

SESSION 5: COMPANIES - INTERPRETATION OF FINANCIAL STATEMENTS

KEY CONCEPTS:

In this session we will focus on:

- Ratios

X-PLANATION

INTRODUCTION:

Ratios

For our curriculum in Grade 12 we are going to use ratios to analyse the information available in the Income Statement and the Balance Sheet.

The raw information available in these financial statements is of limited value. For example, if we had to say that Company X made a profit after tax of R1 000 000, while Company Y made an after tax profit of R6 000 000. Which one would you say has performed better? Your response initially may be Company Y. But, if I told you that Company X had a turnover of R4 000 000, whilst Company Y had a turnover of R120 000 000, now what would you think?

From this we can see that to make a judgment or decision based purely on raw information could be misleading. Therefore there are a number of ratios that can be used to allow us to interpret financial information more accurately. The ratios one would use would depend on the particular aspect of the business one wishes to analyse or answers to specific questions that one is looking for.

The ratios used can be classified under the following categories:

- Profitability - Indicates how profitable the business is and how well expenses are controlled.
- Return - What the owner/s are getting back in return for their investment.
- Liquidity - The ability of the business to pay its short- term debts.
- Solvency - Can the business settle all its liabilities?
- Operating efficiency - Indicates how well operating activities are carried out.
- Risk - Indicates degree of financial risk

The ratios can help us to:

- Check whether there is growth or stagnation in the business
- Check results with competitors performance
- Compare current results to previous years
- Compare results to general economic indicators in the country or globally
- Compare results to alternative investments
- Determine the degree of financial risk by investors / creditors

Some people interested in measuring the business results:

- Management
- Owners / Investors / Shareholders
- Banks
- SARS
- Trade Unions
- Competitors

The following ratios are of importance in Grade 12:

No.	Ratio	Category
1.	Gross profit on turnover	Profitability
2.	Gross profit on cost of sales	Profitability
3.	Net income before tax on turnover	Profitability
4.	Total expenses on turnover	Profitability
5.	Solvency ratio	Solvency
6.	Current ratio	Liquidity
7.	Acid test ratio	Liquidity
8.	Rate of stock turnover	Liquidity
9.	Number of months of stock on hand	Liquidity
10.	Debtors collection period	Liquidity
11.	Creditors payment period	Liquidity
12.	Gearing ratio / Debt equity ratio	Risk
13.	Return shareholders' equity	Return
14.	Return on capital employed	Return
15.	Earnings per share	Return
16.	Dividends per share	Return
17.	Net asset value per share	Return

Ratio Analysis:

Description	Formula	Guidance to comment
1. % Gross profit on turnover	$\frac{\text{Gross profit}}{\text{Sales}} \times 100$	<ul style="list-style-type: none"> • Illustrates mark-up on selling price. • Mark-up achieved may be compared to policy of business.
2. % Gross profit on cost of sales	$\frac{\text{Gross profit}}{\text{Cost of Sales}} \times 100$	<ul style="list-style-type: none"> • Illustrates mark-up on cost price. • Mark-up achieved may be compared to policy of business. • Possible reasons for difference: <ul style="list-style-type: none"> ➢ Seasonal sales ➢ Cash discounts ➢ Incorrect pricing ➢ Theft
3. % Net income on turnover	$\frac{\text{Net profit}}{\text{Turnover}} \times 100$	<ul style="list-style-type: none"> • Portion of net income for every Rand of sales. • Compare to previous results
4. % Total expenses on turnover	$\frac{\text{Total expenses}}{\text{Turnover}} \times 100$	<ul style="list-style-type: none"> • Indicates absorption rate of expenses on turnover. • A lower rate is more favourable.
5. Solvency ratio	Total assets : Total liabilities	<ul style="list-style-type: none"> • The ratio is used to answer the question whether the business is solvent / an indication of its solvency situation. • If assets are more than liabilities the business is solvent. The higher the ratio the better the solvency. • If solvency is close to 1 : 1 there is possible risk of insolvency in the future.
6. Current ratio	Current assets : Current liabilities	<ul style="list-style-type: none"> • Determines liquidity of business. • Compare to previous results • However if the ratio is very high it can also indicate excessive investment in current

		assets. Funds could be used for a better return on other investments.
7. Acid-test ratio	Current assets - inventory : Current liabilities	<ul style="list-style-type: none"> • Determines liquidity of business. • Compare to previous results • If current ratio is favourable and acid-test ratio is unfavourable, it shows possibility of too much investment in stock.
8. Rate of stock turnover	<u>Cost of sales</u> Average stock <ul style="list-style-type: none"> • Average stock = stock at beginning + stock at end divide by 2. • Note the answer must be in times per year. 	<ul style="list-style-type: none"> • Compare to previous results. • Compare to industry. • Quicker rate is more favourable.
9. Number of months of stock on hand	<u>Average stock</u> x 12 Cost of sales	<ul style="list-style-type: none"> • Gives an indication of how long we can expect the stock on hand to last. • This can help with determining ordering times. • We can also comment on the amount of stock carried by the business.
10. Debtors average collection period	<u>Average debtors</u> x 365 or 12 Credit sales <ul style="list-style-type: none"> • If x 365 answer in days • If x 12 answer in months 	<ul style="list-style-type: none"> • Compare to term allowed • If longer, then unfavourable. • How to improve: <ul style="list-style-type: none"> ➢ Send statements more regularly ➢ Charge interest on overdue accounts ➢ Control credit
11. Creditors average payment period	<u>Average creditors</u> x 365 or 12 Credit purchases <ul style="list-style-type: none"> • If x 365 answer in days • If x 12 answer in months 	<ul style="list-style-type: none"> • Compare to term allowed • If longer, then unfavourable. • Aim for shorter time: <ul style="list-style-type: none"> ➢ Good relation with suppliers ➢ Negotiate better terms and conditions ➢ Obtain regular supplies

12. Debt / Equity ratio	Non-current liabilities : Shareholders equity	<ul style="list-style-type: none"> • Measures degree of financial risk of the business • A lower ratio is more favourable, the business is less of a financial risk. • Easier to obtain loans • A high ratio indicates that funds have to be obtained by other means, besides borrowing.
13. Return on total capital employed	$\frac{\text{Net profit before tax + interest on loans} \times 100}{\text{Average capital employed}}$ <p>Capital employed = Shareholders equity + non-current liabilities. Average therefore will be the above for two years, divided by two.</p>	<ul style="list-style-type: none"> • Compare to previous results. • Compare to other outside investments, such as return on a fixed deposit.
14. Return on shareholders' equity	$\frac{\text{Net profit after tax} \times 100}{\text{Average shareholders' equity}}$ <ul style="list-style-type: none"> • Shareholders equity = Share capital + share premium + retained income. • Average therefore would be the above for two years, divide by two. 	<ul style="list-style-type: none"> • Compare to previous results. • Compare to other outside investments, such as return on a fixed deposit. • Compare to returns by other companies with a similar share price.
15. Earnings per share	$\frac{\text{Net profit after tax} \times 100}{\text{Number of shares issued}}$ <ul style="list-style-type: none"> • Number of shares issued = Share capital divided by par value 	<ul style="list-style-type: none"> • Compare to previous results. • Compare to earnings by other companies with a similar share price. • Comment in relation to general economic conditions • Comment in relation to JSE performance in general
16. Dividends per share	$\frac{\text{Total dividends} \times 100}{\text{Number of shares issued}}$	<ul style="list-style-type: none"> • Compare to previous results. • Compare dividends to earnings per share. If a huge difference exists then it means that a large amount has been kept as retained income. Is there justification for that?

		<ul style="list-style-type: none"> • Comment in relation to general economic conditions. • Comment in relation to JSE performance in general
17. Net asset value per share	$\frac{\text{Shareholders equity} \times 100}{\text{Number of shares issued}}$	<ul style="list-style-type: none"> • Used to determine current value of shares • Can influence the decision whether to buy a particular share or not. • If the net asset value is more than the par value, one is inclined to buy the share. • The difference between dividend per share and earnings per share represents the amount retained by the company and thus increases the net asset value per share

X-AMPLE QUESTIONS

Question 1:

INTERPRETATION OF FINANCIAL INFORMATION

You are provided with information relating to Bhaga Toys Limited.

REQUIRED

- 1.1 A company's published annual report comprises five main parts. Match the components of the annual report in COLUMN 1 with the description in COLUMN 2. The first one has been done for you. Write only the letter (A – E) next to the question number (1 – 5), for example 6 – C.

COLUMN 1		COLUMN 2	
COMPONENTS OF THE ANNUAL REPORT		DESCRIPTION	
1	Income Statement	A	this is a written verbal explanation of the operations of the company during a financial year
2	Balance Sheet	B	this reflects whether or not the shareholders can rely on the financial statements
3	Cash-Flow Statement	C	this reflects the profit/loss of the company for the year
4	Directors' Report	D	this reflects the effect of the operating, financial and investing activities on the cash resources
5	Independent Auditor's Report	E	this reflects the net worth of the company

(4)

- 1.2 Refer to information 1, 2 and 3 at the end of this question. Calculate the following financial indicators for 2008:
- Acid-test ratio (4)
 - Stock turnover rate (4)
 - Debt/Equity ratio (3)
 - Net asset value per share (4)
 - Earnings per share (3)
- 1.3 Comment on the liquidity situation of the company. Quote THREE relevant financial indicators (actual ratios or percentages) to support your answer. (8)
- 1.3.1 Briefly explain the difference between *solvency* and *liquidity*
- 1.3.2 Calculate and comment on the solvency of this business.

- 1.4 The company directors feel that the shareholders should be very happy with the returns, earnings and dividends of the company. Quote THREE relevant financial indicators (actual ratios or percentages) to support their opinion. (6)
- 1.5 Refer to the market value per share. Many people feel that the market value of the share on the JSE indicates whether or not the directors are doing a good job. (2)
- Explain why the market value is so important in this regard. If the company issued all its unissued shares next year, how much capital could they expect to raise for the company? Provide a calculation to support your opinion. Note that the authorised share capital comprises 1 000 000 ordinary shares of R2 par value. (4)
- 1.6 Rather than issue more shares, the directors are considering taking out additional loans. Quote TWO relevant financial indicators (actual ratios or percentages) to support their opinion. (4)
- 1.7 The auditors have told the directors that Directors' Fees must be shown separately in the financial statements and not as part of Salaries and Wages. The directors do not want to change this. What is your opinion on this problem? Explain. (3)
- 1.8 Refer to the newspaper article below.

JSE SUSPENDS WOODVIEW LTD OVER NO ANNUAL REPORT

[By Ima Snoop, 12 Feb. 2009]

The trading of shares of furniture company Woodview Ltd were suspended by the JSE Securities Exchange yesterday after the company failed to publish its annual report three months after the end of their financial year-end.

The CEO of Woodview Ltd put out a statement explaining that the auditors had withheld their report and that this was causing a delay.

The company postponed its AGM. The shareholders have not been informed of the reason for the postponement.

Prior to the JSE's action, the share price of Woodview Ltd dropped 30% to 140 cents per share.

The directors of Bhaga Toys Ltd are worried that a similar problem could occur in their company. Briefly explain why this would be a serious problem for the company. Name TWO points. (6)

INFORMATION

1. The following information was extracted from the Income Statement for 2008:

▪ Cost of sales	R976 000
▪ Interest on loan (interest 13% p.a.)	25 000
▪ Net profit before tax	750 000
▪ Net profit after tax	525 000

2. The following **financial indicators** were calculated for the past two years:

	2008	2007
Current ratio	4,1:1	2,1:1
Acid-test ratio	?	1,3:1
Stock turnover rate	?	8 times p.a.
Debtors collection period	30 days	30 days
Creditors payment period	90 days	60 days
Debt/Equity ratio	?	0,1:1
% return on average shareholders' equity (after tax)	33,3%	25%
% return on total capital employed (before tax)	44,3%	25,8%
Net asset value per share	?	213,6 cents
Market value per share	240 cents	220 cents
Dividends per share	20 cents	10 cents
Earnings per share	?	55,2 cents

3. BALANCE SHEET AS AT 30 JUNE 2008

	2008	2007
ASSETS		
<i>Non-current assets</i>	1 619 040	1 611 000
Fixed assets (carrying value)	1 619 040	1 611 000
<i>Current assets</i>	248 500	157 500
Inventory	99 500	62 500
Trade and other receivables	100 000	40 000
Cash and cash equivalents	49 000	55 000
TOTAL ASSETS	1 867 540	1 768 500
EQUITY AND LIABILITIES		
<i>Ordinary shareholders' equity</i>	1 657 040	1 495 000
Ordinary share capital (R2,00 par value)	1 525 000	1 400 000
Share premium	52 000	40 000
Retained income	80 040	55 000
<i>Non-current liabilities</i>	150 000	200 000
Mortgage loan: Tshwane Bank (13% p.a.)	150 000	200 000
<i>Current liabilities</i>	60 500	73 500
Trade and other payables	60 500	73 500
TOTAL EQUITY AND LIABILITIES	1 867 540	1 768 500

SOLUTIONS TO X-AMPLE QUESTIONS:

Question 1:

1.1

Column 1	Column 2
1	C
2	E ✓
3	D ✓
4	A ✓
5	B ✓

(4)

1.2 **Acid-test ratio**

$R248\ 500 - R99\ 500 = R149\ 000$ ✓✓

$R149\ 000 : R60\ 500$ ✓ = 2,46 : 1 ✓ or 2,5:1

Stock turnover rate

$R99\ 500 + R62\ 500 / 2 = R81\ 000$ ✓✓

$R976\ 000$ ✓ / $R81\ 000 = 12$ times p.a. ✓

Debt/Equity ratio

$R150\ 000$ ✓ : $R1\ 657\ 040$ ✓ = 0,09 : 1 ✓ or 0,1:1

Net asset value per share

$R1\ 525\ 000 / 2 = 762\ 500$ shares ✓✓

$R1\ 657\ 040$ ✓ / $762\ 500 \times 100$ cents = 217,3 cents ✓

Earnings per share

$R525\ 000$ ✓ / $762\ 500$ ✓ = 68,9 cents ✓

General comment ✓✓ Good=2 Satisfactory=1 No/invalid comment 0

The liquidity is generally satisfactory although some of the indicators may be considered to be too high, e.g. current ratio should be lower; creditors should be paid in a shorter period.

Any THREE valid indicators named ✓✓✓

Ratios/percentages quoted for each ✓✓✓

Current ratio 2,1:1 → 4,1:1

Acid-test ratio 1,3:1 → 2,46:1

Stock turnover rate 8 times p.a. → 12 times p.a.

Debtors collection period 30 → 30 days

Creditors payment period 60 → 90 days

(18)

1.3 *Any THREE valid indicators named* ✓✓✓

Ratios/percentages quoted for each ✓✓✓

Improvement in % return: 25% → 33,3%

Improvement in EPS: 55,2c → 68,9c

Increase in DPS: 10c → 20c

(8)

1.4 *Any THREE valid indicators named* ✓✓✓

Ratios/percentages quoted for each ✓✓✓

Improvement in % return: 25% → 33,3%

Improvement in EPS: 55,2c → 68,9c

Increase in DPS: 10c → 20c

(6)

1.5 *Responses may be expressed differently*

Any valid explanation

Explanation ✓✓

Good = 2 Satisfactory = 1 No/invalid explanation = 0

- The market value is the price at which shares are currently being sold.
- When the market price is higher than the par value, it is an indication to the shareholders that the company is doing well.

If the company issued all its unissued shares next year, how much capital could they expect to raise for the company? Provide a calculation to support your opinion. Note that the authorised share capital comprises 1 000 000 ordinary shares of R2 par value.

Authorised shares = 1 000 000

Issued shares = 1 525 000 / 2 = 762 500 ✓

Available shares = 1 000 000 – 762 500 = 237 500 ✓

Capital to be raised by the issue of unissued shares

= 237 500 x R2 ✓ = R475 000 ✓

(6)

1.6 *Any TWO valid indicators named ✓✓*

Ratios/percentages quoted for each ✓✓

- Return on capital employed for 2008 = 44,3%
- Current interest rate = 13%
- Debt : equity ratio decreased from 0,1:1 to 0,09:1

(4)

1.7 *Any valid comment ✓✓✓*

- Transparency regarding what the directors earn
- Shareholders have a right to know what directors earn

(3)

1.8 *Any TWO valid explanations ✓✓✓ ✓✓✓*

- A delay would cause shareholders to become suspicious
- Shareholders would not vote for these directors next year
- New shareholders will avoid the company and share prices could drop
- The directors would be guilty of a criminal offence. In terms of the Companies Act they have to produce financial statements within three months
- It will affect the ability to raise capital/loans in future as investors will be suspicious

Excellent = 3 Good = 2 Weak = 1 No/invalid explanation = 0

(6)

[55]