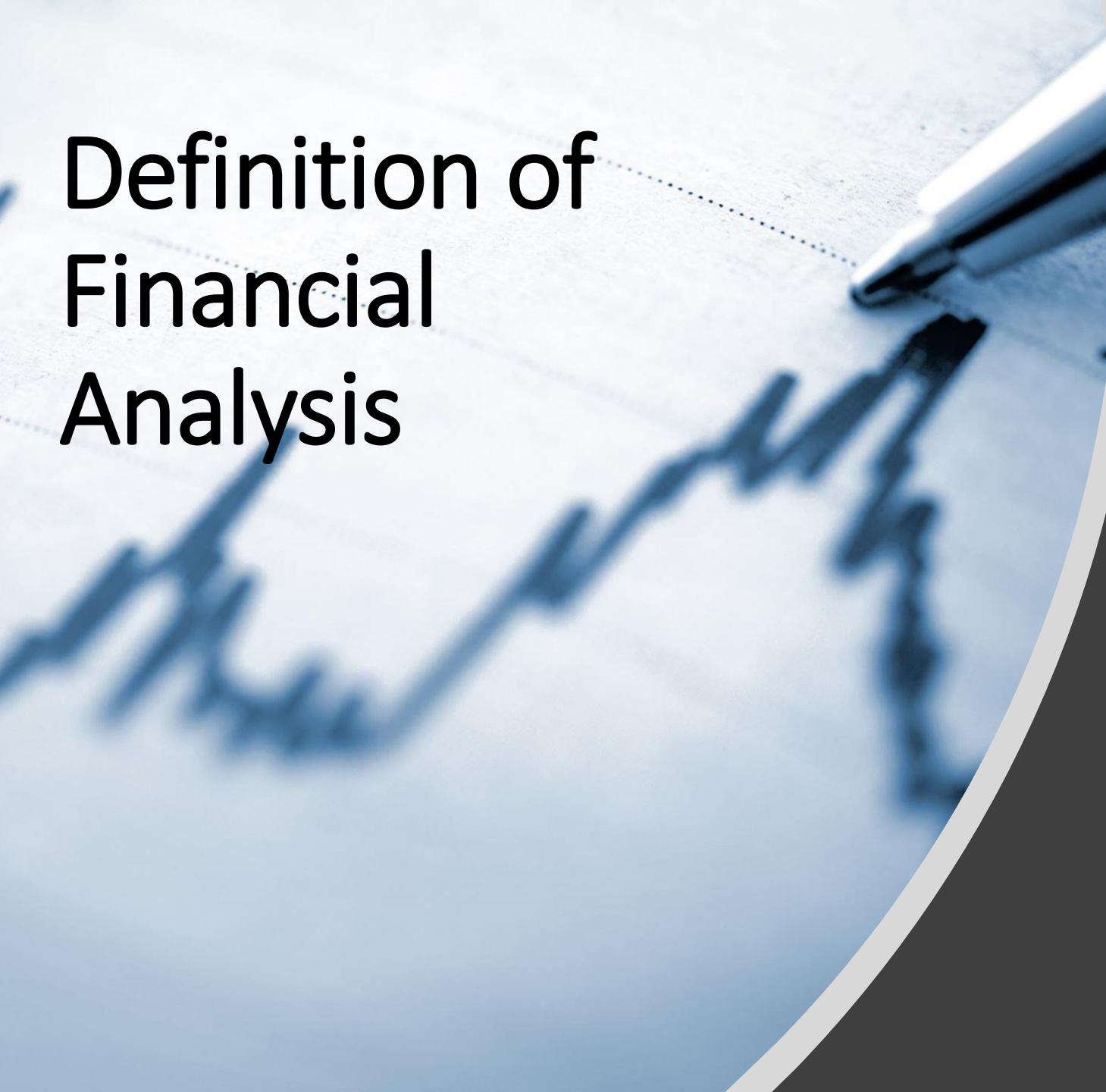


Sample of Financial Statement (Balance sheet and Income statement)

| The KOKO Company | | Balance Sheet | | units : 1000 | |
|--------------------------------|-------------------|---|--------------------|--------------|--|
| As December 31, 202X | | | | | |
| <u>Assets</u> | | Liabilities (Debts) and Equity | | | |
| <u>Current Assets</u> | | <u>Current Liabilities</u> | | | |
| Cash | \$10.00 | Account payables | \$110.00 | | |
| Marketable securities | \$20.00 | Accrued expenses | \$5.00 | | |
| Account receivable | \$80.00 | Short term loan | \$50.00 | | |
| Inventory | \$60.00 | Total Current Liabilities | <u>\$165.00</u> | | |
| Prepaid expenses | \$5.00 | Long-term Liabilities | | | |
| Total Current Assets | <u>\$175.00</u> | Long term loan | \$900.00 | | |
| <u>Long-term Assets</u> | | | bond and debenture | \$350.00 | |
| Property | \$4,000.00 | Total Long-term Liabilities | <u>\$1,250.00</u> | | |
| Building | \$2,000.00 | Stockholders' Equity | | | |
| Machin | \$600.00 | Common stock (par value) | \$5,000.00 | | |
| Equipment | \$200.00 | Retained earning | \$560.00 | | |
| Total Long-term Assets | <u>\$6,800.00</u> | Total Equity | <u>\$5,560.00</u> | | |
| Total Assets | <u>\$6,975.00</u> | Total Liabilities (Debts) and Equity | <u>\$6,975.00</u> | | |

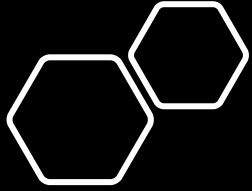
Sample of
Financial
Statement
(Balance
sheet and
Income
statement)

| The KOKO Company | | |
|--|------------|-------------------|
| Income Statement | | |
| For 1 year ended as December 31, 202X | | |
| | | units : 1000 |
| Revenues | | |
| Net sales | \$1,743.75 | |
| Return on investment | \$5.00 | |
| Total Revenues | | \$1,748.75 |
| Cost of goods sold | | \$1,049.25 |
| Profit margin | | \$699.50 |
| Operating Expenses | | |
| Sales Expenses | | |
| Advertising expenses | \$8.72 | |
| Commission | \$17.44 | |
| Administration expenses | | |
| Salary and wages | \$87.19 | |
| Utility expenses | \$20.93 | |
| Transportation expenses | \$60.00 | |
| Cost of materials used | \$12.00 | |
| Total operating Expenses | | \$206.27 |
| Operating Profit before tax and finance costs | | \$493.23 |
| Financial Cost (interest) | | \$36.00 |
| Profit before Tax | | \$457.23 |
| Corporated tax | | \$91.45 |
| Net profit | | \$365.79 |
| Earning per share | | \$0.73 |
| Net profit per share | | 7.32% |

The background of the slide features a close-up, shallow depth-of-field photograph of a silver pen writing on a document. A blue line graph is visible on the page, with the pen's tip positioned over one of the peaks. The overall color palette is light blue and white, with a dark grey curved overlay on the right side.

Definition of Financial Analysis

The process of critical evaluation of the financial information contained in the financial statements in order to understand and make decisions regarding the operations of the firm to study of relationship among various financial facts and figures as given in a set of financial statements, and the interpretation thereof to gain an insight into the profitability and operational efficiency of the firm to assess its financial health and future prospects.



The Importance of Financial Analysis

- If you want to expand your business, you should know the strengths and weaknesses of the business. The analysis help us see critical relationships that might not otherwise be readily identifiable.

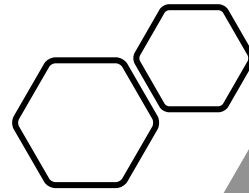


The Purpose of Financial Analysis

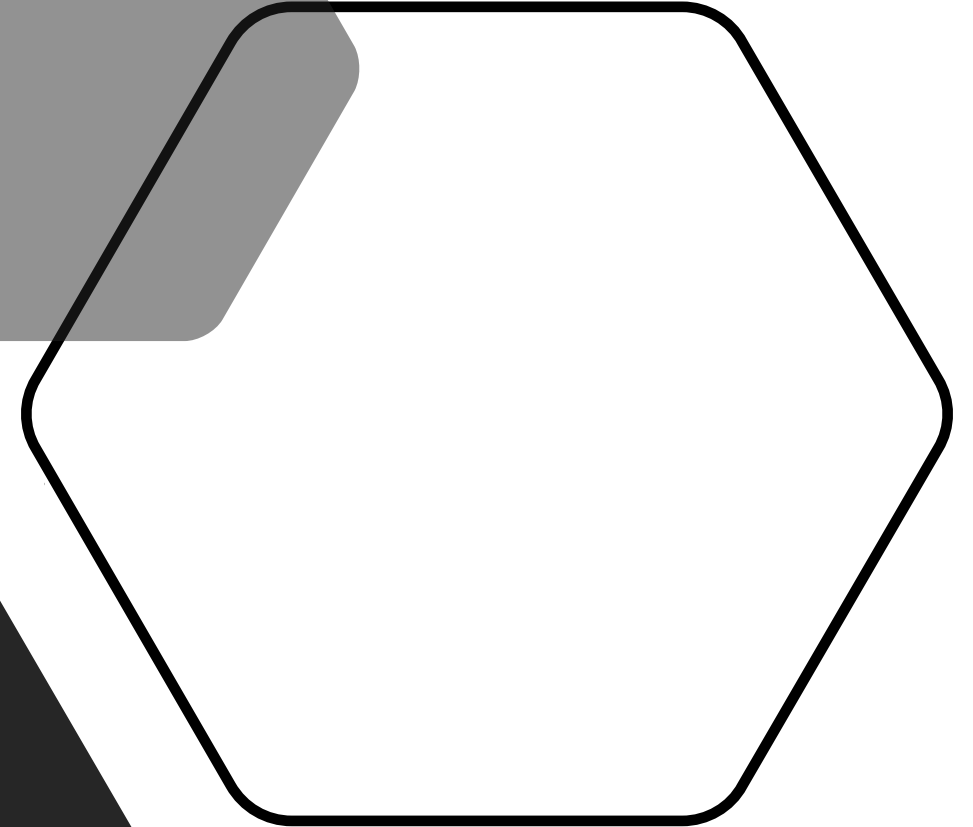
- To understand the company's financial condition
- To determine its creditworthiness, profitability and ability to generate wealth
- To provide a more in-depth look at how well it operates internally
- To help optimize its management, which could ultimately lead to greater profits and increased financial security
- To help optimizing management for greater profits and more financial security



Tools of Financial Analysis



- There are 2 Categorize in financial analysis
 - Percentage Analysis
 - Ratios Analysis
- Comparison:
 - Times Series Analysis
 - Cross Section Analysis





Percentage Analysis

- 3 type of percentage for financial analysis :
 - Horizontal Analysis
 - Vertical Analysis
 - Trend Analysis

Horizontal Analysis

- To comparative financial statement for a different periods of time.

$$\bullet \frac{\text{Increase or Decrease}}{\text{Old Year}} \times 100$$

| Change in Revenues | old year | new year | Change Increase or Decrease | Percentage Change |
|----------------------|------------|------------|--------------------------------|----------------------|
| | Y2021 | Y2022 | (Y2022 -Y2021) | (Y2022 -Y2021) |
| Net sales | \$1,743.75 | \$1,950.00 | \$206.25 | 11.83% |
| Return on investment | \$5.00 | \$5.80 | \$0.80 | 16.00% |
| Total Revenues | \$1,748.75 | \$1,955.80 | \$207.05 | 11.84% |



Vertical Analysis

- To show the structure of funding and investment in balance sheet .

- $$\frac{\text{Amount in each item in *Balance Sheet*}}{\text{Total Assets}} \times 100$$

- To show the structure of performance

- $$\frac{\text{Amount in each item in *Income Statement*}}{\text{Total Revenues}} \times 100$$

Sample of Vertical Analysis of Balance Sheet)

| The KOKO Company Balance Sheet As December 31, 202X | | Percentage of Assets |
|---|----------------|-------------------------|
| units : 1000 | | |
| <u>Assets</u> | | |
| Current Assets | | |
| Cash | \$10 | 0.14% |
| Marketable securities | \$20 | 0.29% |
| Account receivable | \$80 | 1.15% |
| Inventory | \$60 | 0.86% |
| Prepaid expenses | \$5 | 0.07% |
| Total Current Assets | \$175 | 2.51% |
| Long-term Assets | | |
| Property | \$4,000 | 57.35% |
| Building | \$2,000 | 28.67% |
| Machin | \$600 | 8.60% |
| Equipment | \$200 | 2.87% |
| Total Long-term Assets | \$6,800 | 97.49% |
| Total Assets | \$6,975 | 100.00% |

| | | Percentage of Assets |
|---|----------------|-------------------------|
| units : 1000 | | |
| <u>Liabilities (Debts) and Equity</u> | | |
| Current Liabilities | | |
| Account payables | \$110 | 1.58% |
| Accrued expenses | \$5 | 0.07% |
| Short term loan | \$50 | 0.72% |
| Total Current Liabilities | \$165 | 2.37% |
| Long-term Liabilities | | |
| Long term loan | \$900 | 12.90% |
| bond and debenture | \$350 | 5.02% |
| Total Long-term Liabilities | \$1,250 | 17.92% |
| Stockholders' Equity | | |
| Common stock (par value) | \$5,000 | 71.68% |
| Retained earning | \$560 | 8.03% |
| Total Equity | \$5,560 | 79.71% |
| Total Liabilities (Debts) and Equity | \$6,975 | 100.00% |

Sample of Vertical Analysis of Income statement)

| The KOKO Company | | Income Statement | |
|---|----------------|---|---------------|
| For 1 year ended as December 31, 202X | | Percentage of Net Revenues from operations | |
| | | units : 1000 | |
| Revenues | | | |
| Net sales | \$1,743.75 | | 99.71% |
| Return on investment | <u>\$5.00</u> | | <u>0.29%</u> |
| Total Revenues | | \$1,748.75 | 100.00% |
| Cost of goods sold | | <u>\$1,049.25</u> | <u>60.00%</u> |
| Profit margin | | \$699.50 | 40.00% |
| Operating Expenses | | | |
| Sales Expenses | | | |
| Advertising expenses | \$8.72 | | 0.50% |
| Commission | \$17.44 | | 1.00% |
| Administration expenses | | | |
| Salary and wages | \$87.19 | | 4.99% |
| Utility expenses | \$20.93 | | 1.20% |
| Transportation expenses | \$60.00 | | 3.43% |
| Cost of materials used | <u>\$12.00</u> | | <u>0.69%</u> |
| Total operating Expenses | | <u>\$206.27</u> | <u>11.80%</u> |
| Operating Profit before tax and finance costs | | \$493.23 | 28.20% |
| Financial Cost (interest) | | <u>\$36.00</u> | <u>2.06%</u> |
| Profit before Tax | | \$457.23 | 26.15% |
| Corporated tax | | <u>\$91.45</u> | <u>5.23%</u> |
| Net profit | | <u>\$365.79</u> | <u>20.92%</u> |
| Earning per share | | <u>\$0.73</u> | <u>0.04%</u> |
| Net profit per share | | 7.32% | 0.00% |



Ratios Analysis

- 4 type of ratios analysis :
 - Liquidity Ratios
 - Debt Ratios
 - Profitability Ratios
 - Coverage Ratios



Liquidity Ratios

- Evaluated the ability to pay off short-term debt.
- 4 formula :
 - Current ratio
 - Acid-test Ratio
 - Liquidity of Receivables
 - Liquidity of Inventory

Liquidity Ratios Formular

Current ratio

- $$\frac{\text{current assets}}{\text{current liabilities}}$$

Acid-test ratio

- $$\frac{\text{current assets less Inventories and prepaid}}{\text{current liabilities}}$$

Liquidity of Receivables

- $$\frac{\text{Days in Year} \times \text{Receivable}}{\text{Annual Credit Sales}}$$

or

Receivable Turnover Ratios

- $$\frac{\text{Annual Credit Sales}}{\text{Receivables}}$$

Average Collection Period Ratio

- $$\frac{\text{Days in Year}}{\text{Receivables Turnover}}$$

Liquidity Ratios Formular

Liquidity of Inventory

- $$\frac{\text{Days in Year} \times \text{Average Inventory}}{\text{Cost of Goods Sold}}$$

or

Inventory Turnover Ratios

- $$\frac{\text{Cost of Goods Sold}}{\text{Average Inventory}}$$

Average Days Sales Ratio

- $$\frac{\text{Days in Year}}{\text{Inventory Turnover}}$$



Debt Ratios

- Measures the proportion of debt in the capital structure.
- 2 formula :
 - Debt to Networth Ratio
 - Capitalization Ratio

Debt Ratio Formular

Debt to Networth Ratio

- $$\frac{Debt}{Networth}$$

Capitalization Rati

- $$\frac{Long-Term Debt}{Capitalization}$$



Profitability Ratios

- measure earning potential
- 2 type of relation formula
 - Profitability in Relation To Sales
 - Profitability in Relation To Investment

Profitability Ratios Formular

Profitability in Relation To Sales

Gross Profit Margin

- $$\frac{\text{Gross Profit}}{\text{Sales}}$$

Net Profit Margin

- $$\frac{\text{Net Profit After Tax}}{\text{Sales}}$$

Profitability in Relation To Investment

Rate of Return on Common Stock Equity

- $$\frac{\text{Earning for Common-Stockholder}}{\text{Common-Stockholder}}$$

Return on Assets Ratio

- $$\frac{\text{Net Profit After Taxes}}{\text{Total Tangible Assets}}$$

Turnover Ratio

- $$\frac{\text{Sales}}{\text{Total Tangible Assets}}$$



Coverage Ratios

- measure ability to pay financial charges
- Compare financial expenses.
- Formular

Interest Coverage Ratio

- $$\frac{\text{Earning Before Interest and Taxed}}{\text{Interest}}$$



The Limitations of Financial Analysis

- Finance statement are prepared following GAAP
- Finacial statement are only monetary information
- Financial analysis does not consider price level changes.



Summary of Financial Analysis

- Financial analysis tools can help a wide group of individuals for a variety of purposes. However, in this study we will focus on how the firm itself uses financial analysis tools to evaluate its performance.