Chapter 2

Financial Analysis as an Approach to Decision-Making in Financial Institutions

2/3- Financial Ratios:

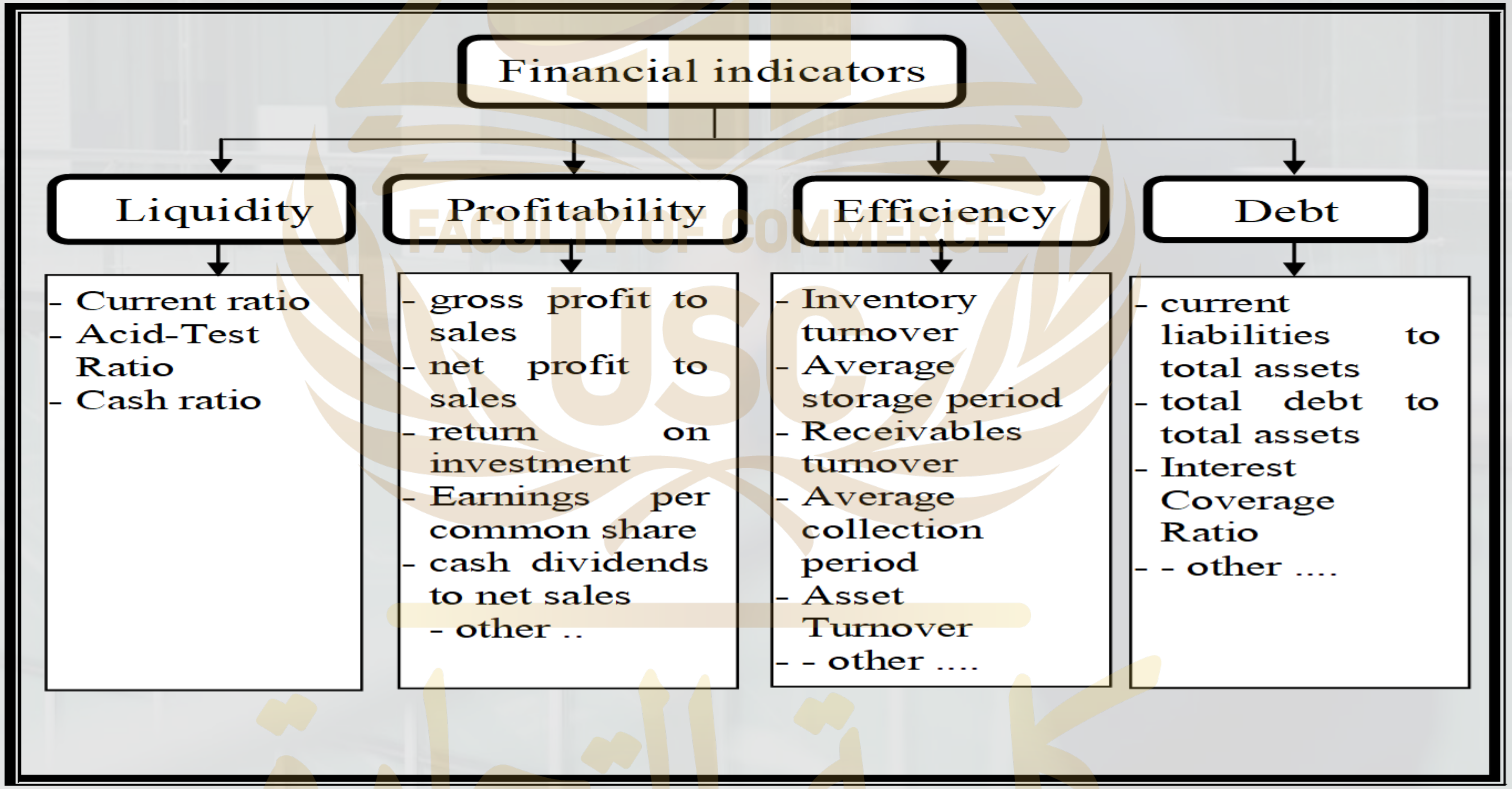
The method of financial ratios is one of the most popular and widespread analytical tools used and known as "financial indicators or financial ratios". The primary purpose of which is to provide the users of financial reports or their financial analysts with a set of indicators that support future decision-making.

2/3- Financial Ratios:

The most important of which are indicators In judging the current financial position of the project and its ability to pay its obligations in terms of the degree of liquidity and the capital structure.

2/3- Financial Ratios:

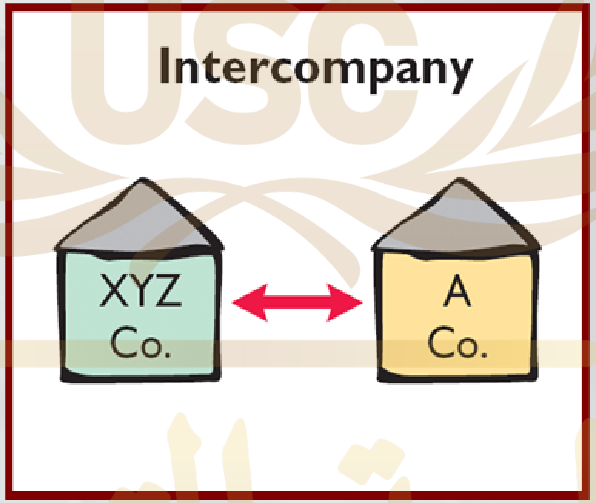
The financial indicators

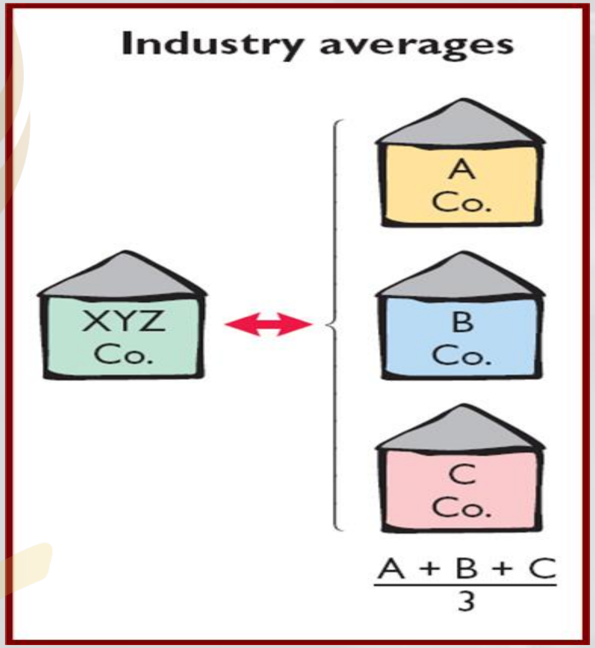


2/3- Financial Ratios:

A single ratio by itself is not very meaningful.

The discussion of ratios will include the following types of comparisons.





First Group: Liquidity Ratio:

Liquidity ratios refer to a set of indicators that measure an entity's ability to meet short-term obligations (current liabilities) from its cash and other assets that can be converted into cash in a relatively short period of time (current assets). The importance of liquidity ratios is represented in the information that it provides to management, owners and creditors who provide the company with short-term credit. **The following are the most important liquidity ratios:**

First Group: Liquidity Ratio:

1- Current Ratio: The current ratio mainly aims to measure the ability of current assets to cover short-term debt, and is determined by the following formula:

- current ratio $= \dfrac{\text{Current assets}}{\text{Current liabilities}}$

It is worth noting that previous studies and expert opinions in financial analysis we find that the current ratio is a satisfactory ratio for many companies in the range 2: 1 as a standard / model ratio.

First Group: Liquidity Ratio:

2- Acid-Test Ratio: There are some current assets that are difficult to convert fully into cash in short time to pay outstanding debts, such as prepaid expenses that cannot be converted into cash but are used instead in operations.

First Group: Liquidity Ratio:

Also, the inventory to be converted into cash, part of it must be transferred to the accounts receivables and then converted to cash, and there is a possibility that it will be sold at a loss in the event of an urgent need for liquidity, but the company may not be able to sell it at all. So inventory and prepaid expenses excluded from the current ratio.

First Group: Liquidity Ratio:

- Acid-Test Ratio $= \dfrac{\text{Most liquid assets}}{\text{Current liabilities}}$

The high liquid assets represent the cash item in addition to the quick convertible assets into cash, such as temporary investments and debtors' accounts (net). As for the inventory and advance expenses, they represent slow-moving assets in converting them from current assets into liquid assets.

First Group: Liquidity Ratio:

3- Cash Ratio: This ratio aims to measure the ability of cash and cash equivalents (securities) to cover short-term debt. Hence, cash assets include money in banks, whether they are term or demand deposits, or in the form of a checking account, and funds in the vault. **this ratio is determined by the following formula:**

First Group: Liquidity Ratio:

- **Cash ratio** $= \dfrac{\text{Cash + securities}}{\text{Current liabilities}}$

This ratio is compared from one year to another, that is, it does not have a standard rate. However, it must be emphasized that a decrease in this percentage less than 1, means that there is an inability to pay debts when They due, which may lead to stopping the activity, and vice versa.

Activity No. (1)

- **Activity nature:** Discussion.
- **Activity Time:** 10 minutes.
- **Task:** Discuss The concept of liquidity ratios and their most important indicators

5 minute break…..

Tea Break

Second Group: Profitability Ratios:

Profitability ratios provide indicators of the enterprise's ability to generate profits from sales or available assets, based on the calculation of revenue expressed with a value of income achieved as a percentage of the value of sales or investments used to achieve income.

Second Group: Profitability Ratios:

1- The ratio of net profit to total assets: This ratio is called the rate of return on investment (ROI), and this ratio is determined by the following formula:

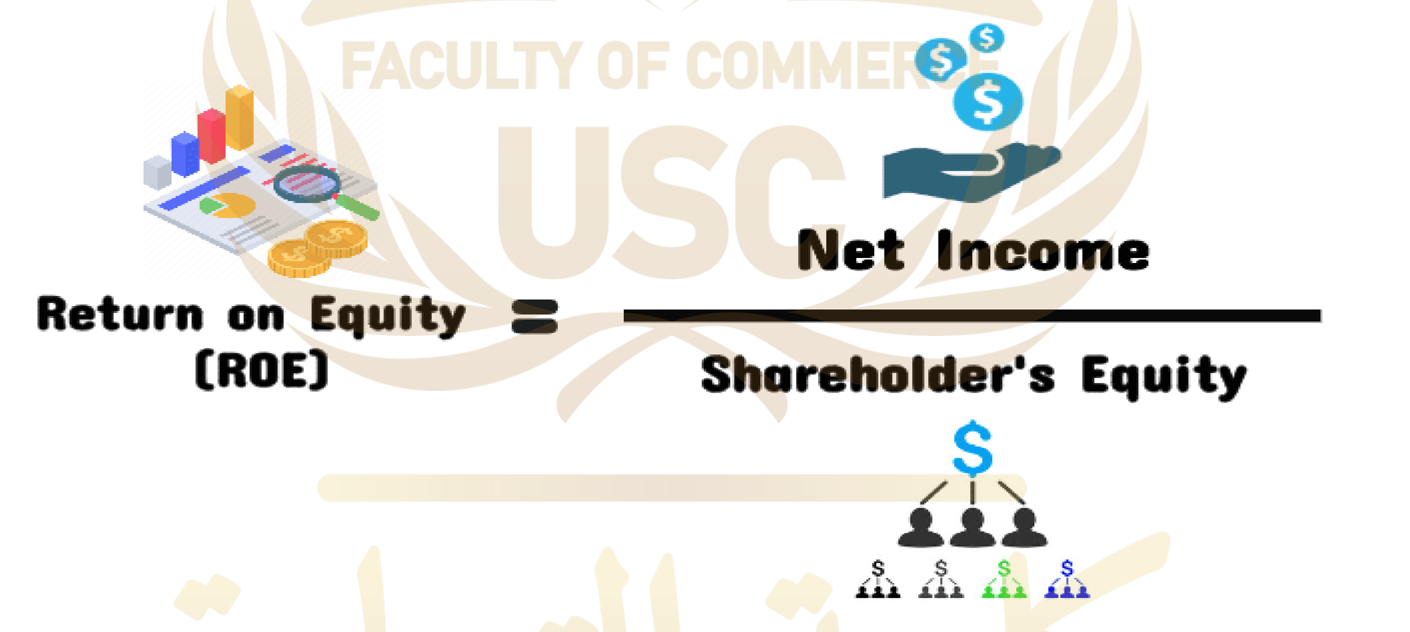
- **Return on investment** $= \dfrac{\text{Net profit after tax + interest}}{\text{Average total assets}}$

Second Group: Profitability Ratios:

2- Return on Equity: This rate refers to the value achieved on the owners ’investments, often called the return on equity rights or the ratio of net profits to equity rights. It aims to measure the profitability of the funds owned by the company, in other words, the amount of each equity dollar's contribution to profitability.

Second Group: Profitability Ratios:

- **Return on equity** $= \dfrac{\text{Net profit after tax}}{\text{Equity rights}}$



Second Group: Profitability Ratios:

3-Gross profit ratio to net sales: This percentage is calculated by dividing the total profit by the net sales, and this percentage is an indication of how efficient the management is dealing with the elements that shape the cost of sales. It is also used as a means of controlling the elements that are involved in creating this number. These items are purchases, sales, beginning inventory, and ending inventory. Therefore, the decreasing of this ratio from one year to another requires research into the reasons that led to this, **which may be due to one of the following:**

Second Group: Profitability Ratios:

- The company incurs abnormal losses as a result of high wages, high prices of raw materials, industrial costs, or repeated recording of purchases.

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Second Group: Profitability Ratios:

- **Decrease** in the selling prices of the product for conditions related to the products themselves, or as a result of strong competition, or the general economic situation, or as a result of neglecting to record some sales, or as a result of a mandatory government pricing for them.
- **Changing the basis** for estimating the remaining goods is a trend towards a more conservative policy.

Second Group: Profitability Ratios:

4- Operating profit margin: This ratio is calculated by dividing the net operating profit by the net sales, and this ratio is more comprehensive than the previous percentage, as it does not only measure the extent of efficiency in dealing with the elements that reflect the cost of sales, but extends to include a measure of efficiency in dealing with all elements of costs that They are related to operations, **and are determined by the following equation:**

Second Group: Profitability Ratios:

- Operating profit margin

$$\text{Operating profit margin} = \frac{\text{Net operating profit}}{\text{Net sales}}$$

5- Return on sales: The Return on sales is calculated by dividing the net profit after tax on the net sales. This percentage shows the profit resulting from each dollar of sales, as well as the percentage by which the selling price of the unit can decrease before the company is exposed to actual losses.

- Return on sales

$$\text{Return on sales} = \frac{\text{Net profit after taxes}}{\text{Net sales}}$$

Activity No. (2)

- **Activity nature:** **Think.. Pair**
- **Activity Time:** **10 minutes.**
- **Task:** **The concept of turnover ratios and their most important indicators**

Third Group: Efficiency Ratios:

Ratios of activity efficiency measurement or indicators of financial efficiency analysis are concerned with stating the extent to which project management uses and monitors the available financial resources, and activity indicators aim mainly at each of:

Third Group: Efficiency Ratios:

- ❑ Measuring productive and administrative efficiency.
- ❑ Measuring the efficiency of investment in products.
- ❑ Measuring the efficiency of credit and collection operations.
- ❑ Measuring the efficiency of working capital management.
- ❑ Measuring the efficiency of working investment management.

Third Group: Efficiency Ratios:

1- Current assets Turnover: **This ratio reflects the relationship between sales and total current assets and shows how quickly the current assets are turned over, and is determined by the following formula:**

$$\text{Current assets Turnover} = \frac{\text{net sales}}{\text{Average current assets}}$$

Third Group: Efficiency Ratios:

2- Fixed assets Turnover: The fixed asset turnover is determined by the following formula:

- Fixed assets Turnover $= \dfrac{\text{net sales}}{\text{Average fixed assets}}$

Third Group: Efficiency Ratios:

3- Inventory turnover: **The inventory turnover rate represents the relationship between the cost of sales and the average product stock. The importance of this rate or standard is represented in being the determinant of the amount of capital needed to invest in the inventory.**

Third Group: Efficiency Ratios:

- Inventory turnover $= \dfrac{\text{Cost of goods sold}}{\text{Average inventory}}$

Self-training….

The following is the income statement as well as the financial position statement for 2023 and 2024 for one of the industrial companies in Sadat City:

- **Required:** Extract the most important financial indicators in 2024???

Self-training….

1- Income Statement:

Description.	2023	2024
Revenue.	37,500	45,000
(-) Sales cost.	22,000	25,000
Gross profit.	15,500	20,000
+ Other revenue.	19,500	16,800
(-) Other expenses.	15,000	13,400
Net income.	20,000	23,400

Self-training….

2- Balance Sheet:

Description.	2023	2024
Fixed assets :		
Machines.	164,000	150,000
Cars.	136,000	145,000
Total fixed assets.	300,000	295,000
Current Assets:		
Debtors.	72,000	70,000
Bank.	93,000	95,000
Total current assets.	165,000	165,000
Total assets	465,000	460,000
Liabilities:		
Notes payable.	58,000	55,000
Creditors	45,700	48,000
Loans	76,300	88,200
Total liabilities	180,000	191,200
Owners Equity.	285,000	268,800
Liabilities and equity	465,000	460,000

The Next Lecture

Chapter 3

Analysis of Cash Flows for Investment Projects “Statement of Cash Flows Using the Six Blocks Approach”