INTERPRETING PUBLISHED ACCOUNTS

LIQUIDITY RATIOS

LEARNING OUTCOMES

- To understand what is meant by ratios and how we calculate them? (A01)

- To be able to apply, analyse and evaluate the different ratio formulas to a given scenario (A02 A03 A04)

INTERPRETING PUBLISHED ACCOUNTS

Today's lesson:

1) What is a ratio?
2) Why calculate ratios?
3) Liquidity ratios: current ratio and acid test ratio
4) Gearing
5) Task

INTRODUCTION

In this lesson we will look at a range of ratios that can be used to conduct a more in-depth analysis of a business's balance sheet and income statements.

You must be able to:

1) Conduct ratio analysis (selection, calculation and interpretation of ratios)
2) Understand the value and limitations of ratio analysis in measuring a business's performance.

WHAT IS A RATIO?

5 Minutes

Using your phones find a definition of Ratio Analysis

Ratio analysis is the process of determining and interpreting numerical relationships based on financial statements. A ratio is a statistical yardstick that provides a measure of the relationship between two variables or figures. For example assets against liabilities.

WHAT IS A RATIO?

- The key feature of ratio analysis is that it **compares two pieces of financial information.**

- By comparing two pieces of data in this way it is possible to make more informed judgements about a business's performance.

- So ratio analysis give decision makers more information and make good-quality decision more likely.

- Ratio analysis allows managers, directors, shareholders and other interested parties to place key figures such as profits and turnover in context.

RATIOS CAN HELP ANSWER Q'S LIKE…

Profitability	Is the business making a profit? Is it growing? How efficient is the business at turning revenues into profit? Is it enough to finance reinvestment? Is it sustainable (high quality)? How does it compare with the rest of the industry?
Financial efficiency	Is the business making best use of its resources? Is it generating adequate returns from its investments? Is it managing its working capital properly?
Liquidity and gearing	Is the business able to meet its short-term debts? Is the business generating enough cash? Does the business need to raise further finance? How risky is the finance structure of the business?
Shareholder return	What returns are owners gaining from their investment? How does this compare with alternative investments?

WHO WANTS TO KNOW WHAT?

Ratio analysis provides the users of financial statements with a tool which allows for a more meaningful interpretation of published accounts.

Managers	Creditors	Government

Employees	Shareholders	Competitors

Look at the headings and the bullet-points from the previous slide. What you think each stakeholder wants by using ratio analysis?

TYPES OF RATIO

Liquidity ratios: measure the ability of the business to settle its debts in the short term.

Gearing: examines the relationship between internal and external sources of finance.

Efficiency ratios: measure the effectiveness with which an enterprise uses the resources available to it.

Profitability ratios: assess the amount of gross or net profit made by the business in relation to turnover, or assets, or capital available.

Shareholder ratios: measure the returns received by the owners.

Proper ratios
e.g. if there are 2 boys for every girl in the class then the ratio is 2:1

As a percentage
e.g. If there are 5 girls in a class of 20 then we have 25% girls

How do we express ratios?

As a multiple
e.g. If students keep leaving the class to be replaced by new students we might turnover our class 3 times per year

LIQUIDITY RATIOS

- **Liquidity** is a measure of a firm's ability to meet day-to-day expenditure.
- If a firm is liquid it holds a high proportion of liquid assets such as cash and debtors.
- Firms want to hold sufficient liquid assets to ensure that they can fulfill their financial commitments, but not too many since liquid assets earn low returns (if any).
- Liquidity can also be termed solvency.
- Liquidity can be measured using the **current ratio** and **acid test ratio**

THE CURRENT RATIO

The current ratio shows how many times a firm could pay its current liabilities out of its current assets.

Current ratio

=

$$\frac{\textbf{current assets}}{\textbf{current liabilities}}$$

This is also known as the working capital ratio

CALCULATING CURRENT RATIO

To calculate the current ratio we use the information from the balance sheet:

Current assets = £90,000
Current liabilities = £77,000

$$\text{Current ratio} = \frac{90,000}{77,000} = 1.17$$

Since there are more assets than liabilities, this is more than 1

USING THE CURRENT RATIO

A ratio of **less than 1.0** = firm can't pay its short term debts

A ratio of **1.0** = firm can just pay its short term debts

A ratio of **1.5** = a good ratio

A ratio of **3.0** = firm has plenty of current assets (perhaps even too many?)

Convention is that a business should operate with a current ratio of 2:1 (so it has £2 of short-term assets for every £1 of short-term debt, but many businesses operate successfully a much lower current ratio

ACID TEST RATIO

The acid test ratio shows how many times a firm could pay its current liabilities using its current assets, but with **stock** removed from the equation.

$$\text{Acid Test Ratio} = \frac{\text{current assets} - \text{inventories}}{\text{current liabilities}}$$

Stock can't always be sold quickly, so taking it out of the equation shows us how easily a firm can pay off debts without having to sell stock.

CALCULATING THE ACID TEST

Once again we use the balance sheet:

Current assets = 90,000

Inventories (or stock) = 12,000

Current liabilities = 77,000

$$\text{Acid test ratio} = \frac{90{,}000 - 12{,}000}{77{,}000}$$

$$= 1.01$$

This ratio is above 1, so even without selling stock, this firm can still pay its debts!

USING THE ACID TEST

- For many business people, the acid test is the real test of how well a business is able to pay off its short term debts.
- If the acid test ratio is **below 1**, then they may worry that the firm **cannot pay off current liabilities** without selling stock (which it may or may not be able to do in a hurry)
- If the acid test ratio is **above 1**, then the firm **can pay off current liabilities** without selling stock and it is in a good financial position

A normal figure for the acid test ratio might be between 0.6:1 and 1.1:1, depending upon the type of business

Balance sheet for a Beauty Salon

A Beauty Salon has just finished trading for the year and needs to create a balance sheet to calculate what she owns and how she paid for it. After going through her financial records, she found the following financial information:

Assets	£
Equipment	7,450
Stock	9,800
Creditors	3,100
Long term bank loan	16,500
Cash	2,700
Vehicle	5,200
Overdraft	2,000
Debtors	900
Short term bank loan	1,200
Fixtures and fittings	9,900
Mortgage	28,900
Retained profit	12,900
Premises	28,650

Questions

- Create a balance sheet using the financial data provided
- Identify and calculate the financial ratios you could use from the balance sheet you have created
- Would you invest in this business? Provide your reasons