

## Chapter 25

### Financial Analysis and Interpretation

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## 1. Introduction

A set of financial statements is, despite the wealth of information contained therein, not able to give a true picture of the business on its own. The financial statements require a more in-depth analysis and an interpretation thereof. The type and extent of the analysis performed depends on the user, the user's specific needs and the information available to the user.

## 2. Users of Financial Statements

There are a variety of users including the following:

- Bank managers and officials and other providers of finance: who perform a thorough investigation into the level of risk involved with the entity and the entity's ability to repay the debt. This type of investigation would be performed when, for example, a bank is considering extending credit or providing a loan for the first time to an entity.
- Tax authorities: who analyse the entity's financial statements for tax purposes.
- Employees: who analyse the financial statements to estimate, for example, the level of job security.
- Directors and Managers: who scrutinise the financial statements since such scrutiny provides important information that is essential in the decision-making process, budgeting procedures for the future years as well as in the review for errors and fraud.
- Investors (current shareholders and potential investors): who evaluate the level of return earned on investments in the entity balanced against the level of risks involved and this, in turn, is compared with the risks and returns offered by other entities and investments.
- Merger and Acquisition Analysts: who analyse the worth of the entity and consider the risks versus the returns involved, and based on such information, decide whether a merger or acquisition with such a company would be beneficial to either party.
- Auditors: who scrutinise every material element of the financial statements since they are required to report on the fair presentation of the financial statements. An analysis (analytical review) of the financial statements is generally performed before proceeding with audit work, since such an analysis highlights areas of concern (possible errors, fraud, misallocations and misstatements). A similar analysis may also be performed near the end of the audit as a final check for forming conclusions on which audit opinion is based.

## 3. Inherent weaknesses in financial statements

Financial statements, despite the International Financial Reporting Standards' onerous disclosure requirements, still have inherent weaknesses. In order to perform a reasoned analysis and interpretation, it is imperative that the user is aware of the limitations of the financial information that he/she is analysing.

### 3.1 Historical figures

The values shown in the financials are often historical figures that are either understated or overstated because of the effects of inflation. In order to lessen this weakness, some companies perform regular revaluations of their assets and/or provide their users with 'inflation adjusted financial statements'. Events after year-end but *before the issue* of the financial statements are also quite often important to the user and will be disclosed in accordance with the statement on events after the reporting period, (IAS 10). However, events that occur *after the issue* of the financial statements (e.g. law suits, flood damage to inventory or other assets, changes in management or ownership) will obviously not be disclosed and yet may be of interest to the users.

### 3.2 Limited predictive value

The financial statements not only use historical figures but are, by definition, a record of past events. These past events may have little or no bearing on the future if, for instance, there is a change in market trends, technology (perhaps rendering part or all of the inventory or assets obsolete), and/ or management etcetera.

### 3.3 Limited qualitative information

Financial statements are, in the main, a record of quantitative information with only a smattering of qualitative information. Qualitative information that might not be found directly in the financial statements but which could nevertheless influence users include (inter alia) changes in management, technology and market trends. An assessment of the level of labour productivity and the competency of management would also be useful. Marketing decisions, an example of which is the decision on whether or not to adopt a different marketing approach in the future, could also affect the decisions of users. Management decisions, such as introducing a new product line, the dropping of a product in the future, or making raw materials internally rather than purchasing them externally are also important to the user and yet are not mentioned in the financial statements.

### 3.4 Risks are not reported

Bearing in mind that when deciding whether the returns offered by a particular investment are acceptable or not, the investor invariably considers the risk related to the investment (the higher the risk, the higher the required rate of return and vice versa). Although the financial statements do not directly refer to, or analyse the risks, the analysis of the information provided goes a long way to identifying risk areas.

### 3.5 Limited comparability

One company may not be easily comparable with another company if each of them uses a *different accounting policy* (e.g. one uses FIFO and the other WA to record inventory movements). Consideration of these differences should be made when interpreting the results of the analysis. It should be noted that a change in accounting policy should not affect the comparability of one year with another year within the same company since the comparative year's figures should be restated.

*Abnormal items* make it difficult to compare one company with another as well as making it difficult to compare one year with another year within the same company. These items should, where necessary, be excluded from the analysis.

*Seasonal fluctuations* make it difficult to compare, for example, the period from September to February (spring and summer) with the period from March to August (autumn and winter) when the company is a swimwear manufacturer.

## 4. Techniques used in the analysis of financial statements

### 4.1 Overview

There are many different techniques that may be used in the analysis of a set of financial statements. The most common techniques are the following:

- Cash flow statements;
- Common-sized financial statements; and
- Ratio analysis.

The 'interpretation' of an analysis entails scrutinising the 'trends'. This 'trend analysis' involves comparing company figures, ratios and percentages:

- To prior years: The more prior years that you have at your disposal for the purpose of comparison the better. This gives a better idea of any trends.

- To industry averages: This gives the user an idea as to how the company's performance compares with the performance of similar companies in the same industry. Care should be taken to compare companies of similar size. It is worth noting that, when a company deviates significantly from the industry average, this does not always bode ill, since if the company wishes to be the best in the industry, it will, by definition, not be 'average'!
- To accepted standards: Accepted standards should be considered as a guide only and once again, the leading company in an industry will seldom adhere to any so-called norms.
- To forecasts (past and future): The internal users may compare, for example, actual ratios to the budgeted ratios over a certain period when planning budgets for the future. The fluctuations between actual and budgeted ratios over the past period need to be investigated and taken into account during the budgeting process for the next period.

## 4.2 Statements of cash flows

This is probably one of the most important statements to analyse since without adequate cash flow, the company will run the risk of not being able to repay creditors and other short-term debts (such as overdrafts) and perhaps also the long-term debts as well. A cash flow problem that continues unchecked, will ultimately lead to liquidity problems and finally liquidation.

## 4.3 Common-sized financial statements

This technique is useful for many different reasons. Using this technique, the financial statements are redrafted showing movements in either currency or percentage terms. There are different approaches to common-size financial statements where each approach has its own usefulness, namely the:

- horizontal analysis, and
- vertical analysis.

The common-size analysis is best performed if changes are not seen in isolation, but rather as part of a bigger picture: comparisons should be made with other connected accounts, whether in the statement of comprehensive income or statement of financial position.

Consider, for instance, an increase in sales: very little information is gleaned simply from the fact that sales increased. What the user needs to know is how the company increased its sales and what effect this has had on the business (e.g. on its profits, liquidity and asset base). In order to answer these questions, we could look at some of the related accounts: cost of sales, bad debts and profits (in the statement of comprehensive income), debtors, the provision for doubtful debts and even possibly inventory (statement of financial position). Other accounts may be affected, depending on the circumstances. Although the provision for doubtful debts is not separately disclosed in the statement of financial position, it is a useful account to analyse (where possible) since it gives an indication of the opinion of management regarding the recoverability of debtors.

Each of the two approaches (horizontal and vertical) mentioned above, will now be discussed in more depth.

### 4.3.1 Horizontal analysis

Using this technique, the change from one year to the next within each line item in the financial statements is analysed on either a currency or percentage basis. Analysing the changes as a percentage is particularly useful when trying to identify, at a glance, any unusual fluctuations. Large percentage fluctuations could be followed up for corrective action by management (where necessary) or interpreted as best as is possible for the purpose of assessing risk where the user is, for instance, a potential investor of the company. If the user is the external auditor, it acts as a particularly useful tool in identifying accounts that appear to include errors, fraud or misallocation, thereby highlighting areas requiring further audit procedures. An example: a material increase in the machinery account together with a similarly material decrease in the repairs and maintenance account may indicate that expenditure on repairs and maintenance has been erroneously debited to machinery (a misallocation).

#### 4.3.1.1 *The horizontal analysis of the statement of financial position:*

- highlights increases and decreases in the sources of finance (equity and liabilities), and
- highlights increases and decreases in the assets, thus indicating how this finance has been invested.

#### 4.3.1.2 *The horizontal analysis of the statement of comprehensive income:*

- highlights increases and decreases in expenditure, (e.g. a significant increase may suggest errors, fraud, overspending or changes in the spending habits of the entity); and
- highlights increases and decreases in income, (e.g. a significant decrease in sales may indicate the need for additional marketing or change in sales mix).

### 4.3.2 **Vertical analysis**

Using this approach, each line item is analysed as a percentage of a base, where the base depends on the user and the purpose of the analysis. These percentages would then be compared with the prior year's percentages and any unusual fluctuation would be investigated (by auditors, managers or directors etc) or merely interpreted (by the shareholders, potential investors or other users external to the operations of the company).

The vertical analysis is useful in that it:

- removes the element of inflation; and
- enables the comparison of the efficiency of operations of large companies with small companies by reducing all figures to percentage terms.

#### 4.3.2.1 *The vertical analysis of the statement of financial position:*

If the vertical analysis were to be performed on the statement of financial position, each line item of the 'assets' section could be analysed as a percentage of, for example, the 'equity and liabilities' section. This indicates how the available finance has been spent: for example, 30% of the total finance may have been invested in non-current assets in the current year whereas only 10% had been spent in this area in the prior year. This may indicate a shift in the company's priorities and a more positive sentiment on the future of the company.

#### 4.3.2.2 *The vertical analysis of the statement of comprehensive income:*

If the vertical analysis were to be performed on the statement of comprehensive income, each line item could be analysed as a percentage of the sales figure. Any figure could be used as the base, however, depending on what objective the user is trying to achieve. If, for example, a manager is trying to analyse expenses with the intention of reducing them in future, he may calculate each expense as a percentage of the total expenses in order to highlight the larger expenses. These percentages should also be compared with the percentages calculated for the previous year and any unusual trend followed up.

## 4.4 **Ratio analysis in general**

This is a most useful technique in that it is the examination of the inter-relationship between various items with other items whether in the statement of comprehensive income or statement of financial position.

For instance, if one were to look at merely the actual/ nominal 'profit after tax' figures in a statement of comprehensive income, a distorted view of the situation may be obtained:

- Imagine that the profit after tax was C100 000 in the prior year and C150 000 in the current year. It would appear, before comparing the profit with any other item in either the statement of comprehensive income or the statement of financial position, that the company's profitability has improved by 50% ( $(150\,000 - 100\,000) / 100\,000$ ).

- However, imagine that at the same time the total of the assets in the comparative year was C500 000 which increased to C1 000 000 in the current year. Although it initially seems that profits are increasing dramatically (50%), if the relationship between the profits earned and the investment in assets is considered, it becomes evident that this aspect of profitability (return on assets) has declined from 20% (100 000/ 500 000) to 15% (150 000/ 1 000 000).

Ratio analysis may be classified into three different areas:

- profitability;
- liquidity; and
- solvency.

#### **4.4.1 Profitability**

This is an analysis of the profits per the statement of comprehensive income as well as the analysis of the profitability in relation to the related capital investment/s and sources of finance per the statement of financial position. The profitability ratios can therefore, be divided into three separate areas:

- Pure analysis of the statement of comprehensive income: e.g. gross profit percentage and net profit percentage;
- Return on capital supplied by the different providers of capital: e.g. return on capital employed, return on equity, earnings per share, dividend payout ratio; and
- Return on assets purchased with the capital supplied: these ratios give an indication of the effectiveness of management in their utilisation of the funds available to the business e.g. return on assets and return on investments.

#### **4.4.2 Liquidity**

This is the ability of the company to repay its debts in the short-term (one year). Consequently, these ratios will focus on the current assets and the current liabilities. Current assets can, by definition, generally be converted into cash (liquidated) within 12 months of year-end and similarly, current liabilities are debts that must generally be settled within 12 months of year-end. These ratios give an indication of management's operational capabilities regarding the management of working capital.

The main liquidity ratios include:

- the current ratio;
- the acid-test ratio; and
- the working capital ratio.

The following ratios look at each of the individual components of the current assets and current liabilities (indicating how liquid *each item* is):

- debtors: collection period and turnover ratios;
- inventory: days on hand and turnover ratios;
- creditors: repayment period and turnover ratios; and
- business cycle ratio.

One of the line items under current assets and current liabilities that is not specifically covered by the liquidity ratios is 'cash and cash equivalents'. The reason for this is that it is covered in detail when analysing the statement of cash flows.

#### **4.4.3 Solvency/ structure**

This is the ability of the company to repay its debts in the long-term. The ratios, therefore, are not restricted to the current assets and current liabilities but deal rather with the total assets and total liabilities.

The solvency ratios give an estimate of the structural safety of the company, by calculating, in various ways, the ratio of internally sourced finance to externally sourced finance. Internally sourced finance is more expensive but yet a low risk source of finance (owners' ordinary or preference share capital) versus externally sourced finance, which is cheaper but yet a riskier source of finance (loans from the bank, debentures etcetera).

Examples of solvency/ structure ratios include:

- the solvency ratio: the extent to which total liabilities are covered by total assets;
- the equity ratio and debt ratio: the percentage of assets financed by either equity (internal financing) or debt (external financing) respectively;
- the debt-equity ratio and borrowing ratio: the ratios showing how the financing is structured/ shared between external and internal financing.

Ratio analysis is only of use if, as with all other techniques, a trend analysis is also performed: that is to say, the ratios are compared with the comparative year's ratios, or compared with industry averages or with ratios of another company. This trend analysis facilitates more meaningful interpretation of the ratios.

## 5. Common-sized financial statements in more detail

Common-sized financial statements are best explained by way of a worked example.

### Example 1: vertical and horizontal analysis

Consider the following financial statements of Edwards Stores, a fashion retail outlet comprising a large chain of stores.

You must then analyse and interpret these financial statements of Edwards Stores with the intention of investment therein.

#### Edwards Stores

#### Statement of comprehensive income

For the year ended 31 December 20X2

	20X2 C	20X1 C
Gross revenue	5 000 000	3 000 000
Cost of sales	3 000 000	1 500 000
Gross profit	2 000 000	1 500 000
Add interest income	100 000	90 000
	2 100 000	1 590 000
Other expenses:	800 000	290 000
Computer software	50 000	20 000
Bad debts	295 000	50 000
Advertising	120 000	60 000
Salaries and wages	90 000	40 000
Insurance	200 000	100 000
Depreciation	45 000	20 000
Profit from operations	1 300 000	1 300 000
Less finance charges	100 000	10 000
Profit before tax	1 200 000	1 290 000
Taxation expense	440 000	645 000
Profit for the period	760 000	645 000
<i>Other comprehensive income</i>	0	0
Total comprehensive income	760 000	645 000



**Example 1: vertical and horizontal analysis continued ...**
**Edwards Stores**  
**Statement of financial position**  
**As at 31 December 20X2**

	20X2 C	20X1 C
<b>Assets</b>		
Non-current assets	1 800 000	900 000
Investment at cost	1 100 000	1 300 000
Current assets:	3 008 000	1 345 000
- Inventory	1 500 000	375 000
- Accounts receivable	1 500 000	350 000
- Cash	8 000	620 000
	5 908 000	3 545 000
<b>Equity and Liabilities</b>		
Ordinary share capital	500 000	500 000
10% Preference share capital	350 000	300 000
Retained earnings	1 658 000	945 000
Shareholders' equity	2 508 000	1 745 000
Non-current loan	2 000 000	800 000
Debentures	600 000	600 000
Deferred tax	400 000	300 000
Current liabilities:		
- Accounts payable	400 000	100 000
	5 908 000	3 545 000

**Edwards Stores**  
**Statement of changes in equity**  
**For the year ended 31 December 20X2**

	Ordinary share capital C	Preference share capital C	Retained earnings C	Total C
Opening balances: 1/1/20X1	500 000	300 000	350 000	1 150 000
Total comprehensive income			645 000	645 000
Less dividends:				
- Preference dividends			(30 000)	(30 000)
- Ordinary dividends			(20 000)	(20 000)
Closing balances: 31/12/20X1	500 000	300 000	945 000	1 745 000
Total comprehensive income			760 000	760 000
Less dividends:				
- Preference dividends			(35 000)	(35 000)
- Ordinary dividends			(12 000)	(12 000)
Preference share issue		50 000		50 000
Closing balances: 31/12/20X2	500 000	350 000	1 658 000	2 508 000

**Solution to example 1: using the horizontal analysis****Edwards Stores****Statement of comprehensive income****For the year ended 31 December 20X2**

	20X2 C	20X1 C	% increase/ (decrease)
Gross revenue	5 000 000	3 000 000	67%
Cost of sales	3 000 000	1 500 000	100%
Gross profit	2 000 000	1 500 000	33%
Add interest income	100 000	90 000	11%
	2 100 000	1 590 000	32%
Other expenses:	800 000	290 000	176%
Computer software	50 000	20 000	150%
Bad debts	295 000	50 000	490%
Advertising	120 000	60 000	100%
Salaries and wages	90 000	40 000	125%
Insurance	200 000	100 000	100%
Depreciation	45 000	20 000	125%
Profit from operations	1 300 000	1 300 000	0%
Less finance charges	100 000	10 000	900%
Profit before tax	1 200 000	1 290 000	-7%
Taxation expense	440 000	645 000	-32%
Profit for the period	760 000	645 000	18%
<i>Other comprehensive income</i>	0	0	0%
Total comprehensive income	760 000	645 000	18%

**Edwards Stores****Statement of financial position****As at 31 December 20X2**

	20X2 C	20X1 C	% increase/ (decrease)
<b>Assets</b>			
Non-current assets	1 800 000	900 000	100%
Investment at cost	1 100 000	1 300 000	-15%
Current assets:	3 008 000	1 345 000	124%
- Inventory	1 500 000	375 000	300%
- Accounts receivable	1 500 000	350 000	329%
- Cash	8 000	620 000	-99%
	5 908 000	3 545 000	67%
<b>Equity and Liabilities</b>			
Ordinary share capital	500 000	500 000	0%
10% Preference share capital	350 000	300 000	17%
Retained earnings	1 658 000	945 000	75%
Shareholders' equity	2 508 000	1 745 000	44%
Non-current loan	2 000 000	800 000	150%
Debentures	600 000	600 000	0%
Deferred tax	400 000	300 000	33%
Current liabilities: Accounts payable	400 000	100 000	300%
	5 908 000	3 545 000	67%

**Interpretation of the horizontal analysis:****The statement of financial position:**

The following is a brief discussion of the most obvious interpretations of the Edward's Stores horizontal analysis of the statement of financial position:

- Finance has been increased by 67%, very little of which has been raised through equity finance (17% increase in preference share capital), with a massive increase of 150% in the relatively risky source of loan finance. Additional financing was obtained indirectly through the 300% increase in accounts payable, possibly indicating a continuing liquidity problem. Whereas the increase in accounts payable may reinforce the opinion that the company is suffering cash flow problems, it may indicate that the company is making use of relatively cheap form of finance and paying the debts only when they fall due. The disposal of 15% of the investments may also have been made in a bid to raise cash.
- The analysis of the assets shows a 100% increase in non-current assets, which accounts for approximately 38% of the 67% (C2 363 000) increase in financing (900 000/ 2 363 000). This may indicate that the company is adopting a positive approach to the future and increasing its operational capabilities in order to meet an expected increase in demand.
- The tremendous increase in inventories (300%) may indicate either obsolete and slow-moving inventories or stockpiling in expectation of a sudden increase in sales. Keeping a higher level of inventory on hand involves higher storage costs and insurance costs and, statistically, there is a higher risk of theft. The risk of damage to inventory and obsolescence also increases. Another suggestion is that the increase is due to a better quality and thus more expensive product which in turn may be the cause of the 67% increase in sales (see horizontal statement of comprehensive income analysis).
- It can be seen that debtors increased by an alarming 329%. This may be as a result of deteriorating collection procedures or it may be that, in order to secure additional sales, the sales staff waived the usual credit checks and offered extended credit terms. This may be the reason for the dramatic increase of 490% in bad debts (see the horizontal statement of comprehensive income analysis).  
An increase in accounts receivable that goes unchecked may cause liquidity problems, which may result in the company finding itself unable to pay its creditors on time. This possibly explains the dramatic 300% increase in accounts payable.
- The 99% decrease in cash seems to confirm the apparent cash shortage.

#### **The statement of comprehensive income:**

The following is a brief discussion of the most obvious interpretations of the horizontal statement of comprehensive income analysis:

- Sales increased by 67%, perhaps due to increased advertising (100% increase), but more probably as a result of the extended credit terms and limited credit checks (suggested by the 329% increase in accounts receivable and the 490% increase in bad debts).
- The cost of sales increased by 100% which exceeded the increase of 67% in sales: this may indicate that the inventory was of a better quality, and thus more expensive, with the higher quality contributing to the increased sales, (more expensive inventory may account for the 300% increase in inventories). Alternatively, in order to service additional sales, it may have been considered prudent to maintain a higher level of inventory than normal. It should be noted that higher levels of inventory frequently increase the cost of inventory and consequently, the cost of sales too:
  - bulk orders may be placed which, although usually reduces the price, may increase the costs instead if the inventory requirements become too large for the company's usual supplier/s, and it becomes necessary to use additional, more expensive suppliers.
  - if the company maintains a low level of inventory and as a result of the increasing demand, finds itself frequently placing 'rush orders', the cost of inventory will increase.
- Expenditure on insurance doubled, no doubt due to the increased levels of inventory and increase in value of the non-current assets.
- Depreciation increased by 125% due to the increase in non-current assets
- Interest expense increased by a dramatic 900% due to the large increase in loans.
- Salaries and wages increased by 125%, which may indicate that the store expected increased volumes of sales and hired more staff, or that the store extended its trading hours in order to secure more sales, in which case the increase may be the extra overtime pay.
- The 150% increase in computer software may be due to replacement of old software, or may be brand new software purchased as a result of the intention to process accounting records internally rather than to use a computer bureau. The increase in non-current assets may therefore be partly due to an increase in computers.

- Despite the 67% increase in sales, the gross profit increased by only 33% and, worse still, the profit before tax *decreased* by 7%. The profit after tax managed to increase by 18%, but this was as a result of a 32% decrease in tax. This indicates that the operational efficiency is deteriorating.

**Solution to example 1: using the vertical analysis**

Edwards Stores Statement of financial position As at 31 December 20X2	20X2 C	20X1 C	20X2 %	20X1 %
<b>Assets</b>				
Non-current assets	1 800 000	900 000	30%	25%
Investment at cost	1 100 000	1 300 000	19%	37%
Current assets	3 008 000	1 345 000	51%	38%
- Inventory	1 500 000	375 000	25,4%	10,6%
- Accounts receivable	1 500 000	350 000	25,4%	9,9%
- Cash	8 000	620 000	0,2%	17,5%
	5 908 000	3 545 000	100,0%	100,0%
<b>Equity and Liabilities</b>				
Ordinary share capital	500 000	500 000	8%	14%
10% Preference share capital	350 000	300 000	6%	8%
Retained earnings	1 658 000	945 000	28%	27%
Shareholders equity	2 508 000	1 745 000	42%	49%
Long-term loan	2 000 000	800 000	34%	23%
Debentures	600 000	600 000	10%	17%
Deferred taxation	400 000	300 000	7%	8%
Current liabilities	400 000	100 000	7%	3%
	5 908 000	3 545 000	100%	100%

Edwards Stores Statement of comprehensive income For the year ended 31 December	20X2 C	20X1 C	20X2 %	20X1 %
Gross revenue	5 000 000	3 000 000	100%	100%
Cost of sales	3 000 000	1 500 000	60%	50%
Gross profit	2 000 000	1 500 000	40%	50%
Add interest income	100 000	90 000		
Gross income	2 100 000	1 590 000	100%	100%
Other expenses:	800 000	290 000	38,1%	18,2%
Computer software	50 000	20 000	2,4%	1,3%
Bad debts	295 000	50 000	14,0%	3,1%
Advertising	120 000	60 000	5,7%	3,8%
Salaries and wages	90 000	40 000	4,3%	2,5%
Insurance	200 000	100 000	9,5%	6,3%
Depreciation	45 000	20 000	2,1%	1,3%
Profit before finance charges	1 300 000	1 300 000	61,9%	81,8%
Less finance charges	100 000	10 000	4,8%	0,6%
Profit before tax	1 200 000	1 290 000	57,1%	81,1%
Taxation expense	440 000	645 000	21,0%	40,6%
Profit for the period	760 000	645 000	36,2%	40,6%
<i>Other comprehensive income</i>	0	0	0	0
Total comprehensive income	760 000	645 000	36,2%	40,6%

**Interpretation of the vertical analysis:****The statement of financial position:**

The elements in the statement of financial position are analysed as a percentage of total financing (equity and liabilities).

- From the analysis above, it can be seen that whereas in 20X1 only 25% of total financing was spent on non-current assets, 30% has been allocated this year. Normally, with an increase in non-current assets, a resultant increase in profits is expected, yet the profits have deteriorated since 20X1 (as evidenced by the horizontal analysis above).
- The percentage spent on investments decreased from 37% to 19%. It is difficult to say from such an analysis whether or not this was advantageous to the company. It will be necessary to calculate the return on investment and compare it with the return on non-current assets and return on equity (these calculations form part of the ratio analysis).
- The investment in inventory has increased from 10,6% to 25,4%. This increase may be due to the increase in demand evidenced by the 67% increase in sales (see the horizontal analysis of the statement of comprehensive income). Conversely, it may indicate that the inventory is slow-moving or obsolete.
- The increase in accounts receivable from 9,9% to 25,4% may indicate that the company's debtors collection policy is deteriorating or that extended credit terms were offered.
- The retention of 17,5% of financing in the form of cash reserves has dropped to 0,2%, which may indicate severe cash flow problems or may be an indication of a more risk seeking approach from management. This should not always be seen as a fault, since as the saying goes: the higher the risk, the higher the return.

**The statement of comprehensive income:**

The vertical analysis of the statement of comprehensive income above, includes a twofold analysis: it first analyses cost of sales and gross profit as a percentage of sales and since there is 'other income', the rest of the statement of comprehensive income has been analysed as a percentage of gross income instead. There is, however, no specific approach that has to be followed when performing such an analysis. The emphasis here is simply to perform an analysis that provides the user with information that is useful to him. For instance, the analysis could have been done with each line item of expenses shown as a percentage of total expenses, sales or, indeed gross income. The variations are endless.

The vertical analysis of a statement of comprehensive income assists in gauging the efficiency of company operations. For example, for every C1 of sales, C0.60 was spent on the cost of the inventory sold which is more than was spent last year (C0.50 per C1 of sales). This obviously means that the cost effectiveness of operations has deteriorated somewhat since last year. Each line item can be analysed in this way (i.e. as a percentage of sales). Since, however, other income has also been earned, each line item has been calculated as a percentage of the total gross income instead of sales.

The more dramatic movements are commented upon overleaf:

- The increase in the cost of sales as a percentage of sales may indicate a poor buying policy (e.g. increased rush orders), a more expensive supplier, a better quality product or may simply reflect the effects of inflation.
- There has been a very serious increase in bad debts with C0.14 out of every C1 of profit being lost to bad debts whereas, in the prior year, only C0.031 was lost in this way. This seems to correlate with the increase in debtors: debtors constituted 9,9% of total finance in 20X1 whereas 25,4% of total finance in 20X2.
- The cost of financing is taking a substantially bigger bite out of sales, with almost C0.05 out of every C1 of sales being spent on financing versus only C0.006 in 20X1.
- Similarly, the cost of insurance is now C0.095 out of every C1 of gross income versus only C0.063 in 20X1. This would seem due to the increased investment in inventories from 10,6% to 25,4 % and a similar increase in non-current assets from 25% to 30% (as revealed in the vertical analysis of the statement of financial position).
- There has been a significant decrease in tax, from almost C0.41 for every C1 of gross income to C0.21 thereof in 20X2. Assuming that there are no permanent differences or other reconciling items, this would mean that there was a change in tax rate. This resulted in the profit *after* tax

decreasing by only C0.043 per C1 of gross income (from C0.405 to C0.362) whereas, the profit *before* tax actually decreased by C0.24 per C1 since 20X1.

### Conclusion:

Despite the 100% increase in non-current assets, the profit before tax (a truer reflection of the profitability of the company than the profit after tax, whose decrease was diluted by the decrease in the tax rate), decreased by 7%. Whereas C0.81 per C1 was retained as profit (before tax) in 20X1, only C0.57 per C1 of profit was retained in 20X2.

As far as the liquidity is concerned, it appears that the company suffered a cash flow shortage (partly due to the increased investment in non-current assets) with the result that the company raised 67% in finance during the year.

The increase in accounts receivable and accounts payable seem to indicate that there is a continuing cash flow shortage with the collection of accounts receivable impacting adversely on the ability to repay the creditors. Although there was an increased investment in current assets (from 38% to 51% of total assets), the increase resulted from inventories and accounts receivable, with cash having *reduced* by 99%. This would seem to confirm a cash flow problem.

The finance structure of the company seems to rely too heavily on risky loan finance than equity.

All in all, the company appears to have deteriorated since 20X1 and thus investment therein should be avoided.

*Comment: The interpretation of the analysis may differ from one user to another and reasons offered for increases and decreases are suggestions only.*

*Please also note that when analysing the statement of comprehensive income references are still made to the statement of financial position (and vice versa): the most important aspect of an analysis and interpretation is to see the bigger picture and therefore different line items, financial statements and techniques should be considered together rather than separately.*

## 6. Ratio analysis in more detail

The following are the financial statements of Cashew-head Limited, a retailer of nuts. You are to refer to these financial statements for a demonstration of the calculation of ratios throughout this chapter.

### Cashew-head Limited Statement of comprehensive income For the year ended 31 December 20X6

	20X6 C	20X5 C
Revenue from sales	8 750 000	5 250 000
Cost of sales	5 250 000	2 625 000
Gross profit	3 500 000	2 625 000
Total other expenses	1 400 000	507 500
Profit before finance charges	2 100 000	2 117 500
Finance charges (all relating to no-current liabilities)	175 000	17 500
Profit before tax	1 925 000	2 100 000
Taxation expense	577 500	630 000
Profit for the year	1 347 500	1 470 000
<i>Other comprehensive income</i>	0	0
Total comprehensive income	1 347 500	1 470 000
Market price per share	1,25	1,00

**Cashew-head Limited**  
**Statement of financial position**  
**As at 31 December 20X6**

	<b>20X6</b>	<b>20X5</b>
	<b>C</b>	<b>C</b>
<b>ASSETS</b>		
<i>Non-current assets</i>	3 150 000	1 575 000
<i>Investment at cost</i>	1 925 000	2 275 000
<i>Current assets</i>	5 264 000	2 353 750
Inventory	2 625 000	656 250
Accounts receivable	2 625 000	612 500
Cash	14 000	1 085 000
	<u>10 339 000</u>	<u>6 203 750</u>
<b>EQUITY AND LIABILITIES</b>		
<i>Issued share capital and reserves</i>	4 747 750	3 395 000
<i>Non-current liabilities</i>		
Non-current loan	3 500 000	1 400 000
Debentures	1 050 000	1 050 000
Deferred taxation	700 000	183 750
<i>Capital employed</i>	<u>9 997 750</u>	<u>6 028 750</u>
<i>Current liabilities</i>		
Accounts payable	341 250	175 000
	<u>10 339 000</u>	<u>6 203 750</u>

**Cashew-head Limited**  
**Statement of changes in equity**  
**For the year ended 31 December 20X6**

	<b>Ordinary share capital C3.50 each C</b>	<b>Preference share capital C</b>	<b>Retained earnings C</b>	<b>Total C</b>
Opening balances: 1 January 20X5	875 000	525 000	612 500	2 012 500
Total comprehensive income			1 470 000	1 470 000
Less dividends declared:				
- Preference dividends			(52 500)	(52 500)
- Ordinary dividends			(35 000)	(35 000)
Opening balances: 1 January 20X6	875 000	525 000	1 995 000	3 395 000
Total comprehensive income			1 347 500	1 347 500
Less dividends declared:				
- Preference dividends			(61 250)	(61 250)
- Ordinary dividends			(21 000)	(21 000)
Preference share issue		87 500		87 500
Closing balances: 31 December 20X6	<u>875 000</u>	<u>612 500</u>	<u>3 260 250</u>	<u>4 747 750</u>

## 6.1 Profitability Ratios

### 6.1.1 Gross Profit Percentage/margin

$$\frac{\text{Gross profit}}{\text{Net sales}} \times \frac{100}{1}$$

This ratio can fluctuate for a number of reasons:

- *Changes in mark-up*  
This could involve either a direct change to the selling price or the offering of *trade/ cash* discount: the sales figure disclosed on the face of the statement of comprehensive income is net of trade and cash discounts.
- *Changes in sales mix*  
Imagine a company that produces two products, say A and B: A produces C0.20 gross profit per C1 of sales, whereas B produces C0.50 gross profit per C1 of sales. If the company usually sold A and B in equal quantities, for every C2 of sales C0.70 would be the gross profit. If the company's sales mix then changed so that twice as many A's were sold as B's, (in other words, for every B that is sold, two A's are sold), for every C3 of sales C0.90 gross profit would be made (2 x C0.20 + 1 x C0.50). Where equal quantities are sold, the gross profit percentage is 35% (70/200 x 100), whereas the gross profit percentage drops to 30% (90/300 x 100) in the event that twice as many A's are sold as B's. The reason is that the sales mix has changed, with more sales of A's which offer a lower gross profit percentage.
- *Stock thefts*  
Theft of inventory causes the closing stock to decrease and therefore the cost of sales to increase in a manner that is out of proportion to the sales.
- *Incorrect inventory counts*  
Obviously, if either the opening or closing balance of inventory is incorrect, it will cause the cost of sales to increase/decrease in a manner that is out of proportion to the sales.
- *Incorrect/ inconsistent valuation of inventory*  
Obviously, if either the opening or closing balance of inventory has been valued incorrectly or inconsistently, the cost of sales will be distorted.

#### Example 2: Cashew-head Limited: gross profit percentage margin

		20X6		20X5	
$\frac{\text{Gross profit}}{\text{Net sales}}$	x	$\frac{3\,500\,000}{8\,750\,000}$	=	$\frac{2\,625\,000}{5\,250\,000}$	x
		$\frac{100}{1}$		$\frac{100}{1}$	
			= 40%		= 50%

### 6.1.2 Net Profit Percentage/margin

$$\frac{\text{Profit before finance charges and tax}}{\text{Net sales}} \times \frac{100}{1}$$

The net profit figure used should be *before* interest and tax so that the profit from the business operations is not influenced either by the financing methods adopted by the entity or the tax structure of the country in which it operates. Ideally, any non-operating income e.g. investment income should also be excluded, since the purpose of the ratio is to calculate that portion of every C1 of sales that is saved (i.e. not spent through the *operations* of the business).

Items that would affect the net profit percentage include:

- any change that affects the gross profit percentage (above) will obviously also affect the net profit percentage;



- changes to the operating expenditure (e.g. bad debts, cash discount, depreciation) and other income (if included) will affect the net profit percentage.

It is slightly more difficult to ascertain the true reasons behind a change in net profit percentage if the user is faced with a set of published financial statements. This is because International Reporting Standards and other legislative requirements necessitate only limited disclosure of the related items.

Although a reduction in operating expenses could naturally be expected to lead to increased profitability, excessive reduction thereof could, in fact, leave the company operating inefficiently and an inefficient operation will ultimately reduce profits anyway.

<b>Example 3: Cashew-head Limited: net profit percentage margin</b>					
		<b>20X6</b>		<b>20X5</b>	
<u>Profit before tax &amp; interest</u>	x $\frac{100}{1}$	<u>2 100 000</u>	x $\frac{100}{1}$	<u>2 117 500</u>	x $\frac{100}{1}$
Net sales	=	8 750 000	=	5 250 000	=
		= 24%		40%	

### 6.1.3 Return on capital employed

$$\frac{\text{Profit before finance charges and tax}}{\text{Average capital employed}} \times \frac{100}{1}$$

‘Capital employed’ constitutes share capital and long-term finance. This ratio therefore calculates the average return belonging to both the suppliers of capital and the long-term financiers. For the sake of simplicity, the ratio is normally calculated with the ‘numerator’ being ‘profits *before* tax’ rather than *after* tax. When reversing the interest expense, care must be taken *not* to reverse any interest paid to the short-term suppliers of finance (i.e. the profits calculated must be after payment of interest to the short-term financiers), since that interest does not belong to the providers of long-term capital.

Illustration: Imagine that a company has profits before tax of C50 and that these profits are calculated after deducting the interest expense of C50: C20 interest to short-term financiers and C30 interest to long-term financiers. The profit before interest and tax is calculated as follows:

Profits before taxation and interest (balancing)	C 100
Less interest paid to short-term financiers	20
Less interest paid to long-term financiers	30
Profits before taxation	<u>50</u>

Bearing in mind that the aim of this ratio is to indicate the earnings before tax (as a percentage return) belonging to the providers of capital and *long-term* finance, it should be obvious that not all of the C100 ‘profit before interest and tax’ belongs to the aforementioned providers. Instead, C20 thereof belongs to the short-term financiers. Therefore, one must only reverse the interest that belongs to the long-term financiers (i.e. C50 + C30 = C80 belongs to the providers of capital and long-term finance).

<b>Example 4: Cashew-head Limited: return on capital employed</b>					
		<b>20X6</b>			
<u>Profit before finance charges and tax</u>	x $\frac{100}{1}$	<u>2 100 000</u>	x $\frac{100}{1}$		
Average capital employed	=	$(9\,997\,750 + 6\,028\,750) / 2$	=		
		= 26,21%			

### 6.1.4 Return on owners' equity

$$\frac{\text{Profit after tax and preference dividends}}{\text{Average ordinary shareholders' equity}} \times \frac{100}{1}$$

This is an important ratio to the owners of the shares since they require a certain return relative to the risks involved with the investment in the entity.

Since the object of this formula is to calculate the return owing to the ordinary shareholders, the earnings should be calculated by deducting preference dividends and tax since both the preference shareholders and the tax authorities have first rights to the profits: any profits remaining belong to the ordinary shareholders. Ordinary dividends should not be deducted since they belong to the ordinary shareholders.

<b>Example 5: Cashew-head Limited: return on owners' equity</b>			
			<b>20X6</b>
<u>Profit after tax and preference dividends</u>	<u>100</u>		<u>1 347 500 – 61 250</u>
Average ordinary shareholder's equity	x 1	=	(4 747 750 – 612 500 + 3 395 000 – 525 000) / 2
			x <u>100</u>
			<u>1</u>
		=	36,7%

### 6.1.5 Return on assets

$$\frac{\text{Profit before finance charges and tax}}{\text{Average total assets}} \times \frac{100}{1}$$

As with the return on capital employed, the effects of financing should be removed. This ratio indicates the effectiveness of management's use of the company assets entrusted to them.

<b>Example 6: Cashew-head Limited: return on assets</b>			
			<b>20X6</b>
<u>Profit before finance charges and tax</u>	<u>100</u>		<u>2 100 000</u>
Average total assets	x 1	=	(10 339 000 + 6 203 750) / 2
			x <u>100</u>
			<u>1</u>
		=	25,4%

### 6.1.6 Earnings per ordinary share

$$\frac{\text{Profit after tax less preference dividends}}{\text{Number of ordinary shares}} \times \frac{100}{1}$$

This ratio is very similar to the 'return on ordinary equity' although the 'earnings per share' is calculated as a *value* per share whereas in the former case, earnings are calculated as a *percentage* of the value of capital.

'Earnings per share' is usually calculated for ordinary shares only since preference shares generally do not share in *earnings* (unless participative), but rather in a fixed dividend only. 'Earnings per share' must be disclosed either on the face of the statement of comprehensive income or in the notes thereto. IAS 33 governs the calculation and disclosure of 'earnings per share'.

<b>Example 7: Cashew-head Limited: earnings per ordinary share</b>			
			<b>20X6</b>
<u>Profit after tax less preference dividends</u>	=	<u>(1 347 500 – 61 250)</u>	<u>20X5</u>
Number of ordinary shares		(875 000 / 3,5)	<u>(1 470 000 – 52 500)</u>
		=	(875 000 / 3,5)
		5,15	5,67

### 6.1.7 Dividends per share

$$\frac{\text{Ordinary (or preference) dividends}}{\text{Number of ordinary (or preference) shares}} \times \frac{100}{1}$$

In contrast to the 'earnings per share' ratio, which merely calculates how much has been *earned* per share, this ratio calculates how much has actually been *declared* to the shareholders.

'Dividends per share' can be calculated for any class of share. It should be disclosed either in the statement of changes in equity or in the notes thereto.

<b>Example 8: Cashew-head Limited: dividends per ordinary share</b>		
Ordinary dividends	=	<b>20X6</b> 21 000
Number of ordinary shares	=	(875 000 / 3,5)
	=	0,08
		<b>20X5</b> 35 000
		(875 000 / 3,5)
		0,14

### 6.1.8 Ordinary dividend payout ratio

$$\frac{\text{Dividends per share}}{\text{Earnings per share}}$$

Or

$$\frac{\text{Dividends}}{\text{Earnings}}$$

This ratio calculates the percentage of the earnings belonging to the ordinary shareholder that are actually distributed to the ordinary shareholder.

<b>Example 9: Cashew-head Limited: ordinary dividend payout ratio</b>		
Ordinary dividends per share	=	<b>20X6</b> 0,08
Earnings per ordinary share	=	5,15
	=	0,016 : 1
		<b>20X5</b> 0,14
		5,67
		0,025 : 1

### 6.1.9 Price earnings ratio

$$\frac{\text{Market price per share}}{\text{Earnings per share}}$$

This ratio reflects how much investors are willing to pay per C1 of reported profits. Theoretically, the greater the profits the more they would be willing to pay. There are, however, many other factors that play a part in determining the market price per share, e.g. the company's performance relative to other companies in the industry, inflation, the risks relating to the investment in the company and expected future growth.

<b>Example 10: Cashew-head Limited: price earnings ratio</b>		
Market price per ordinary share	=	<b>20X6</b> 1,25
Earnings per ordinary share	=	5,15
	=	= 0,24 : 1
		<b>20X5</b> 1,00
		5,67
		= 0,18 : 1

### 6.1.10 Earnings yield

$$\frac{\text{Earnings per share}}{\text{Market price per share}} \times \frac{100}{1}$$

This calculates the earnings as a percentage of each C1 invested.

<b>Example 11: Cashew-head Limited: earnings yield</b>		
Earnings per ordinary share	=	<b>20X6</b> 5,15
Market price per ordinary share	=	1,25
	=	412%
		<b>20X5</b> 5,67
		1,00
		567%

**6.1.11 Dividend yield**

$$\frac{\text{Dividends per share}}{\text{Market price per share}} \times \frac{100}{1}$$

This calculates the dividends as a percentage of each C1 invested. A high dividend yield may be as a result of either a relatively high payout or a share price that is very low (perhaps indicating market sentiment that the company has a limited future).

**Example 12: Cashew-head Limited: dividend yield**

		20X6	20X5
$\frac{\text{Dividend per ord share}}{\text{Market price per ord share}} \times 100$	=	$\frac{0,084 \times 100}{1,25}$	$\frac{0,14 \times 100}{1,00}$
	=	6,7%	14%

**6.2 Liquidity ratios**

Liquidity ratios indicate the ability of the company to repay its debts in the short-term.

**6.2.1 Current ratio**

Current assets: current liabilities

The current ratio indicates the ability to repay the current liabilities out of the current assets. Theoretically, the normal ratio is considered to be 2:1.

**Example 13: Cashew-head Limited: current ratio**

		20X6	20X5
Current assets: Current liabilities	=	5 264 000 : 341 250	2 353 750 : 175 000
	=	15,4 : 1	13,45 : 1

**6.2.2 Acid-test ratio**

Current assets - inventory: current liabilities

The acid-test ratio is a modified current ratio that takes into account the fact that inventory may be a relatively difficult current asset to convert into cash. This ratio therefore reflects a more conservative view of the ability of the company to repay its current liabilities within a short period. Theoretically, the normal ratio is considered to be 1:1.

**Example 14: Cashew-head Limited: acid-test ratio**

		20X6	20X5
Current assets - inventory: Current liabilities	=	$\frac{5\,264\,000 - 2\,625\,000}{341\,250}$	$\frac{2\,353\,750 - 656\,250}{175\,000}$
	=	7,73 : 1	9,7 : 1

**6.2.3 Working capital ratio**

Working capital: total assets

This ratio indicates the percentage of total assets that are relatively liquid. Working capital is calculated as 'current assets – current liabilities'.

**Example 15: Cashew-head Limited: working capital ratio**

		20X6	20X5
Working capital: Total assets	=	$\frac{5\,264\,000 - 341\,250}{10\,339\,000}$	$\frac{2\,353\,750 - 175\,000}{6\,203\,750}$
	=	0,48 : 1	0,35 : 1



**Example 18: Cashew-head Limited: days supply on hand**

		<b>20X6</b>				
<u>Average inventory balance</u>	x	$\frac{365}{1}$	=	$\frac{(2\,625\,000 + 656\,250) / 2}{5\,250\,000}$	x	$\frac{365}{1}$
Cost of sales			=	114,063 days		

**6.2.7 Inventory turnover**

$$\frac{\text{Cost of sales}}{\text{Average inventory balance}}$$

This ratio indicates how fast inventory is turned over (sold) - i.e. how liquid inventory is. A low turnover may indicate over-stocking or obsolescence whereas a high turnover may indicate under-stocking. Comparing this to the 'days stock on hand' ratio brings us to another way of calculating the inventory turnover:

$$\frac{365}{\text{Days inventory on hand}}$$

**Example 19: Cashew-head Limited: inventory turnover**

		<b>20X6</b>	
<u>Cost of sales</u>	=	$\frac{5\,250\,000}{(2\,625\,000 + 656\,250) / 2}$	
Average inventory balance	=	3,2 times	

**6.2.8 Creditors payment period**

$$\frac{\text{Average creditors balance}}{\text{Credit purchases per day}}$$

or

$$\frac{\text{Average creditors balance}}{\frac{\text{Credit purchases}}{365}}$$

or

$$\frac{\text{Average creditors balance}}{\text{Credit purchases}} \times 365$$

This ratio indicates how long we take to pay our trade creditors: a long period could indicate cash flow problems or that we are making full use of relatively cheap finance (but beware the cost of the loss of cash discounts) or it may indicate that credit terms have been extended.

**Example 20: Cashew-head Limited: creditors' payment period**

		<b>20X6</b>				
<u>Average creditors balance</u>	x	$\frac{365}{1}$	=	$\frac{(341\,250 + 175\,000) / 2}{(5\,250\,000 + 2\,625\,000 - 656\,250)}$	x	$\frac{365}{1}$
Credit purchases			=	13,05 days		

**6.2.9 Creditors turnover**

$$\frac{\text{Credit purchases}}{\text{Average creditors balance}}$$

This ratio indicates how many times creditors are paid during the period.

<b>Example 21: Cashew-head Limited: creditors' turnover</b>		
		<b>20X6</b>
<u>Credit purchases</u>	=	$(5\,250\,000 + 2\,625\,000 - 656\,250)$
Average creditors balance	=	$(341\,250 + 175\,000) / 2$
	=	30 times

### 6.2.10 Business cycle

Days supply of inventory + debtors collection period – creditors repayment period

This ratio indicates how long cash is tied up in the operating cycle and therefore helps budget for cash requirements needed to operate the business.

<b>Example 22: Cashew-head Limited: business cycle</b>		
		<b>20X6</b>
Days supply of inventory	=	114,063 + 67,525 – 13,05
+ debtors collection period	=	168,538
– creditors repayment period	=	

## 6.3 Solvency/ structure ratios

The solvency or structure ratios indicate the ability to meet long-term obligations.

### 6.3.1 Equity ratio

Owners' equity: total assets (non-current and current)

This ratio indicates how much of the asset base is financed by owners thus also indicating the strength of the company. It is interesting to note that redeemable preference shares could be argued to be debt rather than equity.

<b>Example 23: Cashew-head Limited: equity ratio</b>		
		<b>20X6</b>
Owner's equity: total assets	=	4 747 750 : 10 339 000
	=	0,46 : 1
		<b>20X5</b>
		3 395 000 : 6 203 750
		0,55 : 1

### 6.3.2 Debt ratio

Total debt (non-current and current): total assets (non-current and current)

This ratio indicates how much of the asset base is financed by external parties. Once again, redeemable preference shares could be argued to be debt not equity.

<b>Example 24: Cashew-head Limited: debt ratio</b>		
		<b>20X6</b>
Total debt: total assets	=	$(10\,339\,000 - 4\,747\,750) :$
		10 339 000
	=	0,54 : 1
		<b>20X5</b>
		$(6\,203\,750 - 3\,395\,000) :$
		6 203 750
		0,45 : 1

**6.3.3 Solvency ratio**

Total assets (non-current and current): total debt (non-current and current)

This is the inverse of the debt ratio. It indicates how much of the liabilities are covered by assets - in essence, the capacity of the company to repay its debts in the long-term. Interestingly, this ratio does not take into account the timing of the repayments and therefore the company may appear to be solvent and at the same time be illiquid! (See liquidity ratios)

<b>Example 25: Cashew-head Limited: solvency ratio</b>		
	<b>20X6</b>	<b>20X5</b>
Total assets: total debt =	10 339 000 :	6 203 750 :
	(10 339 000 – 4 747 750)	(6 203 750 – 3 395 000)
=	1,85 : 1	2,21 : 1

**6.3.4 Debt equity ratio**

Total debt (non-current and current): shareholders' equity (ordinary, preference)

This ratio indicates the ratio in which the company is financed by internal shareholders' capital (equity) versus external third party capital (debt). Debt is considered to be cheaper but riskier than equity finance.

<b>Example 26: Cashew-head Limited: debt equity ratio</b>		
	<b>20X6</b>	<b>20X5</b>
Total debt: shareholders' equity =	(10 339 000 – 4 747 750)	(6 203 750 – 3 395 000)
	: 4 747 750	: 3 395 000
=	1,18 : 1	0,83 : 1

**6.3.5 Borrowing ratio**

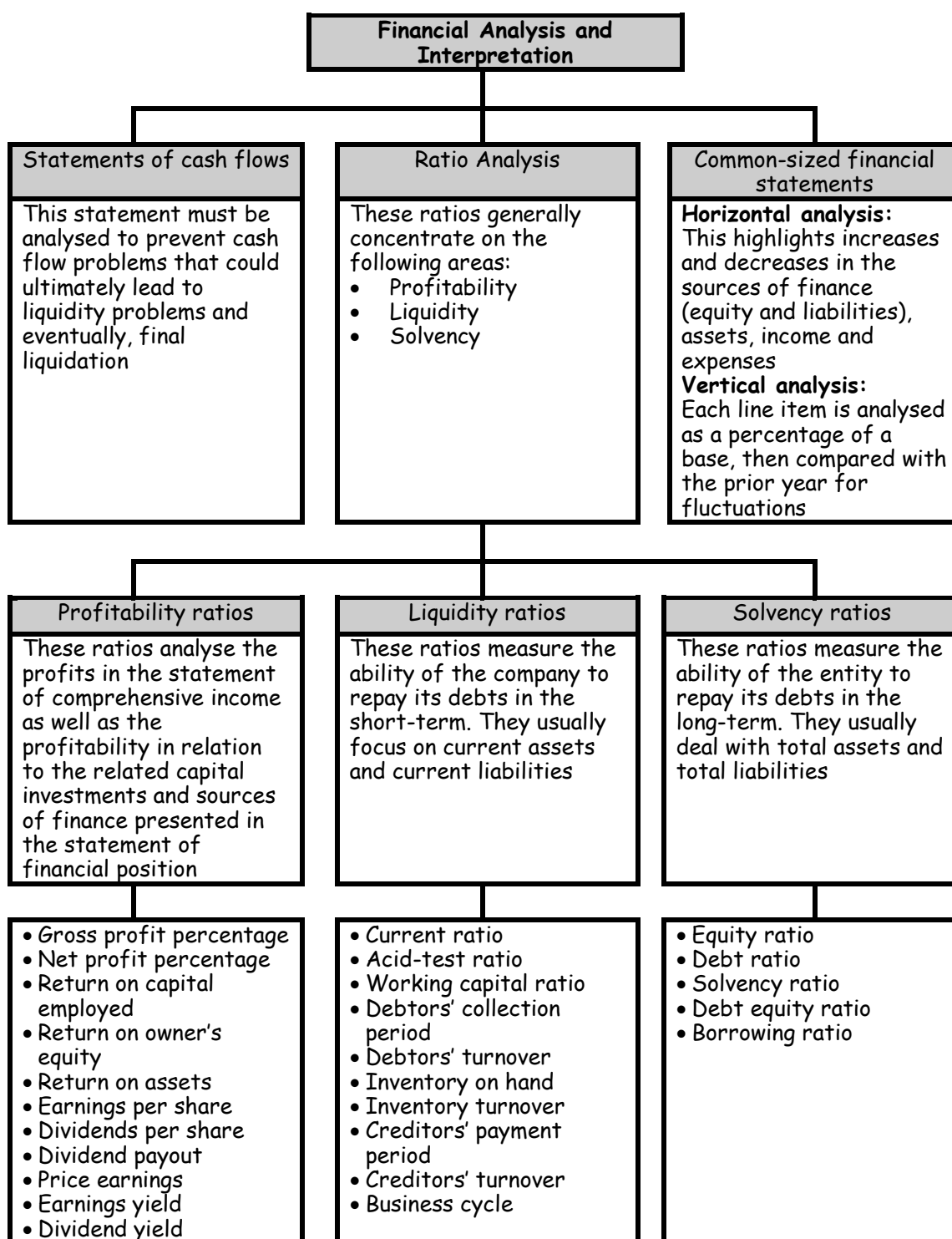
Interest bearing debt: shareholders' equity

This ratio is similar to the debt equity ratio except that it only concentrates on the debt that costs the company money. In other words, non-current debt would exclude items such as deferred tax and current debt would exclude items such as accruals.

<b>Example 27: Cashew-head Limited: borrowing ratio</b>		
	<b>20X6</b>	<b>20X5</b>
Interest bearing debt: shareholders' equity =	(3 500 000 + 1 050 000 + 341 250)	(1 400 000 + 1 050 000 + 175 000)
	: 4 747 750	: 3 395 000
=	1,03 : 1	0,77 : 1



## 7. Summary



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