



**Diploma
in
Business Administration**

Study Manual

ACCOUNTING

The Association of Business Executives

William House • 14 Worple Road • Wimbledon • London • SW19 4DD • United Kingdom

Tel: + 44(0)20 8879 1973 • Fax: + 44(0)20 8946 7153

E-mail: info@abeuk.com • www.abeuk.com

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ABE Diploma in Business Administration

Study Manual

ACCOUNTING

Contents

<i>Study Unit</i>	<i>Title</i>	<i>Page</i>
	Syllabus	i
1	The Nature and Purpose of Accounting	1
	The Scope of Accounting	3
	Users of Accounting Information	4
	Rules of Accounting (Accounting Standards)	6
	Accounting Periods	11
	The Fundamental Concepts of Accounting	12
	Other Accounting Concepts	15
	Important Accounting Terms	17
	Different Types of Business Entity	19
2	Business Funding	23
	Capital of a Company	25
	Dividends	32
	Debentures	33
	Types and Sources of Finance	36
	Management of Working Capital	41
3	Final Accounts and Balance Sheet	45
	The Trial Balance	47
	Trading Account	49
	Manufacturing Account	51
	Profit and Loss Account	54
	Allocation or Appropriation of Net Profit	59
	The Nature of a Balance Sheet	62
	Assets and Liabilities in the Balance Sheet	63
	Distinction between Capital and Revenue	67
	Preparation of Balance Sheet	68
4	The Published Accounts of Limited Companies	73
	The Companies Act 1985 and Accounting Requirements	75
	The Balance Sheet	80
	The Profit and Loss Account	89
	FRS 3: Reporting Financial Performance	97

5	Profit and Cash Flow	101
	Availability of Profits for Distribution	102
	Cash Flow Statements	105
	Funds Flow Statements	120
6	Valuation and Depreciation	123
	Valuation of Stocks	124
	Valuation of Long-Term Contracts	130
	The Importance of Stock Valuation	131
	Depreciation	134
	Methods of Providing for Depreciation	137
7	Further Accounting Standards and Concepts	143
	SSAP 3: Earnings Per Share	145
	SSAP 4: Accounting for Government Grants	145
	SSAP 5: Accounting for Value Added Tax	146
	SSAP 8: The Treatment of Taxation	146
	SSAP 13: Accounting for Research and Development Expenditure	146
	SSAP 17: Accounting for Post Balance Sheet Events	148
	SSAP 18: Accounting for Contingencies	150
	FRS 4: Capital Instruments	151
	FRS 10: Goodwill and Intangible Assets	152
	Accounting for Inflation	155
8	Assessing Financial Performance	163
	Interpretation of Accounts	165
	Ratio Analysis	167
	Profitability Ratios	171
	Liquidity Ratios	173
	Efficiency Ratios	175
	Capital Structure Ratios	177
	Investment Ratios	178
	Limitations of Accounting Ratios	181
	Worked Examples	182
	Issues in Interpretation	189

9	Sources and Costs of Finance	199
	Finance and the Smaller Business	201
	Finance and the Developing Business	204
	Finance for the Major Company	207
	The London Money Market	213
	The Cost of Finance	214
	Cost of Equity	215
	Cost of Preference Shares	217
	Cost of Debt Capital	217
	Weighted Average Cost of Capital (WACC)	218
	Cost of Internally Generated Funds	219
	Management of Factors Affecting Share Prices	221
	Factors Determining Capital Structure	224
	Advantages and Disadvantages of the Principal Financial Alternatives	227
10	Financial Reconstruction	231
	Redemption of Shares	232
	Accounting Treatment	233
	Example of Redemption of Preference Shares	233
	Example of Redemption of Ordinary Shares	236
	Redemption of Debentures	239
11	Group Accounts 1: Regulatory and Accounting Framework	245
	Companies Act Requirements	247
	FRS 2: Accounting for Subsidiary Undertakings	250
	Frs 9: Accounting for Associated Undertakings and Joint Ventures	253
	FRS 7: Fair Values in Acquisition Accounting	259
	Alternative Methods of Accounting for Group Companies	260
	Merger Accounting	264
12	Group Accounts 2: The Consolidated Accounts	269
	The Consolidated Balance Sheet	270
	The Consolidated Profit And Loss Account	286
	Group Accounts – Example	296

Diploma in Business Administration – Part 1

Accounting

Syllabus

Aims

1. To demonstrate an understanding of the theoretical framework of accounting and the principles underlying accounting statements.
2. To demonstrate an understanding of the application of accounting systems using information technology.
3. To be able to prepare and present limited company financial statements.
4. To evaluate the performance and financial position of organisations from their financial statements

Programme Content and Learning Objectives

After completing the programme, the student should be able to:

1. **The theoretical framework**
 - Scope and objectives of accounting
 - The users of accounting information and their needs
 - Traditional accounting conventions
 - The distinction between capital and revenue expenditure
 - Use of information technology in accounting
2. **The financial statements of limited companies**
 - External publications of companies' financial statements
 - An understanding of the different elements that make up the externally reported financial statements
 - An appreciation of the rules contained in generally accepted accounting practice
3. **Interpretation of financial statements**
 - Application of financial ratios in order to help interpret financial statements
 - Investors' ratios
 - Limitations of ratio analysis
 - Accounting ratios and inflation: the impact of changing prices on financial statements and methods of adjusting historic cost accounts to reflect the impact of inflation.

4. Capital structure and gearing

- Types of shares and loans
- Issues and redemption of shares and debentures
- The relationship between equity and debt-gearing

5. Consolidated accounts

- Principles of consolidation
- Inter-company items and their elimination
- Comparison of the acquisition method with the merger method

6. Sources of finance

- The various sources of finance available to businesses
- Differentiation between short-term, medium-term and long-term sources of finance
- An appreciation of the differing financing needs of organisations

Method of Assessment

By written examination. The pass mark is 40%. Time allowed 3 hours.

The question paper will contain three sections:

Section A: Ten compulsory multiple choice questions, each question carrying one mark (10 marks)

Section B: One compulsory question (30 marks)

Section C: Four questions, two of which must be answered and each carrying 30 marks (60 marks)

Financial tables will be provided. Students may use electronic calculators, but are reminded of the need to show explicit workings.

Reading List:***Essential Reading***

- Letza, S. R. (?), *Accounting for Business Executives*; CRICR

Additional Reading

- Wood, F. (?), *Business Accounting*, Vol. 2; Pitman
- Pizzey, A. V. (?), *Accounting and Finance: A Firm Foundation*; Cassell
- Glautier, M. W. E. and Underdown, B. (?), *Accounting Theory and Practice*; Pitman
- Blake, J. (?), *Concise Guide to Interpreting Accounts*; Van Nostrand
- Elliott, B. and Elliott, J. (?), *Financial Accounting and Reporting*; Prentice Hall

Journals

- Accountancy
- Accounting and Business
- Accountancy Age
- The Certified Accountant Students' Newsletter

Study Unit 1

The Nature and Purpose of Accounting

<i>Contents</i>	<i>Page</i>
A. The Scope of Accounting	3
The Purpose of Accounting	3
Financial Accounting and Management Accounting	3
Money as the Common Denominator	3
The Business Entity	4
B. Users of Accounting Information	4
Main Categories of Users	5
Interests of Principal Users	5
C. Rules of Accounting (Accounting Standards)	6
Development of Accounting Standards	6
Statements of Standard Accounting Practice	9
Financial Reporting Standards 1-7	11
D. Accounting Periods	11
E. The Fundamental Concepts of Accounting	12
Accruals	12
Prudence	13
Going Concern	13
Consistency	14
Departures from SSAP 2	14
Accounting Bases and Policies	15
F. Other Accounting Concepts	15
Money Measurement	15
Duality	15
Matching	15
Cost	16

(Continued over)

Materiality	16
Stability of Money Value	16
Objectivity	16
Realisation	16
Business Entity Concept	17
G. Important Accounting Terms	17
The Accounting Equation or Basic Formula	17
Assets and Liabilities	18
Capital v. Revenue Expenditure	18
Effects of Not Complying With the Rule	19
H. Different Types of Business Entity	19
The Sole Trader	19
Partnerships	19
Limited Companies	20
Accounting Differences Between Companies and Unincorporated Businesses	21
Principle of Limited Liability	21
Promoters and Legal Documents	21

A. THE SCOPE OF ACCOUNTING

The Purpose of Accounting

A business proprietor normally runs a business to make money. He or she needs information to know whether the business is doing well. The following questions might be asked by the owner of a business:

- How much profit or loss has the business made?
- How much money do I owe?
- Will I have sufficient funds to meet my commitments?

The purpose of conventional business accounting is to provide the answers to such questions by presenting a summary of the transactions of the business in a standard form.

Financial Accounting and Management Accounting

Accounting may be split into Financial Accounting and Management Accounting.

(a) **Financial Accounting**

Financial accounting comprises **two** stages:

- book-keeping, which is the recording of day-to-day business transactions; and
- preparation of accounts, which is the preparation of statements from the book-keeping records; these statements summarise the performance of the business – usually over the period of one year.

(b) **Management Accounting**

Management accounting is defined by the Chartered Institute of Management Accountants (CIMA) as follows:

“The application of professional knowledge and skill in the preparation and presentation of accounting information in such a way as to assist management in the formulation of policies and in the planning and control of the operations of the undertaking”.

Management accounting, therefore, seeks to provide information which will be used for decision-making purposes (e.g. pricing, investment), for planning and control.

Money as the Common Denominator

Accounting is concerned with money measurement – it is only concerned with information which can be given a **monetary value**. We put money values on items such as land, machinery and stock, and this is necessary for comparison purposes. For example, it is not very helpful to say: “Last year we had four machines and 60 items of stock, and this year we have five machines and 45 items of stock.”. It is the money values which are useful to us.

There are, though, limitations to the use of money as the common denominator.

(a) Human Asset and Social Responsibility Accounting

We have seen that accounting includes financial accounting and management accounting. Both of these make use of money measurement. However, we may want further information about a business:

- Are industrial relations good or bad?
- Is staff morale high?
- Is the management team effective?
- What is the employment policy?
- Is there a responsible ecology policy?

These questions will not be answered by conventional business accounting in money terms but by “human asset accounting” and “social responsibility accounting”. These subjects have not yet been fully developed and are outside the scope of your syllabus.

(b) Devaluation

The value of money does not remain constant, and there is normally some degree of inflation in the economy. We will look at the steps that have been taken to attempt to adjust accounting statements to the changing value of money later in the course.

The Business Entity

The business as accounting entity refers to the separate identities of the business and its owners.

- **The Sole Trader**

There must always be a clear distinction between the owner of the business and the business itself. For example, if Mr X owns a biscuit factory, we are concerned with recording the transactions of the factory. We are not concerned with what Mr X spends on food and clothes. If Mrs Y, works at home, setting aside a room in her house, an apportionment may have to be made.

- **Partnership**

Similarly, the partners in a business must keep the transactions of the business separate from their own personal affairs.

- **Companies**

In law, a company has a distinct “legal personality”. This means that a company may sue or be sued in its own right. The affairs of the shareholders must be distinguished from the business of the company. The proprietor of a limited company is therefore distinct from the company itself.

We shall return to the issue of business entities later in the unit.

B. USERS OF ACCOUNTING INFORMATION

We need to prepare accounts in order to “provide a statement that will meet the needs of the user, subject to the requirements of statute and case law and the accounting bodies, and aided by the experience of the reception of past reports”.

So if we prepare accounts to meet the needs of the user, **who is the user?**

Main Categories of Users

The main users of financial accounts are:

- Equity investors (shareholders, proprietors, buyers)
- Loan creditors (banks and other lenders)
- Employees
- Analysts/advisers
- Business contacts (creditors and debtors, competitors)
- The government (The Inland Revenue)
- The public
- Management (board of directors)

Users can learn a lot about the running of a company from the examination of its accounts, but each category of user will have its own special perspective. We need to look at some of these in more detail.

Interests of Principal Users

- **Proprietor**

The perspective of the business proprietor is explained above (but see below for the interests of shareholders).

- **Inland Revenue**

The Inland Revenue will use the accounts to determine the liability of the business for taxation.

Banks and other Lending Institutes

These require to know if the business is likely to be able to repay loans and to pay the interest charged. But often the final accounts of a business do not tell the lender what he or she wishes to know. They may be several months old and so not show the up-to-date position. Under these circumstances, the lender will ask for cash flow forecasts to show what is likely to happen in the business. This illustrates why accounting techniques have to be flexible and adaptable to meet users' needs.

- **Creditors and Debtors**

These will often keep a close eye on the financial information provided by companies with which they have direct contact through buying and selling, to ensure that their own businesses will not be adversely affected by the financial failure of another. An indicator of trouble in this area is often information withheld at the proper time, though required by law. Usually, the longer the silence, the worse the problem becomes.

- **Competitors**

Competitors will compare their own results with those of other companies. A company would not wish to disclose information which would be harmful to its own business: equally, it would not wish to hide anything which would put it above its competitors.

- **Board of Directors**

The board of directors will want up-to-date, in-depth information so that it can draw up plans for the long term, the medium term and the short term, and compare results with its past

decisions and forecasts. The board's information will be much more detailed than that which is published.

- **Shareholders**

Shareholders have invested money in the company and as such are the owners of the business. Normally, the company will be run by a team of managers and the shareholders require the managers to account for their "stewardship" of the business, i.e. the use they have made of the shareholders' funds.

- **Employees**

Employees of the company look for, among other things, security of employment.

- **Prospective Buyer**

A prospective buyer of a business will want to see such information as will satisfy him or her that the asking price is a good investment.

C. RULES OF ACCOUNTING (ACCOUNTING STANDARDS)

As different businesses use different methods of recording transactions, the result might be that financial accounts for different businesses would be very different in form and context. However, various standards for the preparation of accounts have been developed over the years. We shall be looking at the layout of financial accounts later on in the course. With regard to companies, various rules have been incorporated into legislation (Companies Acts). Companies whose shares are listed on the Stock Exchange are subject to Stock Exchange rules. There are also "Statements of Standard Accounting Practice" (SSAPs) and Financial Reporting Statements (FRSs) which are issued by the main professional accounting bodies through the Accounting Standards Board (ASB).

Development of Accounting Standards

(a) Historical Development

In 1942, the Institute of Chartered Accountants in England and Wales began to make recommendations about accounting practices, and over time issued a series of 29 Recommendations, in order to codify the best practice to be used in particular circumstances. Unfortunately, these recommendations did not reduce the diversity of accounting methods.

- ***The Accounting Standards Committee***

In the late 1960s, there was a lot of public criticism of financial reporting methods and the accounting profession responded to this by establishing the Accounting Standards Committee (ASC) in 1970. The ASC comprised representatives of all the six major accounting bodies, i.e. the Chartered Accountants of England and Wales, of Scotland, and of Ireland, the Certified Accountants, the Cost and Management Accountants, and the Chartered Institute of Public Finance and Accountancy.

The Committee was set up with the object of developing definitive standards for financial reporting.

A statement of intent produced in the 1970s identified the following objectives:

- To narrow the areas of difference in accounting practice
- To ensure disclosure of information on departures from definitive standards

- To provide a wide exposure for new accounting standards
- To maintain a continuing programme for improving accounting standards.

There are various accounting conventions (which we'll look at later) that lay down certain "ground rules" for accounting. However, they do still permit a variety of alternative practices to coexist. The lack of uniformity of practices made it difficult for users of financial reports to compare the results of different companies. There was therefore a need for standards of accounting practice, to try to increase the comparability of company accounts.

- **Statements of Standard Accounting Practice (SSAP)**

The procedure for their establishment was for the ASC to produce **an exposure draft** on a specific topic – e.g. accounting for stocks and depreciation – for comment by accountants and other users of accounting information. A formal statement was then drawn up, taking account of comments received, and issued as a **Statement of Standard Accounting Practice (SSAP)**. Once a statement had been adopted by the accountancy profession, any material departures by a company from the standard practice had to be disclosed in notes to the Annual Financial Accounts.

These standards do not have the force of law to back them up, although all members of the accounting profession are required by their Code of Ethics to abide by them.

- **The Dearing Report**

Although the ASC had much success during its period of operation and issued 25 SSAPs as well as a number of exposure drafts (EDs), Statements of Intent (SOI), and Statements of Recommended Practice (SORP), there were many serious criticisms of its work, leading to its eventual demise.

In July 1987, the Consultative Committee of Accountancy Bodies (CCAB) set up a review of the standard-setting process under the chairmanship of Sir Ron Dearing. The **Dearing Report** subsequently made a number of very important recommendations. The government accepted all but one of them and in August 1990 a new Standard Setting Structure was set up.

(b) The Accounting Standards Board

The following structure (Figure 1.1) was recommended by the Dearing Report, with the Financial Reporting Council (FRC) acting as the policy-making body for accounting standard-setting.

This gave rise to a slightly different regime for the establishment of standards and these are now embodied in **Financial Reporting Standards (FRS)**.

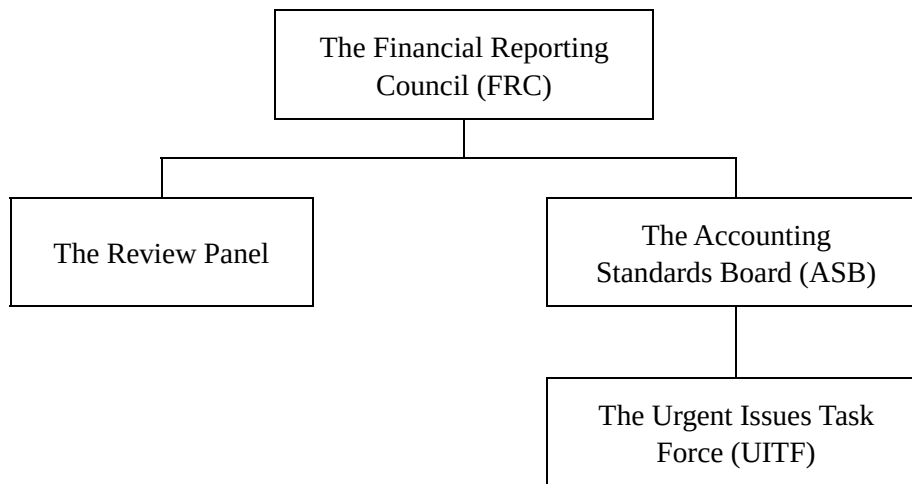


Figure 1.1: Standard Setting Structure

- ***Financial Reporting Standards (FRS)***

The ASB is more independent than the ASC was and can issue standards known as *Financial Reporting Standards (FRS)*. The ASB accepted the SSAPs then in force and these remain effective until replaced by an FRS. The ASB develops its own exposure drafts along similar lines to the ASC; these are known as FREDs (Financial Reporting Exposure Drafts).

- ***Statements of Recommended Practice (SORP)***

Although the ASB believed that Statements of Recommended Practice (SORPS) had a role to play, it did not adopt the SORPS already issued. Not wishing to be diverted from its central task of developing accounting standards, the Board has left the development of SORPS to bodies recognised by the Board.

The SORPS issued by the ASC from 1986 differed from SSAPs in that SSAPs had to be followed unless there were substantive reasons to prove otherwise, and non-compliance had to be clearly stated in the notes to the final accounts. A SORP simply sets out best practice on a particular topic for which a SSAP was not appropriate. However, the later SORPS are mandatory and cover a topic of limited application to a specific industry (e.g. local authorities, charities, housing associations). These SORPS do not deviate from the basic principles of the various SSAPs and FRSs currently in issue.

- ***Urgent Issues Task Force (UITF)***

This is an offshoot of the ASB which tackles urgent matters not covered by existing standards or those which, if covered, were causing diversity of interpretation. In these circumstances, the UITF issues a “Consensus Pronouncement” in order to detect whether or not accounts give a true and fair view.

- ***Financial Reporting Review Panel***

This examines contentious departures from accounting standards by large companies. The panel has the power to apply to the court for an order requiring a company’s directors to revise their accounts.

(c) The International Accounting Standards Committee (IASC)

Apart from the UK Accounting Standards, there are also standards issued by the International Accounting Standards Committee (IASC) which was established in 1973. Representatives from the United Kingdom sit on this Committee with those of other countries. The need for the IASC arose because of international investment, the growth of multinational firms and the desire to have common standards worldwide. In the United Kingdom, our own standards take precedence over the IASC but most of the provisions of IASs are already contained in existing SSAPs or FRSs. Where there is non-compliance with an IAS, this is disclosed in the UK standard.

Statements of Standard Accounting Practice

Note that, with the issuing of new accounting standards by the ASB (FRSs), there currently both a number of SSAPs and FRSs in force. You do not require a detailed knowledge of all the current SSAPs and FRSs, but you should be aware of what they cover and we briefly review them here – starting with SSAPs. Some of the more important standards will be dealt with in detail in later study units under their own topic headings.

- **SSAP 1: Accounting for Associated Companies**

Where one company has invested in another company and can significantly influence the affairs of that company, then rather than simply show dividends received as a measure of income, the full share of the profits of that company should be shown in the investing company's accounts.

- **SSAP 2: Disclosure of Accounting Practice**

This standard requires disclosure if the accounts are prepared on the basis of assumptions which differ materially from the generally accepted fundamental accounting concepts.

The position must be disclosed as a note to the accounts. (Accounting concepts are more fully covered later on in this study unit.)

- **SSAP 3: Earnings Per Share**

This SSAP defines how earnings per share is calculated and is covered in more detail later in the course.

- **SSAP 4: Accounting for Government Grants**

Grants should be recognised in the profit and loss account so as to match the expenditure to which they relate. Capital grants relating to capital expenditure should be credited to revenue over the expected useful economic life of the asset.

- **SSAP 5: Accounting for Value Added Tax**

This aims to achieve uniformity of accounting treatment of VAT in financial statements.

- **SSAP 8: Treatment of Tax Under the Imputation System in Accounts of Companies**

This establishes a standard treatment of taxation in company accounts with particular reference to advance and mainstream corporation tax.

- **SSAP 9: Stocks and Long-term Contracts**

Stocks should be valued at the lower of cost or net realisable value. With long-term contracts the accounts should not recognise profit in advance but should account immediately for any anticipated losses (covered later in the course).

- **SSAP 12: Accounting for Depreciation**

This SSAP applies to all fixed assets except investment properties, goodwill, development costs and investments. All assets with a finite life should be depreciated by allocating cost less residual value to the revenue account, over their economic lives. The SSAP recognises several different methods but does not insist on which method should be used; the method applied, however, should be consistent. (Covered later in the course.)

- **SSAP 13: Accounting for Research and Development**

Expenditure on pure (basic) or applied research can be regarded as ongoing to maintain a company's business. Expenditure on developing new and improved products is normally undertaken to secure future benefits, but should still also be written off in the year of expenditure unless it complies with stringent conditions, e.g. the project is commercially viable.

- **SSAP 15: Accounting for Deferred Tax**

This covers the treatment of taxation attributable to timing differences between profits computed for tax purposes and profits as stated in financial statements. Timing differences originating in one period are likely to be reversed in a subsequent period.

- **SSAP 17: Accounting for Post Balance Sheet Events**

Any event occurring up to balance sheet date will have affected the balance sheet, but normally it is impossible to alter the accounts after approval by the directors. However, between these two dates some types of events can be adjusted for, e.g. discovery of errors or frauds which show that the financial statements were incorrect.

- **SSAP 18: Accounting for Contingencies**

A contingency is a situation that exists at the balance sheet date, the outcome of which is uncertain. Contingent losses must be taken into account and the contingent gains left out. Material contingent losses can be disclosed in the notes to the balance sheet.

- **SSAP 19: Accounting for Investment Properties**

This standard requires investment properties to be included in the balance sheet at open market value. Where investment properties represent a substantial proportion of the total assets the valuation should be carried out by a recognised professional person, and by an external valuer at least every five years.

- **SSAP 20: Foreign Currency Translation**

This deals with the translation of foreign currency transactions from overseas branches or subsidiaries into sterling. The method used should be disclosed as a note to the final accounts.

- **SSAP 21: Accounting for Leases and Hire Purchase Contracts**

This requires that a finance lease (where the lessee takes on the risks and rewards of ownership) should be accounted for by the lessee as if the asset had been purchased. In other words, substance over form.

- **SSAP 24: Accounting for Pension Costs**

An employer should recognise the cost of providing pensions on an equitable basis in relation to the period over which he derives benefit from services rendered by employees.

- **SSAP 25: Segmental Reporting**

Information in accounts should be broken down by class of business and geographically (covered later in the course).

Financial Reporting Standards

- **FRS 1: Cash Flow Statements**

Cash flow statements replace the Source and Application of Funds Statement, so that the emphasis is now on what cash has flowed in or out of the business during the accounting period rather than on how the components of working capital have changed in the year. (See later in the course.)

- **FRS 2: Accounting for Subsidiary Undertakings**

This deals with preparing accounts for parent and subsidiary companies.

- **FRS 3: Reporting Financial Performance**

This covers the treatment of extraordinary and exceptional items in financial statements, and requires a statement of total recognised gains and losses to be prepared. (Covered later.)

- **FRS 4: Accounting of Capital Instruments**

This standard deals with the raising of finance.

- **FRS 5: Reporting the Substance of Transactions**

This standard ensures that financial statements report the substance of transactions and not merely their legal form. (Covered later.)

- **FRS 6: Accounting for Acquisitions and Mergers**

This deals with the different accounting methods for acquisitions or mergers, including limiting the ability of a company to use merger accounting by setting out a number of conditions which must first be satisfied before merger accounting can be adopted.

- **FRS 7: Fair Values in Acquisition Accounting**

All business combinations that do not qualify as a merger in accordance with FRS 6 must therefore adopt acquisition accounting. This Standard ensures that all the assets and liabilities of the acquired company at the date of acquisition are recorded at “fair values” in the financial records of the acquiring company.

- **FRS 10: Accounting for Goodwill and Intangible Assets**

Goodwill purchased should reflect the difference between the price paid for a business and the fair value of the net assets acquired. Goodwill should not include any value for intangible items; these should be included under the heading of intangible assets in the balance sheet. Purchased goodwill should not remain as a permanent item in the balance sheet. It must be amortised against profit and loss on ordinary activities over its useful economic life. (This is covered in more detail later in the course.)

D. ACCOUNTING PERIODS

An owner of a business will require financial information at regular intervals. As we have noted, he or she will want to be able to check periodically how well or badly the business is doing. Financial accounts are normally prepared on an annual basis, e.g. twelve months to the 31 March. Preparing accounts on an annual basis facilitates comparisons between one year and previous years and assists forecasting the next year. For example, there may be seasonal factors affecting the business, which will even out over the year. An ice-cream vendor will expect to make more sales in the summer months than in the winter months. He would not be able to tell if business is improving by looking at accounts for six months ended 31 March 20XX and comparing them with accounts for the six months ended 30 September 20XX. True comparison of profit/loss can be gained only when he examines his accounts for the years (say) 31 March 20X1 and 31 March 20X2.

Accounts normally have to be prepared annually for tax purposes as tax is assessed on profits of a 12-month accounting period. In the case of limited companies, accounts are prepared annually to the “accounting reference date”. It is necessary to calculate annually the amount of profit available for distribution to shareholders by way of dividend.

E. THE FUNDAMENTAL CONCEPTS OF ACCOUNTING

Statement of Standard Accounting Practice No. 2 is called *Disclosure of Accounting Policies*. It identifies four fundamental accounting concepts which should be followed in preparing accounts. These four concepts are also included in company law so companies must follow them in preparing published accounts. These concepts are known as the accruals, prudence, going concern and consistency concepts.

Accruals

Accruals is taking into account or **matching** income and expenditure occurring within an accounting period, whether actual cash is received or paid during the time or not. The reasoning behind the concept is that profit for the period should represent fairly the earnings of the time covered and, in view of the dynamic nature of any business, it is unlikely that all invoices will have been paid. However, they should be accounted for to give a true picture.

A distinction is made between the receipt of cash and the right to receive cash, and between the payment of cash and the legal obligation to pay cash. The accruals concept requires the accountant to include as expenses or income those sums which are due and payable.

You need to remember what the following terms mean:

- **Receipt:** the receipt of cash or cheques by the business, normally in return for goods or services rendered. The receipt may relate to another financial period, e.g. it may be for goods sold at the end of the previous period.
- **Payment:** the payment of cash or cheques by the business in return for goods or services received. Again, a payment may be in respect of goods purchased in the previous financial year or a service to be rendered in the future, e.g. rates payable in advance.

Additionally, the term “capital receipt” is used to describe amounts received from the sale of fixed assets or investments, and similarly “capital payment” might relate to an amount paid for the purchase of a fixed (i.e. long-term) asset.

- **Revenue income:** the income which a business earns when it sells its goods. Revenue is recognised when the goods pass to the customer, NOT when the customer pays.
- **Expenses:** these include all resources used up or incurred by a business during a financial year irrespective of when they are paid for. They include salaries, wages, rates, rent, telephone, stationery, etc.

To help you understand the significance of these terms, here are a few examples (financial year ending 31 December):

- Telephone bill £200 paid January Year 2 relating to previous quarter = Payment Year 2; Expense Year 1.
- Debtors pay £500 in January Year 2 for goods supplied (sales) in Year 1 = Receipt Year 2; Revenue Income Year 1.
- Rent paid £1,000 July Year 1 for the period 1 July Year 1 to 30 June Year 2 = Payment £1,000 Year 1; Expense Year 1 £500, Expense Year 2 £500.

In a later study unit we will see how these matters are dealt with in the final accounts.

Prudence

Prudence is proper caution in measuring profit and income.

Where sales are made for cash, profit and income can be accounted for in full. Where sales are made on a credit basis, however, the question of the certainty of profits or incomes arises. If there is not a good chance of receiving money in full, no sales are made on credit anyway; but if, in the interval between the sale and the receipt of cash, it becomes doubtful that the cash will be received, prudence dictates that a full provision for the sum outstanding should be made. A provision being an amount which is set aside via the profit and loss account.

The two main aspects of this concept are that:

- Income should not be anticipated and all possible losses should be provided for.
- The method of valuation of an asset which gives the lesser value should always be chosen.

Prudence is often exercised subjectively on grounds of experience and is likely, in general, to lead to an understatement of profit. The subjectivity involved can lead to variation between accountants in the amount of provision for bad debts, etc. and is bound to create differences between results obtained by the same general method of measurement. Users are therefore provided with pictures of various businesses which although apparently comparable, in fact conceal individual distortions.

In long-term credit arrangements, e.g. hire-purchase agreements, difficulties arise in the actual realisation of income and profit. The date of the sale, whether on a cash or credit basis, is usually regarded as the date of realisation; but if you have money coming in over two or three years, measurement of the actual sum realised is subject to controversy.

Going Concern

This concept assumes that the business is going on steadily trading from year to year without reducing its operations.

You can often see if an organisation is in financial trouble, e.g. if it lacks working capital, and in these circumstances it would not be correct to follow this concept. It would probably be better to draw up a statement of affairs, valuing assets on a break-up basis rather than reflecting the business as

a going concern (i.e. on the basis of a sudden sale of all the assets, where the sale prices of the assets would be less than on ordinary sale).

Inclusion of other potential liabilities might be necessary to reflect the situation properly, e.g. payments on redundancy, pensions accrued, liabilities arising because of non-completion of contracts.

Thus, the going concern concept directly influences values, on whatever basis they are measured.

Consistency

This is one of the most useful concepts from the point of view of users who need to follow accounting statements through from year to year. Put simply, it involves using **unvarying accounting treatments** from one accounting period to the next, e.g. in stock valuation, etc.

You can only identify a trend with certainty if accounts are consistent over long periods; otherwise, the graph of a supposed trend may only reflect a lack of precision or a change of accounting policies. However, there will usually be changes or inconsistencies in accounting policies over the years and in public accounts it is essential to stress these changes so that users can make proper allowance for differences.

Departures from SSAP 2

Because there are situations where even these four fundamental concepts do not hold true, SSAP 2 permits departures from these concepts, provided that the **reasons are disclosed** for any non-compliance with the standard.

The main difficulty in applying fundamental accounting concepts arises from the fact that many business transactions have financial effects spreading over a number of years. Decisions have to be made on the extent to which expenditure incurred in one year can reasonably be expected to produce benefits in the form of revenue in other years and should therefore be carried forward, in whole or in part. In other words, should it be dealt with in the closing balance sheet, as distinct from being dealt with as an expense of the current year in the profit and loss account because the benefit has been exhausted in that year?

In some cases revenue is received for goods or services the production or supply of which will involve some later expenditure. In this case a decision must be made regarding how much of the revenue should be carried forward, to be dealt with in subsequent profit and loss accounts when the relevant costs are incurred.

All such decisions require consideration of future events of uncertain financial effect, and to this extent an element of commercial judgement is unavoidable. Examples of matters which give rise to particular difficulty are:

- The future benefits to be derived from stocks and all types of work-in-progress at the end of the year.
- The future benefits to be derived from fixed assets, and the period of years over which these will be fruitful.
- The extent to which expenditure on research and development can be expected to produce future benefits.

Accounting Bases and Policies

SSAP 2 also identifies accounting bases, or methods of dealing with certain items.

In the course of practice, a variety of accounting bases have developed which are designed to provide consistent, fair and as nearly as possible objective solutions to problems; for example, bases for calculating depreciation and the amounts at which stocks can be stated.

Accounting bases provide an orderly and consistent framework for periodic reporting of a concern's results and financial position, but they do not, and are not intended to, substitute for commercial judgement in the preparation of financial reports. Where a choice in accounting base is available, judgement must be exercised in choosing those that are best suited to present fairly the concern's results and financial position. The bases thus adopted then become the concern's accounting **policies**.

F. OTHER ACCOUNTING CONCEPTS

Money Measurement

Whether in historic or current terms, money is used as the unit of account to express information on a business and, from analysis of the figures, assumptions can be made by the users.

As we have seen, though, this concept of a common unit goes only some way towards meeting user needs, though, and further explanation is often needed on non-monetary requirements, e.g. the experience of the management team, labour turnover, social policy.

Duality

Each item in a business has two accountancy aspects, reflected in the accounting treatment, for example:

- Double-entry book-keeping requires each transaction to be entered twice as a debit and as a credit. The debit being an increase in the assets of the company or as an expense, the credit entry being a reduction in the cash balance to pay for the item, or an increase in the level of credit taken.
- The assets of a business are shown in one section of a balance sheet and the liabilities in another.

There is little to criticise in this duality but we are looking behind the framework at the efficiency of the system and judging it by its success in meeting user needs. Duality falls short in the same sphere as money measurement, because there are areas in which it is not relevant.

Matching

Often considered the same as the accruals concept, matching calls for the revenue earned in a period to be linked with related costs. This gives rise to accruals and prepayments which account for the difference between cash flow and profit and loss information. This distinction will be clarified when you look at examples later.

Cost

As money is used to record items in the business accounts, each item has a cost.

Accountants determine the value of an asset by reference to its purchase price, not to the value of the returns which are expected to be realised. Many problems are raised by this convention, particularly in respect of the effect of inflation upon asset values.

This can also be considered as the historic cost concept.

Materiality

Accounting for every single item individually in the accounts of a multi-million pound concern would not be cost-effective.

A user would gain no benefit from learning that a stock figure of £200,000 included £140 work-in-progress as distinct from raw materials. Neither would it make much difference that property cost £429,872 rather than £430,000. Indeed, rounded figures give clarity to published statements. So, when they are preparing financial statements, accountants do not concern themselves with minor items. They attempt rather to prepare clear and sensible accounts.

The concept of materiality therefore leaves itself open to the charge that accounts so prepared are not strictly accurate, but generally the advantages outweigh this shortcoming.

Stability of Money Value

There is a certain amount of conflict here between the economist and the accountant. It is common knowledge that the £ of yesterday will not have the same value as the £ of tomorrow, but the accountant knows that he must be as logical and as practical as possible and, whilst he accepts the different values, he knows that to incorporate them into the structure of his accounts would cause problems.

Any form of inflationary accounting has its inaccuracies. All that can really be said about accounting for inflation is that it provides a better measure of the true economic situation than historic accounts. The latter are still used for tax computations and are, in most instances, the sort required by law. There is no compulsory requirement for accounting for changing price levels.

Objectivity

Financial statements should be produced **free from bias** (not a rosy picture to a potential lender and a poor result for the taxman, for instance). Reports should be capable of verification – a difficult problem with cash forecasts.

Realisation

Any change in the value of an asset may not be recognised until the moment the firm realises or disposes of that asset. For example, even if a sale is on credit, we **recognise the revenue** as soon as the goods are passed to the customer.

However, unrealised gains, such as increases in the value of stock prior to resale, are now widely recognised by non-accountants, (e.g. bankers) and this can lead to problems with this concept.

Business Entity Concept

The affairs of the business are distinguished from the personal affairs of the owner(s). Thus a separate capital account is maintained in the business books, which records the business's indebtedness to the owner(s).

It is important to draw a clear distinction between the owner of a business and the business itself. As far as accountancy is concerned, the records of the business are kept with a view to controlling and recording the affairs of the business and not for any benefit to the owner, although the completed accounts will be presented to the owners for their information.

However, it is sometimes hard to divorce the two interests, especially when you are dealing with the sole trader, whose affairs are intertwined with the business he owns and is operating. So if, for example, he owns a sweetshop and takes and eats a bar of chocolate, he is anticipating his profits – as he is if he takes a few pence from the till to pay for some private purchase; and such activities should be recorded. His more personal affairs, however, such as the cost of food, clothing and heat and light for his private residence, must be kept separately from the business records.

When we look at **the partnership** the distinction becomes a little clearer; and when we look at **limited companies**, where the owners or shareholders may take no part in running the company and the law gives the company a distinct legal personality of its own, then we have a clear-cut division and it is easy to distinguish owner and business.

G. IMPORTANT ACCOUNTING TERMS

The Accounting Equation or Basic Formula

In any business there are two entities: the business and its owner/s. Capital is provided by the owners in the form of cash or goods, and this capital is used by the business to acquire assets and finance its operations. When accounts are drawn up, the balance sheet will show the assets of the business, net of any liabilities not yet settled, balanced against the owners' capital. We can therefore say that:

$$\text{Capital} = \text{Net Assets (i.e. Total Assets} - \text{Total Liabilities)}$$

The **capital** is what belongs to the owner/s, and the **net assets** are the assets used in the business. Should the business cease those net assets would be used to raise the cash to repay the owners' capital.

As a business progresses both the net assets and the owner's capital increase. Let us assume that an owner invests £10,000 in a business. The opening balance sheet will therefore show:

$$\text{Capital } £10,000 = \text{Net assets (cash at bank) } £10,000$$

If a business is successful over the years, the figures will increase, so that after a period we may see, for example:

$$\text{Capital } £20,000 = \text{Net assets } £20,000$$

This equation is known as the **basic formula** and you will notice that both sides have equal values. This is because all modern accounting is based on the **principle of double entry**. This means that every transaction in the accounts **must** have two entries, a debit entry in one account and a credit in another.

Assets and Liabilities

Net assets represent the assets of the business after deducting outstanding liabilities due to third parties. To calculate the net assets we take the **total assets** and deduct the **liabilities**.

- **Assets** are the property of the business and include land and buildings, cash, debtors and money in the bank.
- **Liabilities** are what the business owes to outside firms for goods or services supplied, loans made or expenses.

You can relate this to your own situation. You probably own various assets – perhaps a flat, a car, and some household effects. At the same time you may well owe money to a credit card company, the newsagent or a finance company. If you are an employee then your employer will owe you money by way of salary or wages. When you are in business then the business will owe you money by way of your capital and profits.

The treatment and classification of assets and liabilities in the accounts is of fundamental importance:

- **Assets** involve expenditure and are always shown as debit entries in the accounts. There are two main classes of assets:
 - (i) **Fixed assets**, which comprise land and buildings, plant and machinery, motor vehicles, fixtures and fittings – in fact any assets which are to be used in the business for a reasonable period of time generally taken to be greater than one year.
 - (ii) **Current assets**, which consist of stock for resale, debtors, cash/bank. Current assets are short-term assets, not intended to be retained in the business for long.

(Note that expenses also involve expenditure and are always shown as debit entries.)

- **Liabilities** consist of money owing for:
 - (i) Goods purchased on credit
 - (ii) Expenses owing for items like telephone bills, unpaid garage bills, etc.
 - (iii) Loans from, say, the bank, building societies, hire purchase, etc.

Capital v. Revenue Expenditure

When assets such as buildings, plant and machinery, motor vehicles, tools, etc. are bought, they are purchased not for resale but for use in running the business. This type of asset is known as a **fixed asset**. Fixed assets help to create profit, and expenditure on them is known as **capital expenditure**.

As well as the cost of the asset there are additional costs such as carriage on machinery or the legal costs of acquiring land and buildings. If a prefabricated building is erected, there would be additional costs such as the materials used (cement and bricks for the foundations), and the labour costs incurred to erect the building. All these costs are included in the cost of the building and are referred to as **capital expenditure**. This class of expenditure is kept separate from **revenue expenditure**, which relates to the day-to-day running of the business. Examples of revenue expenditure include expenses such as petrol for the delivery vans, telephone charges for the sales department, etc.

You should have no difficulty in distinguishing between capital and revenue expenditure. Remember that capital is spent to buy fixed assets which are used to create profits, while revenue is spent in the creation of profit. We will remind you of the difference between these two types of expenditure in later study units.

Effects of Not Complying With the Rule

If we include fixed assets in revenue expenditure, we will reduce the profit and at the same time fail to disclose the fixed assets. This in turn means that any depreciation (see later in course) will not be taken. If we add revenue items in the fixed assets, we have the opposite effect, i.e. more profit and depreciation incorrectly charged.

The **Companies Act 1989** includes the following directive in relation to published company accounts:

“The balance sheet shall give a true and fair view of the state of affairs as at the end of the financial year. The profit and loss account shall give a true and fair view of the profit or loss of the company for the financial year.”

If we mix capital and revenue expenditure, not only will the accounts be incorrect but they will also contravene the law.

H. DIFFERENT TYPES OF BUSINESS ENTITY

We can now return to the issue of business entities and distinguish them in more sophisticated ways.

The Sole Trader

A sole trader is a business person trading on his or her own account. A sole trader bears total responsibility for business debts and, if in difficulty, may even need to sell personal assets to discharge liabilities.

A sole trader is a business which is owned by one person, although we should remember that the business may employ several others. Capital is introduced by the owner and the profits will be used in two main ways:

- As drawings (the proprietor's wages).
- As retention of profits which will be used to finance the business in future.

Partnerships

A partnership is a group of people working together with a view to generating a profit. The basic structure of a partnership is governed by the **Partnership Act 1890**. There will often be a deed of partnership which lays down in writing the rights and responsibilities of the individual partners, but there is no legal requirement for any partnership agreement to be put into writing.

There are two types of partnership:

(a) Ordinary or General Partnership

This consists of a group of ordinary partners, each of whom contributes an agreed amount of capital, with each being entitled to participate in the business activity and to share profits within an agreed profit-sharing ratio. Each partner is jointly liable for debts of the partnership unless there is some written agreement to the contrary. This is the most common form of partnership.

(b) Limited Partnership

This must consist of at least one ordinary partner to take part in the business, and to be fully liable for debts as if it were an ordinary partnership. Some partners are limited partners who

may take no part in the business activity and whose liability is limited to the extent of the capital which they have agreed to put in. Such firms must be registered and are not common.

Limited Companies

There are four main characteristics which distinguish a limited company:

- The legal nature of the business
- Statutory rules governing the form and content of published accounts
- Separation of ownership from the management of the business
- Limited liability of the shareholders

A company is completely separate in law from its shareholders and as such it may be sued in the courts. On its formation the shareholders subscribe for shares in the company in return for money (or money's worth). The shareholders then collectively own the company and are entitled to share in the profits generated by it.

Several types of limited companies exist:

(a) Private companies

These must comprise one or more members (shareholders) and may not offer shares to the public at large. A private company's name must end with "Limited" or "Ltd".

(b) Public companies

A public company is a company limited by shares which must have at least two members and an authorised capital of at least £50,000, at least one quarter of which must be paid up. There is no maximum number of members prescribed and the company can offer its shares to the public. A public company's name must end with the words "public limited company" or "plc".

(c) Quoted companies

Quoted (listed) companies are those whose shares are bought and sold on a recognised stock exchange. Large organisations may have a full listing on the London Stock Exchange, whilst smaller firms may be listed on the Alternative Investment Market. The latter was established to provide a market for younger companies which could not afford the costs of a full listing on the Stock Exchange. Quoted companies must be public companies, although not all public companies will have a stock exchange listing.

(d) Unquoted companies

These are companies which do not have a full listing on a recognised stock exchange. An unquoted company may be a private or a public company and some shares may be traded through the Alternative Investment Market.

Accounting Differences Between Companies and Unincorporated Businesses

The following table summarises the main accounting differences between the alternative types of business:

Item	Sole Traders and Partnerships	Companies
Capital introduced	To the capital account	As issued share capital
Profits withdrawn by the owners	As drawings	As dividends
Profits left in the business	In a capital account	As a revenue reserve
Loans made from outside investors	As loan accounts	As loan accounts

Principle of Limited Liability

The principle of limited liability means that a member agrees to take shares in a company up to a certain amount, and once he has paid the full price for those shares he is not responsible for any debts that the company may incur, even if it becomes insolvent within a few months of his becoming a member.

This provides a safeguard against the private personal estate of a member being attached to make good the company's debts. (Remember sole traders and partners in such circumstances can lose the whole of their business and private wealth.)

Promoters and Legal Documents

Promoters are the people who comply with the necessary formalities of company registration. They find directors and shareholders, acquire business assets and negotiate contracts. They draw up the memorandum and articles of the new company and register them with the Registrar of Companies.

The **memorandum of association** is said to be the "charter" of the company and it must state the company's objects as well as other details such as its name and address and details of authorised capital.

The **articles of association** are the internal regulations or by-laws of the company, dealing with such matters as the issue and forfeiture of shares, procedure at meetings, shareholders' voting powers, appointment, qualification, remuneration and removal of directors.

When the promoters have arranged all the formalities and satisfied themselves that the statutory regulations have been complied with, they apply for a **certificate of incorporation** which brings the company into existence as a legal being, known as a registered company.

Study Unit 2

Business Funding

<i>Contents</i>	<i>Page</i>
A. Capital of a Company	25
Features of Share Capital	25
Types of Share	25
Types of Capital	26
Share Issues	27
Bonus Issues	29
Rights Issues	30
Redeemable Shares	30
Purchase of Own Shares	32
Advantage of Purchasing/Redeeming Shares	32
B. Dividends	32
Preference Dividends	32
Ordinary Dividends	33
Interim Dividends	33
C. Debentures	33
Types of Debenture	33
Rights of Debenture Holders	34
Gearing	35
Issues at Par and at a Discount	35
Redemption of Debentures	35
Restrictions on Borrowings	36
D. Types and Sources of Finance	36
Balancing Fixed and Working Capital	36
Types of Business and Capital Structure	36
Long-term Funds	37
Shorter-term Funds	38
Interest Rate Exposure	38

(Continued over)

	Sources of External Finance	39
	Examples of Business Financing	40
E.	Management of Working Capital	41
	Working Capital Cycle	41
	Striking the Right Balance	41

A. CAPITAL OF A COMPANY

Virtually every business must have capital subscribed by its proprietors to enable it to operate. In the case of a partnership, the partners contribute capital up to agreed amounts which are credited to their accounts and shown as separate liabilities in the balance sheet.

A limited company obtains its capital, up to the amount it is authorised to issue, from its members. A public company, on coming into existence, issues a **prospectus** inviting the public to subscribe for shares. The prospectus advertises the objects and prospects of the company in the most tempting manner possible. It is then up to the public to decide whether they wish to apply for shares.

A private company is not allowed to issue a prospectus and obtains its capital by means of **personal introductions** made by the promoters.

Once the capital has been obtained, it is lumped together in one sum and credited to **share capital account**. This account does not show how many shares were subscribed by A or B; such information is given in the register of members, which is a statutory book that all companies must keep but which forms no part of the double-entry book-keeping.

Features of Share Capital

- Once it has been introduced into the company, it generally cannot be repaid to the shareholders (although the shares may change hands). An exception to this is redeemable shares.
- Each share has a stated **nominal** (sometimes called **par**) value. This can be regarded as the lowest price at which the share can be issued.
- Share capital of a company may be divided into various classes, and the articles of association define the respective rights of the various shares as regards, for example, entitlement to dividends or voting at company meetings.

Types of Share

(a) Ordinary Shares

The holder of ordinary shares in a limited company possesses no special right other than the ordinary right of every shareholder to participate in any available profits. If no dividend is declared for a particular year, the holder of ordinary shares receives no return on his shares for that year. On the other hand, in a year of high profits he may receive a much higher rate of dividend than other classes of shareholders. Ordinary shares are often called **equity** share capital or just **equities**.

Deferred ordinary shareholders are entitled to a dividend after **preferred ordinary shares**.

(b) Preference Shares

Holders of preference shares are entitled to a **prior claim**, usually at a **fixed rate**, on any profits available for dividend. Thus when profits are small, preference shareholders must first receive their dividend at the fixed rate per cent, and any surplus may then be available for a dividend on the ordinary shares – the rate per cent depending, of course, on the amount of profits available. So, as long as the business is making a reasonable profit, a preference shareholder is sure of a fixed return each year on his investment. The holder of ordinary shares may receive a very low dividend in one year and a much higher one in another.

Preference shares can be divided into two classes:

- ***Cumulative Preference Shares***

When a company is unable to pay dividends on this type of preference share in any one year, or even in successive years, all arrears are allowed to accumulate and are payable out of future profits as they become available.

- ***Non-cumulative Preference Shares***

If the company is unable to pay the fixed dividend in any one year, dividends on non-cumulative preference shares are not payable out of profits in future years.

(c) Redeemable Shares

The company's articles of association may authorise the issue of redeemable shares. These are issued with the intention of being redeemed at some future date. On redemption the company repays the holders of such shares (provided they are fully paid-up) out of a special reserve fund of assets or from the proceeds of a new issue of shares which is made expressly for the purpose of redeeming the shares previously issued. Redeemable shares may be preference or ordinary shares.

(d) Participating Preference Shares

These are preference shares which are entitled to the usual dividend at the specified rate and, in addition, to participate in the remaining profits. As a general rule, the participating preference shareholders take their fixed dividend and then the preferred ordinary shareholders take their fixed dividend, and any balance remaining is shared by the participating preference and ordinary shareholders in specified proportions.

(e) Deferred, Founders or Management Shares

These normally rank last of all for dividend. Such shares are usually held by the original owner of a business which has been taken over by a company, and they often form part or even the whole of the purchase price. Dividends paid to holders of deferred shares may fluctuate considerably, but in prosperous times they may be at a high rate.

You should note that this type of share has nothing to do with employee share schemes, where employees are given or allowed to buy ordinary shares in the company for which they work, at favourable rates – i.e. at less than the market quotation on the Stock Exchange.

Types of Capital

(a) Authorised, Registered or Nominal

These terms are synonymously used for capital that is specified as being the maximum amount of capital which the company has power to issue. Authorised capital must be stated in detail as a note to the balance sheet.

(b) Issued (Allotted) or Subscribed Capital

It is quite a regular practice for companies to issue only part of their authorised capital. The term "issued capital" or "subscribed capital" is used to refer to the amount of capital which has actually been subscribed for. Capital falling under this heading will comprise all shares issued to the public for cash and those issued as fully-paid-up to the vendors of any business taken over by the company.

(c) Called-up Capital

The payment of the amount due on each share is not always made in full on issue, but may be made in stages – for example, a specified amount on application and a further amount when the shares are actually allotted, with the balance in one or more instalments known as **calls**. Thus, payment for a £1 share may be made as follows:

- 25p on application
- 25p on allotment
- 25p on first call
- 15p on second call
- 10p on third and
- final call.

If a company does not require all the cash at once on shares issued, it may call up only what it needs. The portion of the subscribed capital which has actually been requested by the company is known as the called-up capital.

Note that a shareholder's only liability in the event of the company's liquidation is to pay up any portion of his shares which the company has not fully called up. If a shareholder has paid for his shares, he has **no further liability**.

(d) Paid-up Capital

When a company makes a call, some shareholders may default and not pay the amount requested. Thus the amount actually paid up will not always be the same as the called-up capital. For example, suppose a company has called up 75p per share on its authorised capital of 20,000 £1 shares. The called-up capital is £15,000, but if some shareholders have defaulted, the actual amount paid up may be only £14,500. In this case, the paid-up capital is £14,500, and the called-up capital £15,000.

Paid-up capital is therefore the amount paid on the called-up capital.

(e) Uncalled Capital or Called-up Share Capital Not Paid

If, as in our example, a company has called up 75p per share on its authorised capital of £20,000 £1 shares, the uncalled capital is the amount not yet requested on shares already issued and partly paid for by the public and vendors. In this example the uncalled capital is £5,000.

Share Issues

When a company issues shares, it can call for the whole value of the share or shares bought to be paid in one lump sum, or it can request the payment to be made in instalments. Generally, a certain amount is paid upon application, a certain amount on notification that the directors have accepted the offer to subscribe (the allotment), and a certain amount on each of a number of calls (the instalments). For our purposes we only need to look at shares which are payable in full upon application.

(a) Shares at Par

This means that the company is asking the investor to pay the nominal value, e.g. if a company issues 100,000 ordinary shares at £1, which is the par value, then the cash received will be £100,000. We can follow the entries in the accounts:

	Dr	Cr
	£	£
Cash	100,000	
Share capital		100,000

The balance sheet will show:

	£
Current assets	
Cash	£100,000
Share capital	
Authorised, issued and fully paid 100,000 £1 shares	£100,000

The basic rules of double entry apply and as you can see the **basic formula** is the same:

$$\text{Capital (£100,000)} = \text{Net assets (Cash: £100,000)}$$

(b) Shares at a Premium

A successful company, which is paying good dividends or which has some other favourable feature, may issue shares at a price which is higher than the nominal value. For example, as in the last example, if the £1 share is issued it may be that the applicant will be asked to pay £1.50. The additional amount is known as a **premium**.

The entries in the accounts will now be:

	Dr	Cr
	£	£
Cash	150,000	
Share capital		100,000
Share premium account		50,000

The balance sheet will show:

	£
Current assets	
Cash	£150,000
Share capital	
Authorised, issued and fully paid 100,000 £1 shares	£100,000
Share premium account	50,000
	150,000

Notes:

- The share premium is treated separately from the nominal value and must be recorded in a separate account which must be shown in the balance sheet. The Companies Act requires that the account is to be called the share premium account, and sets strict rules as to the uses to which this money can be put.
- The basic formula will now be:

$$\text{Capital (£150,000)} = \text{Net Assets (Cash: £150,000)}$$

and this means that the additional sum paid belongs to the shareholders and as such must always be shown together with the share capital.

Bonus Issues

When a company has **substantial undistributed profits**, the capital employed in the business is considerably greater than the issued capital. To bring the two more into line it is common practice to make a bonus issue of shares. Cash is not involved and it adds nothing to the net assets of the company – it simply **divides the real capital into a larger number of shares**. This is illustrated by the following example.

A company's balance sheet is as follows:

	<i>£000</i>
Net assets	1,000
Ordinary shares	500
Undistributed profits	500
	1,000

We can see that the real value of each share is £2, i.e. net assets £1,000 ÷ 500, but note that this is **not** the market value – only what each share is worth in terms of net assets owned compared with the nominal value of £1. Now suppose the company issued bonus shares on the basis of one new share for each existing share held. The balance sheet will now be as follows:

	<i>£000</i>
Net assets	1,000
Ordinary shares	1,000

Each shareholder has **twice as many shares** as before but is no better off since he owns exactly the same assets as before. All that has happened is that the share capital represents all the net assets of the company. This does, of course, dilute the equity of the ordinary shareholders, but a more substantial share account can often enable a company to obtain further finance from other sources. It can also be used as a defence against a takeover because the bidder cannot thereby obtain control and distribute the reserves.

Rights Issues

A useful method of **raising fresh capital** is first **to offer new shares to existing shareholders, at something less than the current market price** of the share (provided that this is higher than the nominal value). This is a rights issue, and it is normally based on number of shares held, as with a bonus issue, e.g. one for ten. In this case, however, there is no obligation on the part of the existing shareholder to take advantage of the rights offer, but if he does the shares have to be paid for. The **Companies Act** requires that, before any equity shares are issued for cash, they must first be offered to current shareholders.

Example

A company with an issued share capital of £500,000 in £1 ordinary shares decides to raise an additional £100,000 by means of a one-for-ten rights issue, at a price of £2 per share. The issue is fully subscribed and all moneys are received. The book-keeping entries are:

Dr:	Cash	£100,000	
Cr:	Share capital a/c		£50,000
Cr:	Share premium a/c		£50,000

Note the credit to share premium account. You should also note that neither bonus nor rights issues can be allotted if they would cause the authorised capital to be exceeded.

Redeemable Shares

Redeemable shares may not be issued at a time when there are no issued shares of the company which are not redeemable. This means that there must be at all times some shares which are not redeemable.

Only **fully-paid shares** may be redeemed and, if a premium is paid on redemption, then normally the premium must be paid out of distributable profits, unless the premium effectively represents a repayment of capital because it was a share premium paid when the shares were issued. In that case the share premium may be paid from the share premium account.

When shares are redeemed, the redemption payments can be made either:

- (a) From the proceeds of a new issue of shares, or
- (b) From profits.

If (b) is chosen then an amount equal to the value of the shares redeemed has to be transferred from the distributable profits to an account known as the **capital redemption reserve**.

The Act makes it clear that when shares are redeemed it must not be taken that there is a reduction of the company's **authorised** share capital.

By issuing redeemable shares the company is creating temporary membership which comes to an end either after a fixed period or at the shareholder's or company's option. When the temporary membership comes to an end the shares that are redeemed must be cancelled out. To avoid the share capital contributed being depleted, a replenishment must be made as mentioned earlier, i.e. by an issue of fresh shares or by a transfer from the profit and loss account.

(Note: In the illustration which follows we have adopted a "standard" balance sheet which we will discuss later. For the present, you need not be concerned with regard to how the balance sheet is constructed.)

Example

On 31 July the balance sheet of Heathfield Industries plc was as follows:

	£	£
Fixed assets		135,000
Current assets	47,000	
Current liabilities	(12,000)	35,000
		<u>170,000</u>
Capital and Reserves		
40,000 £1 ordinary shares		40,000
30,000 redeemable £1 shares fully paid		30,000
Profit and loss account		<u>100,000</u>
		170,000

Notes:

- The bank balance which is included in the current assets stands at £20,000.
- It is the intention of the directors to redeem £15,000 of the redeemable shares, **the redemption being made by cash held at the bank.**

After the redemption the balance sheet would look like this:

	£	£
Fixed assets		135,000
Current assets	32,000	
Current liabilities	(12,000)	20,000
		<u>155,000</u>
Capital and Reserves		
40,000 £1 ordinary shares		40,000
15,000 £1 redeemable shares		15,000
Capital redemption fund *		15,000
Profit and loss account		<u>85,000</u>
		155,000

- * Under the **Companies Act**, when redeemable shares are redeemed and the funds to redeem are **not** provided by a new issue of shares, i.e. the cash is available, then there should be a transfer to this reserve from the profit and loss account. This prevents the share capital being reduced, which is illegal other than by statutory procedures.

Notes:

- You will see that the basic formula is not changed. We still have:

$$\text{Capital } £170,000 = \text{Net assets } £170,000$$

and after an equal amount has been taken from both sides (the reduction in cash and a reduction in the redeemable shares) we have:

$$\text{Capital } £155,000 = \text{Net assets } £155,000$$

- There are very strict rules regarding the capital redemption reserve and the only transfer without court approval is by way of creating **bonus shares**.
- Don't worry about the profit and loss account because we will discuss this account fully in a later study unit.
- You may wonder why there are so many strict rules. This is because the **Companies Acts** are there to protect the **shareholders**.

Purchase of Own Shares

The **Companies Act** authorises a company to purchase its own shares provided that it is so authorised by its **articles**. There are three main rules:

- (a) It may purchase, but this does not mean subscribe for, shares.
- (b) It cannot purchase all its shares leaving only redeemable shares.
- (c) Shares may not be purchased unless they are **fully paid**.

Note: Redeeming or purchasing shares may appear to be the same thing, particularly as the same accounting procedures are adopted. **The difference is** that when shares that are redeemable are issued it is made quite clear at the point of issue that they will be redeemed. On the other hand, shares issued without this proviso cannot be redeemed. Such shares can be bought back, but there is yet another golden rule, which is that a company cannot buy back all its shares and it must, after the purchase, have other shares in issue which are not redeemable. This is to prevent a company redeeming/purchasing all its shares and ending up with **no members**.

Advantage of Purchasing/Redeeming Shares

The main advantage of buying back or redeeming shares for public companies is when there are large cash resources and it may be useful to return some of the surplus cash to the shareholders. This will avoid the pressures put on directors to use cash in uneconomic ways.

B. DIVIDENDS

The shareholder of a company gets his reward in the form of a share of the profits and his share is called a **dividend**.

Preference Dividends

The preference shareholder is one who is entitled to a specific rate of dividend before the ordinary or equity shareholders receive anything. The rate which will be paid is established when the shares are issued and is usually expressed as a percentage of the nominal value, e.g. 10% preference shares, which means that if the shareholder held 100 £1 preference shares he would receive a £10 dividend.

You should note that this type of share has declined and it is now more usual for companies to have a single class of shareholder.

Ordinary Dividends

Ordinary dividends are paid on ordinary or equity shares and the rate is usually expressed as a percentage, e.g. a 10% dividend on £500,000 ordinary shares will amount to £50,000.

The Act states that:

“All dividends shall be declared and paid according to the amounts paid up on shares on which the dividend is paid. A dividend while the company continues in business may be of any size that is recommended by the directors and approved by the members.”

The amount distributed to members is proportional to either the nominal value of the shares held, or the amount paid-up if they are partly paid.

Members may approve a dividend proposed by the directors or they can reject or reduce it, but they **cannot increase** a proposed dividend.

Interim Dividends

Provided the articles so authorise and there are, in the opinion of the directors, sufficient funds to warrant paying an interim dividend, then one may be paid. This means that approximately halfway through the financial year, if the company is making sufficient profits, the directors have the authority to pay a dividend. The directors do not require the members to authorise such dividends. The dividends are calculated in the same way as the final proposed dividend after the final accounts have been prepared.

C. DEBENTURES

A debenture is written acknowledgement of a **loan to a company**, which carries a fixed rate of interest.

Debentures are **not** part of the capital of a company. Interest payable to debenture holders must be paid as a matter of right and is therefore classified as loan interest, a **financial expense**, in the profit and loss account. A shareholder, on the other hand, is only paid a **dividend** on his investment if the company makes a profit, and such a dividend, if paid, is an **appropriation of profit**.

Types of Debenture

(a) Simple or Naked Debentures

These are debentures for which no security has been arranged as regards payment of interest or repayment of principal.

(b) Mortgage or Fully Secured Debentures

Debentures of this type are secured by a specific mortgage of certain fixed assets of the company.

(c) Floating Debentures

Debentures of this type are secured by a **floating charge** on the property of the company. This charge permits the company to deal with any of its assets in the ordinary course of its business, unless and until the charge becomes fixed or crystallised.

An example should make clear the difference between a mortgage, which is a fixed charge over some specified asset, and a debenture which is secured by a floating charge. Suppose that a company has factories in London, Manchester and Glasgow. The company may borrow money by issuing debentures with a fixed charge over the Glasgow factory. As long as the loan remains unpaid, the company's use of the Glasgow factory is restricted by the mortgage. The company might wish to sell some of the buildings, but the charge on the property as a whole would be a hindrance.

On the other hand, if it issued floating debentures then there is no charge on any specific part of the assets of the company and, unless and until the company becomes insolvent, there is no restriction on the company acting freely in connection with any of its property.

Rights of Debenture Holders

The rights of debenture holders are:

- They are entitled to payment of interest at the agreed rate.
- They are entitled to be repaid on expiry of the terms of the debenture as fixed by deed.
- In the event of the company failing to pay the interest due to them or should they have reason to suppose that the assets upon which their loan is secured are in jeopardy, they may cause a receiver to be appointed. The receiver has power to sell a company's assets in order to satisfy all claims of the debenture holders.

The differences between shareholders and debenture holders are summarised in the following table:

Debenture Holder	Shareholder
Debentures are not part of the capital of a company.	Shares are part of the capital of a company.
Debentures rank first for capital and interest.	Shares are postponed to the claims of debenture holders and other creditors.
Debenture interest must be paid whether there are profits or not and is a charge to the profit and loss account.	Dividends are payable out of profits only (appropriations) but only if there is adequate profit.
Debentures are usually secured by a charge on the company's assets.	Shares cannot carry a charge.
Debenture holders are creditors, not members of the company, and usually have no control over it.	Shareholders are members of the company and have indirect control over its management.

Debentures are not capital and so they should not be grouped with the shares in the balance sheet.

Gearing

The gearing of a company is the ratio of fixed-interest and fixed-dividend capital (i.e. debentures plus preference shares) to ordinary (equity) share capital plus reserves. We will consider this when we look at accounting ratios later, but you should be aware that a company's gearing can have important repercussions, as debenture interest **must** be paid regardless of profitability.

Issues at Par and at a Discount

Whereas shares **may not** be issued at a discount, debentures may. This means that the lender pays less than the nominal value.

(a) Issues at Par

This is the same as issuing shares at par, i.e. a £100 debenture would raise £100.

(b) Issues at a Discount

This means that the value raised by the issue is less than the par value, e.g. a £100 debenture would raise in cash, say, £80. This discount can be deducted from the share premium account. The entries in the accounts would look like this:

	£	£
Cash	80	
Share premium account *	20	
Debenture		100

* Clearly there would be a balance in the account. This illustration merely shows the basic entries.

As you can see, the debenture will appear in the accounts **at its full value**. You may wonder why a company would take this step and there is no mystery; it is just a ploy to encourage the public to invest.

Redemption of Debentures

As debentures can be issued at par or at a discount they can also be redeemed at a value greater than that paid, e.g. if you pay £80 then the redemption value is quite likely to be £100 and if you pay the par value of £100 then you might well get £120 back. Again the difference – if any – can be written off to the share premium account.

There are three ways of financing a redemption of debentures:

- Out of the proceeds of a new issue of shares or debentures.
- Out of the balance on the profit and loss account and existing resources of the business (cash).
- Out of a sinking fund built up over the years with or without investments (the investment really being a savings fund).

When shares are redeemed or purchased there is a statutory requirement to make a transfer to the capital redemption reserve. The reason for this is because shares are part of the capital of the company whereas debentures are merely long-term liabilities or loans.

Restrictions on Borrowings

Restrictions on borrowings outstanding at any time may be contained in the articles of association of the company, imposed by resolution of shareholders, or included in the loan agreement or trust deed.

D. TYPES AND SOURCES OF FINANCE

Balancing Fixed and Working Capital

The assets of a business are financed by its liabilities, as shown in the balance sheet. Every business needs:

- Fixed capital – to finance fixed assets.
- Working capital – to finance current assets.

Ultimately, all assets must be supported by the long-term capital base, but short-term borrowings may be used to cover temporary lulls in trade in order to maintain the return on capital employed.

Working capital – stocks, debtors and cash – must be carefully managed so that it is adequate but not excessive.

Types of Business and Capital Structure

The type of business organisation influences the capital structure. In a small business the financial structure tends to be relatively straightforward. On the other hand, with the large public company an extremely complicated capital structure may be present.

(a) Sole Trader and Partnership

With the sole trader or partnership, the initial funds generally come from the owners themselves. Any extra requirements for the seasonal needs or other purposes may be obtained from a bank. Remember also that **credit purchases** are a very important form of financing.

The fixed assets of the sole trader's business or the partnership may be obtained by leasing or by hire purchase; all that the owner of the business has to do is to establish a good credit standing.

With this type of small business, great care must be taken to ensure that **overtrading** does not occur. Overtrading is when there is a high turnover, requiring more stock and higher costs, with an insufficient capital base to support it. There is a great danger of overtrading when too much finance is obtained through hire purchase or the leasing of premises or other fixed assets. Payments have to be made in the form of interest or similar charges, and these are fixed charges which have to be covered whether the business makes a profit or not.

(b) Private Limited Company

The private company requires greater cash resources and, when finance from the owners is inadequate, additional cash must be obtained from external sources. The constraint here is that shares cannot be offered to the general public.

(c) Public Limited Company

The public company can obtain funds through the issue of shares to the general public.

In determining the types of funds to be raised, every business must consider the reasons for needing these funds and the use to which they will be put. For example, it is not likely that share capital would be raised to solve a short-term liquidity problem.

Long-term Funds

(a) Owners' Capital

This is the amount contributed by the owner(s) of a business, and it is supplemented by retained profits.

In the case of a limited company, a great many individuals can own shares in the company. There are two main types of shares – ordinary shares and preference shares, as we have seen. The decision about the proportions of ordinary shares and preference shares (if any) to issue is not an easy one, and it will be influenced by the type of company, as well as by other factors.

(b) Loans

There are a number of forms of longer-term loan available to a business:

- ***Unsecured Loan***

This is an advance for a specified sum which is repaid at a future agreed date. Interest is charged per annum on the total amount of the loan or on the amount outstanding.

- ***Secured Loans***

These tend to be for larger amounts over longer periods. Security is required in the form of a specific asset or it is spread over all the assets of the business (a “floating” charge). If the borrower defaults on the loan, the lender is allowed to dispose of the secured asset(s) to recover the amount owed to him. Since there is less risk to the lender, secured loans are cheaper than unsecured ones.

- ***Mortgage Loans***

These are specific secured loans for the purchase of an asset, the asset itself giving security to the lender – e.g. purchase of premises.

- ***Debentures***

These, as we've seen, are a special type of company loan, broken into small-value units to allow transferability. They carry a fixed rate of interest which is a charge against profits and has to be paid irrespective of the level of profits.

Note that loan interest is a charge against profits and it is, therefore, allowable for tax purposes, unlike dividends on shares.

(c) Venture Capital

Obtaining finance to start up a new business can be very difficult. Venture capital is finance provided by (an) investor(s) who is (are) willing to take a risk that the new company will be successful. Usually, a business proposal plan will need to be submitted to the venture capitalist, so that the likely success of the business can be assessed.

The investor(s) providing venture capital may provide it just in the form of a debenture loan or, more likely, in the form of a package including share capital and a long-term loan. A member of the venture capital company is normally appointed to the board of the new company, to ensure some control over the investment.

(d) Leasing (longer-term)

This source of funds has grown substantially in recent years, and it is an important method of funding the acquisition of fixed assets. The business selects its required asset and the leasing

company purchases it. Then the business uses the asset and pays the leasing company a rent. The payments are regular (e.g. monthly) and for fixed amounts.

A development of leasing is a process called **sale and leaseback**, in which the assets owned and used by a business are sold to a leasing company and then rented back over a long period. The cash proceeds from the sale provide immediate funds for business use.

Lease purchase agreements are also possible, where part of the fixed monthly payment goes towards the purchase of the asset and part is a rental cost.

(e) Hire Purchase (longer-term)

This is very similar to leasing, although the ultimate objective, in this case, is for the business to acquire title to the asset when the final hire-purchase payment is made. The business can thus claim capital allowances on such assets, which reduce its tax liability.

Shorter-term Funds

(a) Trade Credit

Trade credit is a significant source of funds for most businesses, because payment can be made after the receipt of goods/services. However, a balance must be achieved between using trade credit for funding and the problem of loss of supplier goodwill if payments are regularly late.

(b) Overdrafts

Here a bank allows the business to overdraw on its account up to a certain level. This is a very common form of short-term finance.

(c) Grants (these can be for long- or short-term purposes)

Grants are mainly provided by the government and its agencies. They include grants for special projects, e.g. energy-conservation grants for specific industries, such as mining, and grants for specific geographical areas.

(d) Leasing and Hire Purchase

These can also be arranged on a short-term basis.

(f) Factoring

This is a service provided to a business which helps increase its liquidity. The factoring organisation will, for a fee, take over the accounts section of its client and send out invoices and collect money from debtors. It also provides a service whereby the client may receive up to, say, 80% of the value of a sales invoice as soon as it is sent to the customer and the remaining money is passed on when collected by the factor.

The problem with this method is that factors are very careful about accepting clients, and they reject many organisations which approach them. Also, some personal contact with customers is lost, which can harm trade.

Interest Rate Exposure

When considering a loan or other financial arrangement, the benefits deriving from what that borrowing finances will be set against its forecast costs. If the economic situation changes and the difference between costs and benefits is squeezed (say by increased costs of financing) the company will become less profitable. The general level of interest rates is a very important factor in financial planning.

Sources of External Finance

Having looked at the various types of finance available, let's now consider the organisations which provide or help provide funds.

(a) Clearing Banks

These play a vital part in the provision of funds, particularly to small businesses. They provide:

- Overdrafts
- Personal loans – unsecured
- Personal loans – secured
- Medium-term loans – designed to help businesses to expand and develop. Often, repayments can be tailored to suit the individual borrower.

(b) Merchant Banks

These provide development capital but they are very selective in the organisations they choose to help. Normally the bankers require, as security, a seat on the board of directors and active involvement in the management of the company. Development purposes include expansion, buying out partners, product development, and overcoming tax problems.

(c) Specialist Institutions

There are a number of specialist institutions – e.g. 3i Group (Investors in Industry) – which provide finance, particularly for new business start-ups or management buyouts.

(d) Foreign Banks

These account for about 30% of all bank advances to UK manufacturing industries. They are often slightly cheaper than clearing bank loans. Foreign banks are unlikely to lend below £250,000.

(e) Insurance Companies

These can be used for obtaining mortgage facilities on the purchase of property.

(f) Pension Funds

Several pension funds have invested in company projects.

(g) Share Issues through the Stock Exchange

Companies wishing to raise funds through a public issue of shares invariably use the services of an **issuing house**. These are experts in new issues, and they provide administrative support and advice.

(h) Local Authorities

These have certain powers to provide assistance to industry where this would benefit the local area. Finance is usually in the form of loans, improvement grants or provision of factory space.

(j) Central Government and the European Union

There are a number of different fields in which assistance is provided from these sources – e.g. regional aid, tax relief for investing in new companies.

Examples of Business Financing

The following is the balance sheet of a newly opened corner shop/general store. Do you feel that the fixed and working capital has been correctly balanced? Comment on any different approach that you might like to see as regards financing.

Balance Sheet as at

	£	£
Fixed Assets		
Land and buildings		35,000
Fittings		5,000
Current Assets		
Stock	1,000	
Cash	500	
	<u>1,500</u>	
Current Liabilities		
Bank overdraft	5,000	
Trade creditors	1,000	
	<u>6,000</u>	(4,500)
		<u>35,500</u>
Long-term Liabilities		
Mortgage loan		<u>30,000</u>
		<u>5,500</u>
Capital		5,500

This example is somewhat “larger than life” in that it is most unlikely that such a venture would be financed.

Fixed and working capital has not been well balanced at all. It seems that stock has been purchased entirely on credit and that it is at a very low level. Unless another delivery is expected shortly it seems unlikely that £1,000 stock would satisfy customers for very long. In addition, the bank overdraft seems to be financing fixed assets (fittings). This is a mismatch of short- and long-term and is poor financing.

As to the remainder of the financing, much of the land and buildings appears to be under mortgage, with a very small capital contribution from the owners.

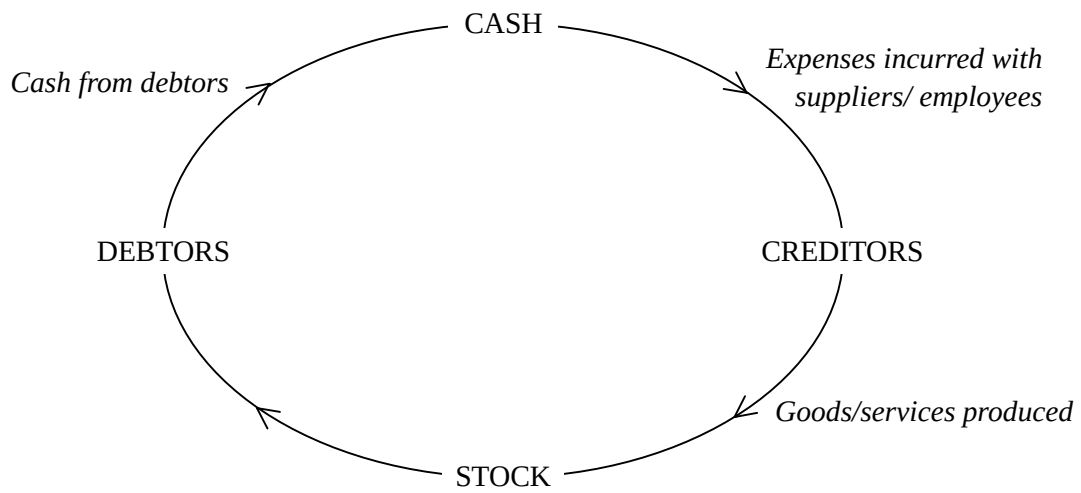
The venture looks doomed from the beginning. Think about the level of profit needed to meet interest charges alone on this level of borrowing – without considering repayment.

E. MANAGEMENT OF WORKING CAPITAL

Working Capital Cycle

Working capital is **current assets less current liabilities**.

When a business begins to operate, cash will initially be provided by the proprietor or shareholders. This cash is then used to purchase fixed assets, with part being held to buy stocks of materials and to pay employees' wages. This finances the setting-up of the business to produce goods/services to sell to customers for cash, which sooner or later is received back by the business and used to purchase further materials, pay wages, etc.; and so the process is repeated.



Problems arise when, at any given time in the business cycle, there is insufficient cash to pay creditors, who could have the business placed in liquidation if payment of debts is not received. An alternative would be for the business to borrow to overcome the cash shortage, but this can be costly in terms of interest payments, even if a bank is prepared to grant a loan.

Striking the Right Balance

Working capital requirements can fluctuate because of seasonal business variations, interruption to normal trading conditions, or government influences, e.g. changes in interest or tax rates. Unless the business has sufficient working capital available to cope with these fluctuations, expensive loans become necessary; otherwise insolvency may result. On the other hand, the situation may arise where a business has too much working capital tied up in idle stocks or with large debtors which could lose interest and therefore reduce profits.

Irrespective of the method used for financing fixed and current assets, it is extremely important to ensure that there is **sufficient** working capital at all times but that this is **not excessive**. If working capital is in short supply, the fixed assets cannot be employed as effectively as is required to earn maximum profits. Conversely, if the working capital is too high, too much money is being locked up in stocks and other current assets. Possibly, the excessive working capital will have been built up at the sacrifice of fixed assets. If this is so, there will be a tendency for low efficiency to persist, with the inevitable running down of profits.

The management of working capital is an extremely important function in a business. It is mainly a balancing process between the cost of holding current assets and the risks associated with holding very small or zero amounts of them.

(a) Management of Stocks

Stocks may include:

- Raw materials
- Work in progress
- Finished goods

The two aspects to consider are:

(i) ***The Cost of Holding Stocks***

These include:

- Financing costs – the cost of producing funds to acquire the stock held
- Storage costs
- Insurance costs
- Cost of losses as a result of theft, damage, etc.
- Obsolescence cost and deterioration costs

These costs can be considerable, and estimates suggest they can be between 20% and 100% per annum of the value of the stock held.

(ii) ***The Cost of Holding Very Low (or Zero) Stocks***

These include

- Cost of loss of customer goodwill if stocks not available
- Ordering costs – low stock levels are usually associated with higher ordering costs than are bulk purchases
- Cost of production hold-ups owing to insufficient stocks

The organisation will set the balance which achieves the minimum total cost, and arrive at optimal stock levels.

(b) Management of Debtors

The management of debtors requires identification and balancing of the following costs:

(i) ***Costs of Allowing Credit***

These include:

- Financing costs
- Cost of maintaining debtors' accounting records
- Cost of collecting the debts
- Cost of bad debts written off
- Cost of obtaining a credit reference

- Inflation cost – outstanding debts in periods of high inflation will lose value in terms of purchasing power

(ii) *Costs of Refusing Credit*

These include:

- Loss of customer goodwill
- Security costs owing to increased cash collection

Again, the organisation will attempt to balance the two categories of costs – although this is not an easy task, as costs are often difficult to quantify. It is normal practice to establish credit limits for individual debtors.

(c) *Management of Cash*

Again, two categories of cost need to be balanced:

(i) *Costs of Holding Cash*

These include

- Loss of interest if cash were invested
- Loss of purchasing power during times of high inflation
- Security and insurance costs

(ii) *Costs of Not Holding Cash*

These include:

- Cost of inability to meet bills as they fall due
- Cost of lost opportunities for special-offer purchases
- Cost of borrowing to obtain cash to meet unexpected demands

Once again, the organisation must balance these costs to arrive at an optimal level of cash to hold. The technique of cash budgeting is of great help in cash management.

Study Unit 3

Final Accounts and Balance Sheet

<i>Contents</i>	<i>Page</i>
Introduction	47
A. The Trial Balance	47
B. Trading Account	49
Layout	49
Example	50
C. Manufacturing Account	51
Layout	51
Example	52
D. Profit and Loss Account	54
Credits	54
Debits	54
Items Requiring Special Attention	55
Example	58
E. Allocation or Appropriation of Net Profit	59
Sole Trader	59
Partnership	59
Limited Company	61
F. The Nature of a Balance Sheet	62
Difference between Trial Balance and Balance Sheet	62
Functions of the Balance Sheet	62
Summarised Statement	63

(Continued over)

G. Assets and Liabilities in the Balance Sheet	63
Types of Asset	63
Valuation of Assets	64
Order of Assets in the Balance Sheet	64
Liabilities to Proprietors	65
External Liabilities	66
I. Distinction between Capital and Revenue	67
Definitions	67
Capital and Revenue Receipts	67
J. Preparation of Balance Sheet	68
Sole Trader	68
Partnership	69
Answers to Questions for Practice	71

INTRODUCTION

Every business, sooner or later, wants to know the result of its trading, i.e. whether a profit has been made or a loss sustained, and whether it is still financially solvent. For this reason, the following accounts must be prepared at the end of the year (or at intervals during the year if the business so chooses):

(a) Manufacturing Account

This applies only to a manufacturing business, and shows the various costs of producing the goods.

(b) Trading Account

The purpose of this account is to calculate the **gross profit** of a trading business, and this is done by showing the revenue from the sale of goods, and the cost of acquiring those goods.

(c) Profit and Loss Account

A business has many expenses not directly related to manufacturing or trading activities, and these are shown in the profit and loss account. By subtracting them from gross profit, a figure for **net profit** (or loss) is found. A business selling a service will produce just a profit and loss account.

(d) Appropriation Account

A business now has to decide what to do with its net profit. The way in which this profit is distributed (or “appropriated”) is shown in the appropriation account. This account is not used in the case of a sole trader, the net profit being transferred to the proprietor’s capital account.

(e) Balance Sheet

This is a statement of the assets owned by the business, and the liabilities outstanding. It is not strictly an account.

So you can see that we arrive at the results of a firm’s trading in two stages. Firstly, from the manufacturing and trading accounts we ascertain gross profit. Secondly, from the profit and loss account we determine net profit. You will often see the manufacturing, trading and profit and loss accounts presented together and headed simply “Profit and Loss Account for the year ending”.

A. THE TRIAL BALANCE

Before drawing up the final accounts and the balance sheet, it is usual to prepare a list of all the balances in the accounts ledger. This is known as the **trial balance**.

Each account in the firm’s books is balanced off. This means adding up the debit and credit sides and then comparing the totals. If, for example, the debit side adds up to £500 and the credit side to £400, then the lesser figure is deducted from the greater figure, and the difference would be shown as a debit balance and entered into the trial balance (in this case it would amount to £100).

Having drawn up the trial balance, and providing that the two sides have similar totals, it is then possible to begin to draw up the final accounts. Remember that even if the trial balance has similar amounts on both the debit and credit totals, this only proves the **arithmetical accuracy** of the entries in the ledger accounts.

A Typical Trial Balance (Sole Trader)

	Debit £	Credit £
Capital		84,000
Drawings	10,000	
Debtors	20,000	
Creditors		7,000
Provision for doubtful debts		700
Fixed assets at cost	60,000	
Depreciation of fixed assets		19,000
Stocks (trading)	32,000	
Telephone expenses	3,000	
Sundries	1,000	
Cash in hand/bank	1,900	
Purchases trading stock	55,000	
Sales		170,000
Wages	35,000	
Insurance	1,600	
Audit	3,000	
Motor vehicle expenses	9,000	
Rent	9,000	
Salaries (office)	12,000	
Office cleaning	9,000	
Carriage inwards	2,200	
Advertising	5,000	
Commissions paid	7,000	
Loss on canteen	5,000	
	<u>280,700</u>	<u>280,700</u>

Note: This model is provided to give you an idea of the layout and of some of the typical items that may be included in a trial balance. There is no need to try and learn where all the items can be found.

B. TRADING ACCOUNT

For the sake of simplicity, we will assume here that the business purchases ready-made goods and resells them at a profit.

What is gross profit? If I purchase a quantity of seeds for £10 and sell them for £15, I have made a gross profit of £5. In the trading account we have to collect all those items which are directly concerned with the cost or selling price of the goods in which we trade.

Layout

The main items in the trading account are shown in the following model layout. Carriage inwards, i.e. on purchases, and customs duties on purchases, etc. are expenses incidental to the acquisition by the business of the goods which are intended for resale, and are therefore debited to the trading account.

	£	£	£
Sales			XXXX
less Sales returns (Returns inwards)			XXXX
Turnover			XXXX
Cost of goods sold:			
Opening stock		XXXX	
Purchases	XXXX		
less Returns (Returns outwards)	XXXX		
	XXXX		
add Carriage inwards	XXXX		
		XXXX	
		XXXX	
less Closing stock		XXXX	XXXX
Gross profit (loss)			XXXX

Note how sales returns are deducted from sales, and purchases returns from purchases.

Gross profit may be defined as the **excess of the selling price of goods over their cost price**, due allowance being made for opening and closing stocks, and for costs incidental in getting the goods into their present condition and location. We will look at the valuation of stock in a later study unit.

Example

From the following balances extracted from the books of AB Co. Ltd, prepare a trading account for the year ended 31 December:

Balances at 31 December Year 1

	Dr £	Cr £
Purchases	140,251	
Sales		242,761
Purchases returns		4,361
Sales returns	9,471	
Stock as at 1 January	54,319	
Customs and landing charges (re purchases)	2,471	
Carriage inwards	4,391	

Stock in hand at 31 December was valued at £64,971.

NB These are not all the balances in the books of the company – only those necessary for compiling the trading account.

As you know that all these items are trading account items, this makes the exercise easy, but remember that in practice the accountant will have to select, out of the various items in the trial balance, those which are trading account items.

AB Co. Ltd
Trading Account for year ended 31 December . . .

	£	£	£
Sales	242,761		
less Returns	<u>9,471</u>		233,290
Cost of goods sold:			
Opening stock		54,319	
Purchases	140,251		
less Returns	<u>4,361</u>		
	135,890		
Customs and landing charges	2,471		
Carriage inwards	<u>4,391</u>	<u>142,752</u>	
		197,071	
less Closing stock		<u>64,971</u>	<u>132,100</u>
Gross profit			101,190

QUESTIONS FOR PRACTICE (answers provided at the end of the unit)

1. (a) From the following balances extracted from the ledger of H Smith & Co. on 31 October, prepare the trading account of the business for the year ended 31 October:
- | | |
|---|---------|
| Purchases | £24,720 |
| Sales | £40,830 |
| Purchases returns | £1,230 |
| Sales returns | £1,460 |
| Carriage inwards | £2,480 |
| Stock as at 1 November (i.e. beginning of year) | £6,720 |
| Stock at end of year | £7,630. |
- (b) In what way would the trading account of H Smith & Co. be different if the proprietor, Mr Smith, had withdrawn goods for his own use valued at £500 selling price?

C. MANUFACTURING ACCOUNT

In dealing with our trading account, we have assumed that the business purchased finished articles and resold them in the same condition, without making any alteration to them. Such a business is a trading concern only. As you know, many businesses do more than this. They purchase raw materials and convert them into finished articles by a process of manufacture. Manufacture involves a number of factors, each contributing its own measure of cost to the final product when it is ready for the market. A simple trading account would not be appropriate for the purpose of dealing with these various expenses, so we use a manufacturing account.

The primary purpose of the manufacturing account is to arrive at the **cost of production** of the articles produced within a given period. A secondary purpose may be that of arriving at a theoretical profit on manufacturing (manufacturing profit).

The cost of production comprises such factors as raw materials, manufacturing wages, carriage inwards, factory power and fuel, factory rent, rates, insurance, etc. The expenses must not be debited to the manufacturing account haphazardly; the layout and sequence of this account is important.

Layout

The account is built up by stages:

- Cost of materials used** – i.e. opening stock of raw materials plus purchases of raw materials less closing stock of raw materials.
- Carriage inwards, duty, freight, etc. will be added to purchases, while purchases returns will be deducted. The purchases figure will be after deduction of trade discount.
- Direct labour costs** – i.e. wages paid to workmen engaged on actual production.
- Direct expenses** – which are any expenses incurred on **actual production**.
- Prime cost** – i.e. the sub-total of (a), (b), (c) and (d).
- Factory overheads or indirect expenses** associated with production such as factory rent and rates, salary of works manager, and depreciation of plant, machinery and factory buildings.

- (g) Work in progress at the beginning of the period (added).
- (h) Work in progress at the end of period (deducted).
- (i) **Cost of production** – i.e. adjusted total of (g) and (h)

So in outline the layout is:

Direct materials
Direct labour
Direct expenses
PRIME COST
Factory overheads or Indirect expenses
TOTAL PRODUCTION COST

Example

The following is an extract from a trial balance:

	£	£
Opening stock of raw materials	90,000	
Opening stock of work in progress	75,000	
Returns outwards – raw materials		2,500
Purchases – raw materials	160,000	
Wages direct	83,000	
Wages indirect	65,000	
Expenses direct	22,000	
Carriage inwards – raw materials	7,900	
Rent factory	25,000	
Fuel and power	17,370	
General factory expenses	32,910	
Opening stocks – finished goods	97,880	
Sales		548,850

The closing stocks are:

Raw materials	£74,000
Work in progress	£68,000
Finished goods	£83,500

We can prepare the manufacturing and trading accounts together as follows:

Manufacturing and Trading Account for

	£	£
Opening stocks of raw materials		90,000
Purchases raw materials	160,000	
less Returns outward	<u>2,500</u>	
	157,500	
Carriage inwards	<u>7,900</u>	<u>165,400</u>
		255,400
less Closing stocks of raw materials		<u>74,000</u>
Total cost of raw materials		181,400
Direct wages	83,000	
Direct expenses	<u>22,000</u>	<u>105,000</u>
Prime cost		286,400
Indirect expenses:		
Wages	65,000	
Fuel & power	17,370	
General factory expenses	32,910	
Rent	<u>25,000</u>	<u>140,280</u>
		426,680
Opening WIP		<u>75,000</u>
		501,680
less Closing WIP		<u>68,000</u>
Total cost of production		<u>433,680</u>
Sales		548,850
Opening stocks finished goods	97,880	
Production costs	<u>433,680</u>	
	531,560	
less Closing stocks finished goods	<u>83,500</u>	<u>448,060</u>
Gross trading profit		100,790

D. PROFIT AND LOSS ACCOUNT

No business can function without incurring what are known as overhead expenses. For example, there are salaries, rent, stationery and other incidentals which must be met out of the gross profit made. In addition, a business may earn a small income quite apart from the gross profit, e.g. dividends and interest on investments.

The purpose of the profit and loss account is to gather together all the revenue credits and debits of the business (other than those dealt with in the manufacturing and/or trading account) so that it can be seen whether a net profit has been earned or a net loss incurred for the period covered by the account.

Credits

The items appearing as credit in the profit and loss account include:

- Gross profit on trading – brought from the trading account.
- Discounts received.
- Rents received in respect of property let. (If rents are received from the subletting of part of the factory premises, the rent of which is debited to the manufacturing account, then these should be credited to manufacturing account. In effect this reduces the rent debit to that applicable to the portion of the factory premises actually occupied by the business.)
- Interest and dividends received in respect of investments owned by the business.
- Bad debts recovered.
- Other items of profit or gain, other than of a capital nature, including profits on the sale of assets.

Debits

All the overhead expenses of the business are debited to the profit and loss account. Items entered as debits in the profit and loss account should be arranged in a logical and recognisable order. The following subdivisions of overhead expenses indicate one recommended order (although this is not the only order in use).

(a) **Administration Expenses**

These cover rent, rates, lighting, heating and repairs etc. of office buildings, directors' remuneration and fees, salaries of managers and clerks, office expenses of various types. In general, all the expenses incurred in the **control** of the business and the direction and formulation of its policy.

(b) **Sales Expenses**

Included in these are travellers' commission, salaries of sales staff, warehouse rent, rates and expenses in respect of the warehouse, advertising, and any expenses connected with the **selling** of the goods dealt in, e.g. bad debts.

(c) **Distribution Expenses**

Here we have cost of carriage outwards. (Remember that carriage inwards, i.e. on purchases, is debited to the trading account; it is not really an overhead charge as it increases the cost of the purchase.) Under this heading we also have such items as freight (where goods are sold to customers abroad), expenses of motor vans and wages of the drivers, wages of packers and any other expenses incurred by the **distribution** or delivery of the goods dealt in.

(d) Financial Expenses

These include bank charges, interest on loans, hire purchase agreements, debentures, mortgages, bank overdrafts, etc.

No capital expense items must be debited to profit and loss account. This is extremely important. An example of a capital item is the purchase of plant and machinery by a manufacturing business.

Items Requiring Special Attention

There are several items which do not occur in the normal course of business but which must be carefully considered at the end of each trading period.

(a) Bad Debts

If all the debtors of a firm paid their accounts, no mention of this item would be made. Unfortunately, however, they do not, and many firms incur what are known as bad debts. For instance, where a debtor is declared a bankrupt, the whole of his debt will not be settled. Only a part of it is paid, but as far as the law is concerned, the debt is wiped out. Consequently, the unsettled portion of the debt is of no value, and it must be written off as a loss. Similarly, if debtors disappear, or if their debts are not worth the trouble of court action, the debts must be written off.

The debtor's account is credited with the amount of bad debt, thus closing the account. To complete the double entry, the **bad debts account** is debited. All bad debts incurred during the trading period are debited to the bad debts account.

At the end of the trading period the bad debts account is credited with the total bad debts, to close the account. The double entry is preserved by debiting profit and loss account with the same amount.

Bad debts are sometimes considered to be a financial expense, for they arise from the financial policy of selling goods on credit rather than for cash. However, they are more appropriately classified as a sales expense, as they result directly from sales.

(b) Bank Charges

These are charges made by the firm's bank for working the account of the firm, and are therefore debited to profit and loss account. Bank charges are a financial expense.

(c) Debenture Interest

As debenture holders are creditors of the company, their interest must be paid whether the company is able to show a profit or not. Therefore it is an expense and, as such, must be debited to profit and loss account.

Remember the difference between debenture interest and dividends paid. The former is interest on an outside loan whilst the latter is merely a distribution of profit.

(d) Depreciation

Assets such as plant and machinery, warehouse or factory buildings, delivery vehicles, are used directly in the manufacture of goods or in trading and, as a result of this, their value must decrease owing to wear and tear. This decrease in value must be allowed for when overhead charges are being debited to the manufacturing, trading or profit and loss account. We will look at how to estimate the amount to charge each year for depreciation in a later study unit.

Each year the depreciation account will increase in value, until such time as the balance on that account equals the cost price shown in the asset account. At this point no further depreciation should be charged to the profit and loss account.

Depreciation of such assets as office furniture must also be allowed for in the profit and loss account. Where, however, there is a manufacturing account, the depreciation of all assets which are actually engaged in production, e.g. plant and machinery, should be recorded in it, because such depreciation is a manufacturing expense. Normally the depreciation provision is the last charge to be shown in both the manufacturing account and the profit and loss account.

Where there is a profit or loss on the disposal of a fixed asset, this is shown in the profit and loss account immediately after the expense of depreciation.

(e) Discount

There are usually two discount accounts, one for discounts received and one for discounts allowed. The former is a credit balance and the latter a debit balance. At the end of the trading period, discounts received account is debited and profit and loss account credited, as items under this heading are benefits received by the firm. Discounts allowed account is credited and profit and loss account debited, as these items are expenses of the firm. Discounts allowed can be classed as a financial expense but are more usually shown as a separate item in the profit and loss account.

(f) Dividends Paid (Limited Company Only)

This item, which will appear as a debit balance in the trial balance, represents profits which have been distributed amongst the shareholders of the company. It is not, therefore, an expense of the company and must **not** be debited to the profit and loss account. This item must be debited to the appropriation account (see later). If no profits have been made, no dividends will be paid to shareholders.

(g) Drawings (Partnership or Sole Trader)

The drawings of a partner or sole trader are not expenses of the business and must not, therefore, be debited to the profit and loss account. Drawings are the withdrawals of cash or goods or services from the business by the partner or sole trader.

(h) Goodwill

This is an item which often appears as an asset of a business. It is the value attached to the probability that old customers will continue to patronise the firm. Thus, where a company purchases another business, it may pay £500,000 for assets which are agreed as being worth only £450,000. The difference of £50,000 will be the value of the goodwill.

In such circumstances, the company might decide to write off the goodwill over a number of years, say ten years. In this case the profit or loss account would be debited annually with £5,000 and goodwill account credited, until the latter account ceases to exist. Often, however, the firm decides to write off the entire amount of any goodwill immediately.

(i) Preliminary Expenses (Limited Company Only)

These are expenses incurred at the time a limited company is set up, and consist chiefly of legal charges connected with the incorporation of the company. Under the Companies Act they should be written off immediately.

(j) Provision for Bad Debts

In addition to writing off bad debts as they occur or when they are known to be bad, a business should also provide for any losses it may incur in the future as a result of its present debtors being unable to meet their obligations. If a business has book debts totalling £100,000, it is not very likely that all those debtors will pay their accounts in full. Some of the debts may prove to be bad, but this may not be known for some considerable time.

The amount of the provision should be determined by a careful examination of the list of debtors at the balance sheet date. If any of these debts are bad, they should be written off at once. If any debts are doubtful, it should be estimated how much the debtor is likely to pay. The balance of his debt is potentially bad, and the provision should be the total of such potentially bad amounts. The debtor's account will not, however, be written off until it is definitely known that it is bad.

The provision is formed for the purpose of reducing the value of debtors on the balance sheet to an amount which it is expected will be received from them. It is **not** an estimate of the bad debts which will arise in the succeeding period. Bad debts arising in the next period will result from credit sales made within that period as well as from debts outstanding at the beginning of the period. It is therefore quite incorrect to debit bad debts against the provision for bad debts. Once the latter account has been opened, the only alteration in it is that required to increase or decrease its balance – by debit or credit to profit and loss account. This alteration is included as a financial expense when a debit.

(**Never** show provision for bad debts with the liabilities on the balance sheet – it is always deducted from the amount of debtors under the assets on the balance sheet – see later.)

(k) **Provision for Discounts Allowable**

If a business allows discount to its customers for prompt payment, it is likely that some of the debtors at the balance sheet date will actually pay less than the full amount of their debt. To include debtors at the face value of such debts, without providing for discounts which may be claimed, is to overstate the financial position of the business. So, a provision for discounts allowable should be made by debit to profit and loss account. If made on a percentage basis, it should be reckoned in relation to potentially good debts, i.e. debtors less provision for bad debts, for if it is thought that a debt is sufficiently doubtful for a provision to be raised against it, it is hardly likely that that debtor will pay his account promptly and claim discount!

The provision appears as a deduction in the balance sheet from debtors (after the provision for bad debts has been deducted). It is a financial expense.

(l) **Expenses Paid in Advance or Arrears (Prepayments and Accruals)**

Where a proportion of an expense, such as rent, has been **paid in advance (prepaid)**, this must be allowed for when the profit and loss account is drawn up. For instance, if the firm paid £10,000 rent for six months from 1 November, and the profit and loss account is made out for the year ended 31 December, it would obviously be wrong to debit the profit and loss account with the full amount of £10,000. Only two months' rent should be debited, i.e. £3,333.30 and the other four months' rent, i.e. £6,666.70, should be carried forward and shown in the balance sheet as an asset, "Rent paid in advance". These remarks apply equally to any other sum paid in advance, e.g. rates, insurance premiums.

On the other hand, it is often the case that a firm, at the end of the trading period, has incurred expenses which have **not yet been paid** (i.e. have **accrued**). For instance, where rent is not payable in advance, a proportion of the rent for the period may be owing when the profit and loss account is drawn up. How is this to be accounted for?

Obviously, profit and loss account will be debited with rent already paid, and it must also be debited with that proportion of the rent which is due but unpaid. Having debited profit and loss account with this latter proportion, we must credit rent account with it. The rent account will then show a credit balance and this must appear as a liability on the balance sheet – it is a debt owing by the business. Then, when this proportion of rent owing is paid, cash will be credited and rent account debited.

The treatment of expenses (or income) paid or received in advance or in arrears is an example of the accruals concept referred to earlier in the course.

Example

The following balances remain in John Wild's books after preparation of his trading account for the year ended 30 June:

	Dr £	Cr £
Capital		80,000
Gross profit		10,000
Rates	700	
Insurance	350	
Postage and stationery	270	
Drawings	6,000	
Electricity	800	

The following notes were available at 30 June:

Rates paid in advance	£140
Insurance paid in advance	£150
Electricity account due but unpaid	£170

Prepare John Wild's profit and loss account for the year ended 30 June.

John Wild
Profit and Loss Account for the year ended 30 June

	£	£
Gross profit		10,000
less Expenses:		
Rates (700 – 140)	560	
Insurance (350 – 150)	200	
Postage and stationery	270	
Electricity (800 + 170)	970	2,000
Net profit		8,000

E. ALLOCATION OR APPROPRIATION OF NET PROFIT

The net profit of a business for any period is the excess of its income (gains and profits) over its expenses and losses. It is quite easily ascertained by deducting the total of the debit items in the profit and loss account from the total of the credit items.

We must now consider how the debit to the profit and loss account for net profit (or credit for net loss) is represented by double entry in the books of the business. This differs according to the type of ownership of the business.

The three main types of ownership are sole trader, partnership and limited company, and we shall consider the question of net profit in relation to each in turn.

Sole Trader

This is the simplest case of all (illustrated in the previous example) because the net profit, which is debited to profit and loss account, is credited to the capital account of the sole trader. The trader may have withdrawn certain amounts during the trading period; the total of the drawings accounts will then be debited to capital account at the end of the trading period.

Partnership

The allocation of net profit (or loss) in the case of a partnership is not quite as simple. When the partnership commences, a document is usually drawn up setting out the rights and duties of all the partners, the amounts of capital to be contributed by each, and the way in which the net profit or loss is to be shared amongst them.

In the case of a partnership, the profit and loss account is really in two sections. The first section is drawn up as we have seen in this study unit and is debited with the net profit made (or credited with the net loss). The second section shows how the net profit is allocated to the various partners, and it is referred to as a **profit and loss appropriation account**.

In a partnership, the partners each have two accounts, the **capital account** (which is kept intact) and the **current account**. A partner's current account is debited with his drawings, and with his proportion of any loss which the business might sustain. It is credited with the partner's share of the net profit, and with interest on his capital if this is provided for in the partnership agreement. Thus

the capital account of a partner will remain constant, but his current account will fluctuate year by year.

So the appropriation account is credited with the net profit of the trading period. It is debited with any interest on the partners' capitals, where this is provided for in the partnership agreement, and with any salaries.

Then, when these items have been debited, remaining profit can be divided. The appropriation account will be debited with the shares of the remaining profit which are due to the partners. This will close the profit and loss account, and, to complete the double entry, the current account of each partner must be credited with his share of the profit.

Example

Smith, Brown and Robinson are partners who share profits in the proportion of their capitals. Their capitals are £50,000, £20,000 and £10,000 respectively. The net profit for the year before providing for this, or for the following items, is £71,000. Interest on capital is to be allowed at 5 per cent per annum, and Robinson is to have a partnership salary of £3,000 per annum. Show how the profit of £71,000 is allocated.

Profit and Loss Appropriation Account for year ended 31 December . . .

	£	£
Net profit b/d		71,000
Robinson – salary		3,000
Interest on capital at 5%:		
Smith	2,500	
Brown	1,000	
Robinson	500	4,000
Share of profit:		
Smith ($\frac{5}{8}$)	40,000	
Brown ($\frac{1}{4}$)	16,000	
Robinson ($\frac{1}{8}$)	8,000	64,000
		71,000

Thus:

	£
Smith's current account will be credited with (£2,500 + £40,000)	42,500
Brown's current account will be credited with (£1,000 + £16,000)	17,000
Robinson's current account will be credited with (£3,000 + £500 + £8,000)	11,500
Net profit shown in first part of profit and loss account	71,000

Limited Company

When the net profit has been ascertained, the directors of a company have to decide how much they can release as dividends and how much to retain. A limited company distributes its profits by means of dividends on the shares of its capital held by the shareholders. So, where a company declares a dividend of 10 per cent, the holder of each £1 share will receive 10p. Such a dividend would be debited to the appropriation account, together with all dividends paid on other classes of shares.

Directors' fees should be debited to the profit and loss account proper. (If, however, these fees vary according to the amount of net profit paid and have to be passed by the company in general meeting, they should be kept in suspense until such meeting has taken place. Then they should be debited to the appropriation account, because they are a proportion of the profits due to the directors.)

When dividends and any other items have been debited to the appropriation account, the whole of the profit may not have been used. The balance remaining is carried forward to the appropriation account of the next trading period.

When a company make a large profit, the directors will often deem it prudent to place a proportion of such profit on one side, instead of distributing it amongst the shareholders. An account is opened to which such sums will be credited, the appropriation account being debited. This account is known as a **reserve account** and contains appropriation from net profits, accumulating year by year.

QUESTIONS FOR PRACTICE

2. From the following balances appearing in the ledger of the New Manufacturing Co. on 31 December, draw up the profit and loss account for the year ended 31 December:

	£	£
Discounts allowed	32	
Discounts received		267
Gross profit brought down from trading account		127,881
Salaries	44,261	
Bank charges	193	
Sundry office expenses	1,361	
Rent and rates	19,421	
Bad debts written off	937	
Carriage outwards	5,971	
Plant and machinery	50,000	

Notes:

- (a) Write off 10 per cent depreciation on plant and machinery.
 - (b) Rent owing on 31 December amounted to £2,000.
 - (c) An insurance premium amounting to £500 was paid in July in the current year for the year to 30 June of the following year. The £500 is included in sundry office expenses.
-

F. THE NATURE OF A BALANCE SHEET

As we have seen, at the end of an accounting period, it is usual to extract a trial balance. From the trial balance are compiled the trading account, manufacturing account (if any), profit and loss and appropriation account. In preparing these final accounts, many accounts in the ledger are closed, e.g. sales account is closed by being transferred to the credit of the trading account.

When the final accounts have been prepared, there will still be a number of ledger accounts which remain open. These open account balances are extracted as a kind of final trial balance, set out in full detail, and this final trial balance is known as the balance sheet.

A balance sheet is a statement showing the assets owned and the liabilities owed by the business on a certain date. It can be ruled in account form, but it is not an account. However, the expression “final accounts” includes the balance sheet even though it is not really an account.

Because it is a statement as at a particular date, it is headed:

Name of Firm
Balance Sheet as at (or as on, or at) date

It is **never** headed “for the year (or other period) ended”. This latter type of heading is used for trading and profit and loss accounts which cover a period of time.

The balance sheet may be presented with the assets on one side and the liabilities on the other. An alternative presentation is to show the assets (net) first, with a total, and then the capital of the business, with its own total, in a vertical format. The vertical format is now the more generally used one.

Difference between Trial Balance and Balance Sheet

- A trial balance is a list of **all** the ledger balances, not only assets and liabilities but also gains and losses. A balance sheet is a list of a **part** only of the ledger balances, i.e. those remaining after the profit and loss items have been dealt with, the assets and liabilities.
- A trial balance is prepared **before** the revenue accounts are compiled. A balance sheet is prepared **after** the revenue accounts have been dealt with.

With the profit and loss account we actually transfer the gains and losses appearing in accounts in the books. Because the balance sheet is a statement and not an account, the accounts for assets and liabilities in the books are not affected when we draw up the balance sheet. We do not “transfer” them to the balance sheet.

Functions of the Balance Sheet

(a) Financial Position of Business

The balance sheet is drawn up in order to give a picture of the financial position of the business. It reveals whether the business is solvent or insolvent. It shows how much is invested in different forms of property, and how the business is funded.

(b) Arithmetical Accuracy of Accounts

The agreement of the balance sheet also provides a check on the accuracy of the revenue accounts in much the same way as the agreement of a trial balance provides evidence of the arithmetical accuracy of the books.

(c) Bridge between Financial Years

The balance sheet is also a bridge between one financial year and the next. All accounts which remain open after the manufacturing, trading and profit and loss accounts have been prepared are summarised in the balance sheet.

Summarised Statement

If we listed each asset, each piece of machinery, each book debt etc. separately, the balance sheet would be extremely long. Assets and liabilities are summarised or grouped, therefore, into main classes, and only the total of each type is shown on the balance sheet. Thus, if our debtors are Jones, who owes us £10, and Smith, who owes us £15, we show under current assets:

Debtors £25

Summarisation entails giving as much information in as little space as possible. Style and layout are important. As an example, assume that office furniture was worth £2,000 at the beginning of the year and has since depreciated by £100. The balance sheet will show:

Balance Sheet as at 31 December year 1

	£	£
Fixed Assets		
Office furniture		
Balance 1 January	2,000	
less Depreciation for year at 5% pa	<u>100</u>	<u>1,900</u>

G. ASSETS AND LIABILITIES IN THE BALANCE SHEET**Types of Asset**

The key distinction to make is between fixed and current assets.

- **Fixed Assets**

These are assets which are retained in a business, more or less permanently, for the purpose of earning revenue only and not for the purposes of sale. Examples are: plant, machinery, land, buildings, vehicles. Some fixed assets are consumed by the passing of time, e.g. leases, mines. The difference between tangible and intangible assets is discussed later.

- **Current Assets**

Cash and those other assets which have been made or purchased merely to be sold and converted into cash are known as current assets. It is from the turnover of current assets that a business makes its trading profit. Examples are: stock in trade, debtors, cash, temporary investments. All such assets are held for a short period only, e.g. stock when sold creates debtors, these debtors pay their debts in cash, by means of which more stock can be acquired. So the circle moves round and current assets are kept constantly moving.

Whether an asset is fixed or current depends entirely upon the kind of business. What is a fixed asset in one firm may be a current asset in another. For example, machinery is a fixed asset when held by a

firm which manufactures cigarettes but, in the hands of a firm which sells machinery, it will be a current asset. A motor van will be a fixed asset for a tradesman who uses it for delivery but, to a manufacturer of such vans, it will be a current asset, i.e. stock.

The deciding factor is whether the asset is held merely until a purchaser can be found, or permanently for use in the business.

However, you must remember that even if an asset is not easily realisable, it may still be a current asset, e.g. a debt due from a foreign importer may be hard to realise, owing to exchange restrictions, but it still remains a current asset. (Note also that a “fixed” asset is not necessarily immovable.)

A further classification of assets may be made to distinguish between tangible and intangible assets.

- Assets which can be possessed in a physical sense, e.g. plant, machinery, land and buildings, are **tangible** assets. Also included in the category of tangible assets are legal rights against third parties.
- On the other hand, assets which cannot be possessed in a physical sense, and which are not legal rights against external persons, are intangible. Goodwill is perhaps the best example of an intangible asset. It is often a very valuable asset in the case of an old-established business.

Valuation of Assets

Generally speaking, fixed assets represent money which has been spent in the past on items which were intended to be used to earn revenue for the firm. In many cases these fixed assets depreciate over a period of years and may finally have to be scrapped. Therefore, the money spent originally on a fixed asset should be spread out over the number of years of the estimated life of the asset. An item representing depreciation will be debited to the profit and loss account annually.

Because we deduct the depreciation from the cost of the asset, the fixed asset is shown as a diminishing figure in the balance sheet each year (unless, of course, there have been additions to the asset during the year). The decrease in the value of the fixed asset is also shown as an expense in the annual profit and loss account.

Remember that not all fixed assets are consumed by the passing of time. Some, in fact, may appreciate, e.g. freehold land and buildings. With the rising value of such assets, it is considered quite correct to revalue them so the balance sheet shows the correct market value.

Current assets such as stock are normally held for a relatively short period, i.e. until they can be realised. Current assets should generally be valued at cost or market price whichever is lower. This is necessary to ensure that no account is taken of profit until the assets have been realised.

Order of Assets in the Balance Sheet

The assets in the balance sheet must be arranged in a clear and logical order. The order usually adopted is:

Fixed assets

Current assets

In each group assets are arranged in an order from most fixed to most fluid, thus:

Fixed Assets	Current Assets
Goodwill	Work in progress
Patents, trademarks, etc.	Stock in trade
Freehold land and buildings	Debtors
Leasehold land and buildings	Payments in advance
Plant and machinery	Temporary investments
Motor vehicles	Bank deposit account
Furniture and fittings	Cash at bank
Long-term investments	Cash in hand

A sub-total for each group is extended into the end column of the balance sheet. The examples which follow later make this clear.

Liabilities to Proprietors

The liability of a business to the proprietor is, in the case of a sole trader, his capital account, i.e. the amount by which the business is indebted to him.

With a partnership, the liabilities to the proprietors are found in the capital accounts and current accounts of the partners. (The current accounts are only liabilities when they are credit balances. When they are debit balances they appear in the asset section of the balance sheet, since debit balances represent debts due **from** partners.) The balances of these accounts represent the indebtedness of the business to the various partners.

With a limited company, this indebtedness is the amount of the share capital paid up.

The indebtedness of the business to the proprietor(s) cannot, strictly speaking, be classed as a liability. The proprietors of a firm can only withdraw their capital in bulk when the firm is wound up, and even then they must wait until the outside creditors have been satisfied. When the outside creditors have been paid out of the proceeds of sale of the assets, it may be that there is very little left for the proprietors to take.

In some cases the proceeds of sale of the assets are insufficient to pay off the external creditors. The proprietors must then provide more funds until the creditors are satisfied:

- A **sole trader** must contribute funds to pay off remaining outside creditors, even if this takes the whole of his private property and investments.
- In a **partnership**, the partners too must make good a deficiency on winding up. They must contribute until all the external creditors are paid, even if this takes the whole of their private means.
- A **limited liability company** is different from either a sole trader or a partnership, since the liability of each proprietor, i.e. shareholder, is restricted to the amount he originally agreed to contribute. For example, a shareholder has 100 shares of £1 each in a company, and has paid 75p on each share. He can only be called upon to pay a further sum of 25p per share (total £25), if the assets of the company do not realise sufficient to satisfy the external creditors. In

most companies all the shares are fully paid, so the shareholders are not liable for anything further.

External Liabilities

The external liabilities of any firm are those which cannot be described as indebtedness to proprietors. It is possible, however, for a person to be an external creditor and a proprietor. This occurs when a shareholder of a company becomes an ordinary trade creditor of the company in the normal course of business.

We can classify external liabilities in various ways:

(a) Long term or Current Liabilities

- ***Long-term Liabilities***

Long-term liabilities are those which would not normally be repaid within 12 months.

- ***Current Liabilities (Short-term Liabilities)***

Current liabilities consist of current trading debts due for payment in the near future. It is essential that long-term and current liabilities are stated separately in the balance sheet, so that shareholders and third parties can judge whether the current assets are sufficient to meet the current liabilities and also provide sufficient working capital. Current liabilities also include accrued expenses.

(b) Secured and Unsecured Liabilities

- ***Secured Liabilities***

Liabilities for which a charge has been given over certain or all of the assets of the firm are said to be secured. In such cases the creditor, in default of payment, can exercise his rights against the assets charged, to obtain a remedy. (An asset is “charged” when the creditor gives a loan on condition that he acquires the ownership of the asset if the loan is not repaid by the agreed date. The asset is security for the loan.) This is similar to a mortgage on a private house.

A charge may be either **fixed** or **floating**. A fixed charge is one which relates only to one particular asset, such as a building. On the other hand, a floating charge can be exercised over the whole of the class of assets mentioned in the charge, present or future. Debentures are often secured by a floating charge on the whole of the assets of the company.

The floating charge does not “crystallise” until the charge is enforced, i.e. the creditor goes to court to obtain payment of his debt. When this occurs, the firm which granted the charge may not deal in any way with any of the assets included in the charge.

A floating charge is convenient to both borrower and lender. The borrower is allowed to deal as he chooses, in the ordinary course of business, with the assets covered by the charge, without having to obtain the permission of the lender. Also the lender is satisfied because he knows that his loan is well secured. With a fixed charge, however, the borrower could not sell the asset charged without the permission of the lender.

- ***Unsecured Liabilities***

Such liabilities are not secured by a charge over any of the assets of a firm.

In the event of a winding-up of a business, the secured creditors are satisfied out of the proceeds of the asset(s) over which they have a charge. Any surplus, together with the

proceeds of uncharged assets, are reserved to satisfy first the preferential liabilities (described below) and then the unsecured liabilities. When all these liabilities have been met, the final surplus, if any, is shared by the proprietors.

(c) Preferential Liabilities

On the bankruptcy of a sole trader or partnership, or on the winding-up of a company, certain liabilities enjoy preference over others. These debts are known as preferential liabilities. Examples are unpaid wages and taxation. Preferential liabilities do not concern us in the preparation of a balance sheet of a continuing business.

(d) Contingent Liabilities

Liabilities which might arise in the future but which are not represented in the books of the firm concerned at the date of drawing up the balance sheet, are said to be contingent.

An example of a contingent liability is where the firm concerned is involved in a law action at the date of the balance sheet. If there is a possibility that damages and/or costs will be awarded against the firm, a note to this effect should be added as a footnote to the balance sheet.

I. DISTINCTION BETWEEN CAPITAL AND REVENUE

As we mentioned earlier in the course, revenue expenditure constitutes a charge against profits and must be debited to profit and loss account, whereas capital expenditure comprises all expenditure incurred in the purchase of fixed assets for the purpose of earning income, and is shown in the balance sheet. Failure to observe the distinction inevitably falsifies the results of the book-keeping. For example, if a motor car were purchased and the cost charged to profit and loss account as motor car expenses, or if a building were sold and the proceeds credited to profit and loss account as a trading gain, then both the profit and loss account and the balance sheet would be incorrect. It would not show a true and fair view of the company's trading position.

Definitions

(a) Capital Expenditure

Where expenditure is incurred in acquiring, or increasing the value of, a permanent asset which is frequently or continuously used to earn revenue, it is capital expenditure.

(b) Revenue Expenditure

This represents all other expenditure incurred in running a business, including expenditure necessary for maintaining the earning capacity of the business and for the upkeep of fixed assets in a fully efficient state.

It is extremely difficult to lay down a hard and fast rule as to the dividing line which separates capital expenditure and revenue expenditure. For example, if a general dealer bought a motor car, the cost would be debited to capital, whereas if a motor dealer bought the car, the cost would be debited to revenue and/or holding stock, if not sold during the same accounting period as the purchase.

Capital and Revenue Receipts

The division of receipts into capital and revenue items is not nearly as difficult, as the sources of receipts are generally far less in number than the types of expenditure.

(a) Capital Receipts

These normally consist of additional payments of capital into the business, and proceeds from the sale of fixed assets.

(b) Revenue Receipts

These comprise all other forms of income, including income from the sale of goods in the ordinary course of trading, interest on investments, rents, commission and discounts.

J. PREPARATION OF BALANCE SHEET

Let's now see how balance sheets are prepared in practice for sole traders and partnerships. Company balance sheets follow the same lines, and we will look at these later.

Sole Trader

As an example, the balance sheet of J Smith is given:

J. Smith
Balance Sheet as at 31 Dec

	£	£	£
	<i>Cost</i>	<i>Dep'n</i>	<i>Net</i>
Fixed Assets			
Freehold premises	21,480		21,480
Fixtures and fittings	2,000	100	1,900
	<u>23,480</u>	<u>100</u>	<u>23,380</u>
Current Assets			
Trading stock	11,480		
Debtors	18,960		
less Provision for bad debts	<u>750</u>		
Insurance prepaid	250		
Cash	<u>240</u>	30,180	
Current Liabilities			
Trade creditors	19,490		
Accrued expenses	<u>480</u>	<u>19,970</u>	
Net current assets			<u>10,210</u>
Total assets less current liabilities			33,590
Long-term Liabilities			
Mortgage on freehold			<u>12,470</u>
			<u>21,120</u>
Capital Account			
Balance brought forward			18,000
Add net profit for the year			<u>14,010</u>
			32,010
less Drawings			<u>10,890</u>
			<u>21,120</u>

Partnership

The main point of difference between the balance sheet of a sole trader and of a partnership lies in the capital and current accounts. While the sole trader may merge profits and losses, drawings, etc. into his capital account, this is not so in a partnership. Current accounts are necessary to record shares of profits and losses, interest on capitals, salaries, drawings, etc. and the final balances only need be shown in the balance sheet.

The order of assets and liabilities is generally as shown in the balance sheet above for the sole trader. Current accounts always appear below capital accounts.

Here is a summarised version of the proprietors' interest section of the balance sheet of a partnership:

Robinson, Jones and Brown
Balance Sheet as at 31 October

	Robinson	Jones	Brown	Total
	£	£	£	£
Proprietors' Interest				
Capital accounts	7,500	5,500	2,500	15,500
Current accounts	2,475	1,965	1,180	5,620
	<u>9,975</u>	<u>7,465</u>	<u>3,680</u>	<u>21,120</u>

QUESTIONS FOR PRACTICE

3. The following balances remain in William Dean's books after he has completed his profit and loss account for the year ended 31 May Year 2:

	£	£
Capital 1 June Year 1		124,000
Net profit for year ended 31 May Year 2		13,570
Loan from John Dean (repayable in 10 years' time)		9,500
Trade creditors		1,950
Premises	110,000	
Stock	25,000	
Trade debtors	2,600	
Balance at bank	1,400	
Cash in hand	20	
Drawings (taken out of business for private use)	10,000	

Set out William Dean's balance sheet as at 31 May Year 2.

ANSWERS TO QUESTIONS FOR PRACTICE

1. (a)

H. Smith & Co.
Trading Account for year ended 31 October

	£	£	£
Sales		40,830	
less Returns		<u>1,460</u>	39,370
Cost of goods sold:			
Opening stock		6,720	
Purchases	24,720		
less Returns	<u>(1,230)</u>	23,490	
Carriage inwards		<u>2,480</u>	
		32,690	
Closing stock		<u>7,630</u>	25,060
Gross profit			<u>14,310</u>

- (b) The profit would be increased by £500 to £14,810 because the net sales would be increased to £39,870 and the drawings account of Mr Smith would be debited by a similar amount, i.e. £500.

2.

New Manufacturing Company
Profit and Loss Account for year ended 31 Dec

	£	£	£
Gross profit on trading		127,881	
Discounts received		<u>267</u>	128,148
Expenses			
Rent & rates (19,421 + 2,000)	21,421		
Salaries	44,261		
Sundries (1,361 – 250)	1,111		
Discounts allowed	32		
Bad debts	937		
Carriage outwards	5,971		
Bank charges	193		
Depreciation on plant and machinery:			
10% of £50,000	<u>5,000</u>		<u>78,926</u>
Net profit			<u>49,222</u>

Notes

- Rent and rates have been increased by £2,000, this being the amount owing at the year end.
- Sundry office expenses have been reduced by £250, this being the prepayment of the insurance premium.

3.

William Dean
Balance Sheet as at 31 May year 2

	£	£
Fixed Assets		
Premises		110,000
Current assets		
Stock	25,000	
Trade debtors	2,600	
Balance at bank	1,400	
Cash in hand	20	
	29,020	
<i>less</i> Current Liabilities		
Trade Creditors	1,950	27,070
Net assets		137,070
Long-Term Liabilities		
Long-term loan (repayable in 10 years' time)		9,500
		127,570
Financed by:		
Opening capital		124,000
<i>add</i> Net profit		13,570
		137,570
<i>less</i> Drawings		10,000
		127,570

Study Unit 4

The Published Accounts of Limited Companies

<i>Contents</i>	<i>Page</i>
Introduction	74
A. The Companies Act 1985 and Accounting Requirements	74
Background	74
Accounting Records and Reports	75
Duty to Deliver Accounts	75
Signing of Balance Sheet	76
Circulation of Published Accounts	76
Small and Medium-sized Companies – Power to File Modified Statements	76
Directors' Report	77
Auditors' Report	78
B. The Balance Sheet	79
Disclosure of Accounting Policies	79
Presentation of the Balance Sheet	80
Further Explanation of Items and Format	83
Notes to the Balance Sheet Required by the Companies Act	84
Example	85
C. The Profit and Loss Account	88
Presentation of the Profit and Loss Account	88
Further Explanation of Items and Format	89
Notes to the Profit and Loss Account Required by the Companies Act	90
Example of Internal and Published Profit and Loss Account	92
D. FRS 3: Reporting Financial Performance	96
Profit and Loss Account	97
Notes to the Profit and Loss Account	98
Statement of Recognised Gains and Losses	98
Note of Historical Cost Profit and Losses	99
Reconciliation of Movements of Shareholders' Funds	99
Exceptional and Extraordinary Items	100

INTRODUCTION

When a company draws up its own final accounts for internal use, it may use any format it likes because there are no rules to prevent such accounts being drafted in the manner most suitable for management.

However, the **published** accounts of a limited company must be in accordance with the rules laid down in the **Companies Act 1985** (as amended by the **Companies Act 1989**), as well as complying with relevant accounting standards (with which we will deal later).

A. THE COMPANIES ACT 1985 AND ACCOUNTING REQUIREMENTS

Background

Even under the **Companies Act 1929**, the Act which operated before the **Companies Act 1948** came into force, the directors of a company were under an obligation to lay before the members in general meeting, at least once every year, a profit and loss account made up to the same date as the balance sheet. However, with very few exceptions, that Act did not specify which details were to be shown in this published profit and loss account. While the “internal accounts” (i.e. the final accounts drawn up for the information of the directors and management) would be fully detailed, the published profit and loss account frequently contained the barest minimum of information. Thus, it might show little else but the opening balance on the appropriation account, the “net profit” for the current year (a figure arrived at by deducting from the true net profit all taxation, transfers to reserve, etc.), and the balance on the appropriation account at the end of the year.

The following reasons led to the passing of the 1948 Act:

- The very real possibility that shareholders could be misled by published accounts.
- The growing need for more statistics relating to the commercial and business life of the country.
- It was thought to be in the public interest for the press to have as much information as possible about company finance.
- It was desirable to increase the amount of control which it was possible for shareholders to exercise over the running of the business.

Other **Companies Acts** were passed in 1967, 1976 and 1980, further increasing the amount of information required to be published by companies. The 1981 Act changed considerably the format of annual financial statements. The accounting provisions of these Acts were consolidated in the **Companies Act 1985**.

Before we consider the detailed provisions of the **Companies Act 1985** regarding the content of published accounts, we must first study the requirements concerning their preparation, authorisation and circulation to members.

Accounting Records and Reports

The provisions in respect of accounting records and reports are laid down in **section 221** of the **Companies Act 1985**.

A company must keep accounting records which are sufficient to give a clear indication of its financial position at any time. The accounting records must be kept for three years in the case of a private company, or six years otherwise, and they must show:

- Daily records of receipts and payments of moneys
- Details of assets and liabilities
- Stocktaking records at the end of the financial year
- With the exception of retail sales, clear indications of identities of the purchasers and sellers of goods, as well as of the actual goods themselves.

From the above records, the following must be prepared at specific intervals:

- A profit and loss account (or an income and expenditure account, if appropriate)
- A balance sheet (as at the date of the end of the period covered by the profit and loss account)
- An auditors' report
- A directors' report
- Group accounts (if applicable).

Duty to Deliver Accounts

The provisions in respect of the duty to deliver accounts are laid down in **section 227** of the **Companies Act 1985**.

- (a) A company must lay before its members in general meeting the accounts as indicated above, in respect of each accounting reference period (S.241 CA 1985).

(The accounting reference period, old "financial year", runs from the date of incorporation of a new company until the date notified by the company to the Registrar as being its accounting reference date. If no specific notification is made then the Registrar will take 31 March as that date (S.224 CA 1985). Minimum and maximum periods of six and 28 months, respectively, are imposed on the accounting reference period. In subsequent years, new and established companies must make up their accounts to the accounting reference date, or to within seven days.)

- (b) A company must deliver a copy of the accounts to the Registrar of Companies, unless the company is unlimited and is not a subsidiary of, or the holding company for, a limited company and has not acted in business as a trading-stamp scheme promoter (S.244 CA 1985).

The time laid down as being permitted between the end of the accounting reference period and the laying of the accounts before the company and delivery to the Registrar differs as follows:

- Public companies have seven months.
- Private companies have ten months.
- Companies with interests outside the United Kingdom, the Channel Isles and the Isle of Man may, upon notice to the Registrar, claim a three-month extension.

- Newly-incorporated companies have not less than three months but the period will be reduced by the amount of time by which the accounting reference period exceeds 12 months.

Penalties for non-compliance with the above include heavy fines for the directors and, in the event of persistent default, disqualification from directorship for up to five years.

Signing of Balance Sheet

The provisions in respect of the signing of the balance are laid down in **section 238** of the **Companies Act 1985**.

The three provisions of which you must be aware are:

- Every balance sheet of a company must be signed on behalf of the board by two directors, or by the single director if there is only one. (Note that this is the company's **own** balance sheet and not, in the case of a company with subsidiaries, the consolidated balance sheet.)
- A balance sheet of a banking company must be signed by the secretary or manager and by at least three directors.
- If any copy of a balance sheet not so signed is issued, the company and every officer in default is liable to a fine not exceeding one-fifth of the statutory minimum (currently, the statutory minimum is £1,000).

Circulation of Published Accounts

The provisions in respect of the circulation of published accounts are laid down in **section 240** of the **Companies Act 1985**.

- A copy of every balance sheet, profit and loss account, directors' report and auditors' report must be circulated to every shareholder and debenture holder at least 21 days before the meeting to discuss them.
- Any member or debenture holder is entitled to be supplied, within seven days of demand, with a copy of the last balance sheet, and documents required to be attached, free of charge.

Small and Medium-sized Companies – Power to File Modified Statements

Section 248 of the **Companies Act 1985** defines a company as small or medium-sized if it satisfies **two or more** of the qualifying conditions in (a) or (b) below, in respect of any financial year of the company **and** the financial year immediately preceding that year.

(a) Small Company

From 16 November 1992 the limits are:

- The amount of its turnover must not exceed £2.8m.
- Its balance sheet total must not exceed £1.4m. (Balance sheet total means the total assets before deduction of any liabilities.)
- The average number of persons employed by the company in the financial year in question must not exceed 50.

(b) Medium-sized Company

- The amount of its turnover must not exceed £11.2m.
- Its balance sheet total must not exceed £5.6m.
- The average number of persons employed by the company in the financial year in question must not exceed 250.

Small and medium-sized companies are permitted to file modified financial statements (now termed “filing exemptions”) as follows:

To be forwarded to Registrar	Small Company	Medium Company
Balance sheet	Abridged	Full
Profit and loss account	None	Abridged
Directors' report	None	Full
Notes to accounts	Reduced	No need to disclose turnover or margin of gross profit
Information on directors' and employees' salaries	None	Full disclosure

Note that these concessions relate only to documents filed with the Registrar. They do **not** affect the information which must be given to members of the company – and thus they actually involve more work for the company in preparing two sets of financial statements.

The filing exemption does not apply to a public company or a banking, insurance or shipping company, which must file full accounts irrespective of size.

If directors file such modified statements with the Registrar, they must include a special auditors' report which:

- states that the auditors consider that the requirements for exemption from filing full accounts are satisfied
- reproduces the full text of the auditors' report on the financial statements issued to members of the company.

Directors' Report

A report by the directors must be attached to every balance sheet laid before a company in general meeting (S.235 CA 1985). It must contain the following:

- A fair review of the development of the business of the company and its subsidiaries during the financial year ended with the balance sheet date, and of their position at the end of it.
- Details of the dividends proposed.
- Details of transfers to reserves.
- Details of the principal activities of the company and subsidiaries, and any significant changes during the period.
- Any significant changes during the period in the fixed assets of the company or subsidiaries.

- (f) Any significant differences between the market values and book values of land and buildings or any of the company's subsidiaries.
- (g) The following details of the company or subsidiaries:
- Research and development activities
 - Likely future business developments.
 - Any important events occurring since the financial year-end.
- (h) Details of the interests in group shares or debentures as they appear in the register of directors' interests at:
- the start of the period, or the date of the director's appointment, if later, and
 - the end of the period.
- This information must be given for each director at the end of the financial year, either here or in the notes to the accounts. A nil statement must be made, where applicable.
- (i) Details of any political and charitable contributions over £300 in value in total.
- (j) If the employees' average number is more than 250 during the financial year, details of the policy regarding:
- Employment of the disabled
 - Continued employment and training of those who are disabled during employment in the company
 - Training, promotion and career development of the disabled.
- (k) Full details of any disposals or purchase of a company's own shares.

Auditors' Report

The provisions in respect of an auditors' report are laid down in **section 236** of the **Companies Act 1985**.

The auditors must make a report to the members on the accounts examined by them and on every balance sheet and profit and loss account laid before the company in general meeting. The report – which may be drawn up at some future time – must state:

- (a) Whether, in their opinion, the company's balance sheet and profit and loss account have been properly prepared in accordance with the law.
- (b) Whether, in their opinion, a true and fair view is given:
- in the case of the balance sheet, of the state of the company's affairs at the end of its financial year
 - in the case of the profit and loss account, of the company's profit or loss for its financial year
 - in the case of group accounts, of the state of affairs and profit or loss of the company and its subsidiaries, so far as concerns members of the company.

The Accounting Standards Committee sought legal advice concerning the definition of "true and fair", and a summary of Counsel's opinion is as follows:

- (i) "True and fair" evolves as times change.

- (ii) The legal requirements, such as the formats contained in the **Companies Act 1985**, are guidelines offered by Parliament at the time of drafting the legislation. It is conceivable that they could be superseded by accounting practice in order to give a true and fair view – e.g. if an SSAP were to say that historical cost accounting would not give a true and fair view in times of high inflation, and recommended instead current cost accounting or some other alternative, then the courts might well accept the fundamentally altered true and fair view.
- (iii) SSAPs are documents embodying seriously and deeply considered accounting matters which are accepted by the profession. Although the courts may disregard their terms, their requirements are likely to indicate a “true and fair” view of the handling of specific accounting problems, and they are likely to be used by the courts as influential guidelines. However, SSAPs evolve, and it must be accepted that what is “true and fair” when an SSAP is originally written may not be considered “true and fair” at some future date. Accurate and comprehensive disclosure of information within acceptable limits is important.
- (iv) Over time, the meaning of “true and fair” will remain the same but the content will differ.

It is the duty of the auditors to carry out such investigations as will enable them to form an opinion as to whether:

- proper books of account have been kept by the company, and proper returns adequate for audit have been received from branches not visited by them
- the company’s final accounts are in agreement with these books and returns.

If their opinion is that proper books have not been kept, or adequate returns have not been received, or the final accounts do not agree with them, they must state this in their report.

The report of the auditors must be read before the company in general meeting.

You should note that auditors are also bound to consider – and report, if necessary – whether the accounts of the company comply with standard accounting practice. Normally an auditors’ report is very short, stating that, in their view, the accounts have been properly prepared, give a true and fair view of the profit or loss, etc. and comply with the **Companies Act** and with standard accounting practice. The report can then be qualified by stating the respects in which the accounts do not conform to the requirements.

B. THE BALANCE SHEET

Disclosure of Accounting Policies

Limited companies must publish their financial statements every year. The information provided to shareholders (and other interested parties) would be of little value were there no explanation of the way in which the figures had been compiled. SSAP 2, which we have already reviewed, addresses just this area – namely a company’s accounting policies.

SSAP 2 achieves three things:

- it defines the four fundamental concepts of accounting – the going concern concept, the accruals concept, the consistency concept and the prudence concept
- it recognises that these concepts may be applied in a variety of ways in any given set of circumstances and defines the methods of applying accounting bases
- it requires every entity to adopt one specific basis in each relevant area as its accounting policy and to disclose such policies by way of a note in its financial statements.

The Standard does **not** require disclosure of the four fundamental concepts, but an entity is assumed to be applying them. Disclosure is only required to the extent that this may not be the case.

The fundamentals concept and the accruals concept may be applied in various ways. For example, there are several valid methods for calculating depreciation. Differing accounting bases occur, for example, in the areas of:

- depreciation of fixed assets
- valuation of stock and work in progress
- leasing and hire purchase transactions.

A company may make its choice from the available methods. Its choice will become its accounting policy in that area for consistent application.

Presentation of the Balance Sheet

The **Companies Act** provides two possible balance sheet formats but we shall only consider Format 1, which is the vertical presentation used by most United Kingdom companies.

The items to be included, and their order, are set out below, with the figures in brackets referring to the notes which follow.

A. Called-up share capital not paid (1)

B. Fixed assets

I Intangible assets

1. Development costs
2. Concessions, patents, licences, trademarks and similar rights and assets (2)
3. Goodwill (3)
4. Payments on account

II Tangible assets

1. Land and buildings
2. Plant and machinery
3. Fixtures, fittings, tools and equipment
4. Payments on account and assets in course of construction

Continued over

B Fixed Assets (*continued*)**III Investments**

1. Shares in group undertakings
2. Loans to group undertakings
3. Participating interests
4. Loans to undertakings in which the company has a participating interest
5. Other investments other than loans
6. Other loans
7. Own shares (4)

C Current assets**I Stocks**

1. Raw materials and consumables
2. Work in progress
3. Finished goods and goods for resale
4. Payments on account

II Debtors (5)

1. Trade debtors
2. Amounts owed by group undertakings
3. Amounts owed by undertakings in which the company has a participating interest
4. Other debtors
5. Called-up share capital not paid (1)
6. Prepayments and accrued income (6)

III Investments

1. Shares in group undertakings
2. Own shares (4)
3. Other investments

IV Cash at bank and in hand**D Prepayments and accrued income (6)****E. Creditors: amounts falling due within one year**

1. Debenture loans (7)
2. Bank loans and overdrafts
3. Payments received on account (8)
4. Trade creditors
5. Bills of exchange payable
6. Amounts owed to group undertakings

Continued over

E. Creditors: amounts falling due within one year (*continued*)

7. Amounts owed to undertakings in which the company has a participating interest
8. Other creditors including taxation and social security (9)
9. Accruals and deferred income (10)

F. Net current assets (liabilities) (11)**G. Total assets less current liabilities****H. Creditors: amounts falling due after more than one year**

1. Debenture loans (7)
2. Bank loans and overdrafts
3. Payments received on account (8)
4. Trade creditors
5. Bills of exchange payable
6. Amounts owed to group undertakings
7. Amounts owed to undertakings in which the company has a participating interest
8. Other creditors including taxation and social security (9)
9. Accruals and deferred income (10)

I. Provisions for liabilities and charges

1. Pensions and similar obligations
2. Taxation, including deferred taxation
3. Other provisions

J. Accruals and deferred income (10)**K. Capital and reserves**

- I Called-up share capital (12)
 - II Share premium account
 - III Revaluation reserve
 - IV Other reserves
 1. Capital redemption reserve
 2. Reserve for own shares
 3. Reserves provided for by the articles of association
 4. Other reserves
 - V Profit and loss account
-

Further Explanation of Items and Format

The following notes refer to the numbered references in the above required format of the balance sheet. Additional general notes follow to aid understanding of all aspects of the items and their presentation.

(1) Called-up share capital not paid (Items A and C.II.5)

This item may be shown in either of the two positions given in the format.

(2) Concessions, patents, licences, trademarks and similar rights and assets (Item B.I.2)

Amounts in respect of assets shall only be included in a company's balance sheet under this item if either:

- the assets were acquired for valuable consideration and are not required to be shown under goodwill; or
- the assets in question were created by the company itself.

(3) Goodwill (Item B.I.3)

Amounts representing goodwill should only be included to the extent that the goodwill was acquired for valuable consideration.

(4) Own shares (Items B.III.7 and C.III.2)

The nominal value of the shares held must be shown separately.

(5) Debtors (Items C.II.1-6)

The amount falling due within one year must be shown separately for each item shown under debtors.

(6) Prepayments and accrued income (Items C.II.6 and D)

This item may be shown in either of the two positions given.

(7) Debenture loans (Items E.1 and H.1)

The amount of any convertible loans must be shown separately.

(8) Payments received on account (Items E.3 and H.3)

Payments received on account of orders must be shown for each of these items insofar as they are not shown as deductions from stocks.

(9) Other creditors including taxation and social security (Items E.8 and H.8)

The amount for creditors in respect of taxation and social security must be shown separately from the amount for other creditors.

(10) Accruals and deferred income (Items E.9, H.9 and J)

The two positions given for this item at E.9 and H.9 are an alternative to the position at J, but if the item is not shown in a position corresponding to that at J it may be shown in either or both of the other two positions (as the case may require).

(11) Net current assets (liabilities) (Item F)

In determining the amount to be shown for this item any amounts shown under "prepayments and accrued income" must be taken into account wherever shown.

(12) Called-up share capital (Item K.1)

The amount of allotted share capital and the amount of called-up share capital which has been paid up must be shown separately.

Additional general notes on balance sheet items are as follows.

- (a) The headings such as B.I (Intangible assets) and B.II (Tangible assets) must be disclosed, whereas items such as 1 (Development costs) and 2 (Concessions, patents etc.) may be combined where they are not material. However, if items are combined then a breakdown of such combinations must be shown in the notes. (See the example given later.)
- (b) All fixed assets, such as property and goodwill, must be depreciated over the economic life of the asset.
- (c) The value of any hire-purchase agreements outstanding must not be deducted from assets.
- (d) Only goodwill that has been purchased must be shown, and internally-generated goodwill must not be shown, although this does not apply to consolidated accounts.
- (e) When an asset is revalued, normally this is an adjustment to show the asset at the market value instead of cost. The difference of the revaluation must be debited or credited to the revaluation reserve.
- (f) Preliminary expenses, and expenses and commission on any share or debenture issues, should either be written off against the share premium account or written off to the profit and loss account.
- (g) The Act lays out the accounting principles to be followed when preparing the financial accounts:
 - A company is presumed to be a going concern.
 - Accounting policies must be applied consistently from year to year.
 - The accruals concept must be followed.
 - The prudence concept must be observed.
 - Each component item of an asset or liability must be separately valued, e.g. if the organisation has five types of stock then each type must be independently valued at the lower of cost or net realisable value.
 - Amounts representing assets or income may **not** be offset against items representing liabilities or expenditure, e.g. debit and credit balances on a debtors account may not be aggregated or, as per (d) above, the amount outstanding on a hire-purchase contract may not be deducted from the asset concerned.

Notes to the Balance Sheet Required by the Companies Act

The Companies Act 1985 makes specific provision for the following items to be included in Notes to the Balance Sheet.

Share Capital and Debentures

- (a) The authorised share capital; and
- (b) Where shares of more than one class have been allotted, the number and aggregate nominal value of shares of each class allotted.

- (c) In the case of any part of the allotted share capital that consists of **redeemable shares**, the following information must be given:
- The earliest and latest dates on which the company has power to redeem those shares.
 - Whether those shares must be redeemed in any event or are liable to be redeemed at the option of the company.
 - Whether any (and, if so, what) premium is payable on redemption.
- (d) Information must also be given when shares or debentures are **issued during the year**, including details of the allotment and reasons for making the allotment.

Fixed Assets

- (a) The appropriate amounts in respect of each item as at the date of the beginning of the financial year and as at the balance sheet date respectively.
- (b) The effect on any amount shown in the balance sheet, in respect of each item, of:
- Any revision of the amount in respect of any assets included under that item made during the year.
 - Acquisitions during that year of any assets.
 - Disposals during that year of any assets.
 - Any transfers of assets of the company to and from that item during that year.
- (c) In particular the following information must be given:
- The cumulative amount of provisions for depreciation or diminution.
 - The amount of any such provisions made in respect of the financial year.
 - The amount of any adjustments made in respect of any such provisions during that year in consequence of the disposal of any assets.
 - The amount of any other adjustments made in respect of any such provision during that year.

Reserves and Provisions

Details must be given of amounts transferred to and from reserves.

Guarantees and Other Financial Commitments

The details required here are any changes in the assets or details of other contingent liabilities (see later – SSAP 18).

Example

The following example shows the formal layout of Format 1.

Advantage is taken of the concessions whereby detail may be disclosed in the notes instead of on the face of the balance sheet. As most UK companies now elect to use the abbreviated form of balance sheet, the various totals must be enhanced by additional notes at the end of the balance sheet.

J & K Plastics plc
Balance Sheet as at 31 December

	Current year £	Previous year £
Fixed Assets		
Intangible assets	X	X
Tangible assets	X	X
Investments	X	X
	<u>X</u>	<u>X</u>
Current Assets		
Stocks	X	X
Debtors	X	X
Cash at bank and in hand	X	X
	<u>X</u>	<u>X</u>
Creditors: Amounts falling due within one year	(X)	(X)
	<u>X</u>	<u>X</u>
Net current assets	X	X
Total assets less current liabilities	X	X
Creditors: Amounts falling due after more than one year	(X)	(X)
Provisions for liabilities and charges	(X)	(X)
	<u>XXX</u>	<u>XXX</u>
Capital and Reserves		
Called-up share capital	X	X
Share premium account	X	X
Revaluation reserve	X	X
Other reserves	X	X
Profit & loss account	X	X
	<u>XXX</u>	<u>XXX</u>
Approved by the Board (date)		
Names (Directors)		

An example of the notes to be attached to the balance sheet follows.

*Notes to the Balance Sheet***(a) Intangible Assets**

	Development costs £	Patents & trademarks £	Goodwill £	Total £
Cost				
At 1 Jan	X	X	X	X
Additions	X	X	X	X
Disposals	(X)	(X)	(X)	(X)
At 31 Dec	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
Amounts Written off				
Depreciation				
At Jan 1 balance	X	X	X	X
Charge for the year, P & L a/c etc.	X	X	X	X
Deductions in respect of disposals	(X)	(X)	(X)	(X)
At 31 Dec	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
Net Book Values				
At 31 Dec current year	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
At 31 Dec previous year	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

(b) Tangible Assets

	Land & buildings £	Plant & machinery £	Vehicles £	Total £
Cost or Valuation				
At 1 Jan	X	X	X	X
Additions	X	X	X	X
Revaluations (additional value only)	X	X	X	X
Disposals	(X)	(X)	(X)	(X)
At 31 Dec	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
Net Book Value				
At 31 Dec current year	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
At 31 Dec previous year	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

(c) Other notes

Full details of the following items must also be shown as notes:

- creditors – amounts falling due within one year,
- creditors – amounts falling due after one year, and
- provisions for liabilities and charges.

C. THE PROFIT AND LOSS ACCOUNT

We will now consider the format of the profit and loss account for publication, along with further legal requirements concerning profits and losses.

Presentation of the Profit and Loss Account

The **Companies Act** provides four possible formats for the profit and loss account of a limited company, but we shall only consider Format 1 here as it is easy to follow and the most commonly used.

The items to be included, and their order, are set out below, with the figures in brackets referring to the notes which follow.

1. Turnover (1)
2. Cost of sales (2)
3. Gross profit or loss
4. Distribution costs (2)
5. Administrative expenses (2)
6. Other operating income
7. Income from shares in group undertakings
8. Income from participating interests
9. Income from other fixed asset investments (3)
10. Other interest receivable and similar income (3)
11. Amounts written off investments
12. Interest payable and similar charges (4)
13. Profit/loss on ordinary activities before taxation
14. Tax on profit or loss on ordinary activities
15. Profit or loss on ordinary activities after taxation
16. Extraordinary income
17. Extraordinary charges
18. Extraordinary profit or loss

Continued over

-
19. Tax on extraordinary profit or loss
 20. Other taxes not shown under the above items
 21. Profit or loss for the financial year
 22. Dividends paid or proposed
-

Then, either on the face of the profit and loss account or by way of note, the following:

23. Retained profit brought forward
 24. Retained profit carried forward
 25. Earnings per share.
-

This is the list of all the items which must be shown in the profit and loss account. The numbers **do not** have to be shown but the **order of the items must be adhered to**; if some of the items do not exist for the company, however, then there is no need to include such items, e.g. if a company does not have any outside investments then items 7, 8, 9, 10 and 11 would not appear and so item 6 would be followed by item 12.

Further Explanation of Items and Format

The following notes refer to the numbered references in the above required format of the profit and loss account. Additional general notes follow to aid understanding of all aspects of the items and their presentation.

(1) Turnover (Item 1)

Turnover is not defined in the Act but it is widely regarded as gross income from normal trading.

Turnover should be shown and calculated net of trade discounts, VAT and other sales taxes. Notes must show the turnover broken down by classes of business and by geographical markets, having regard to the manner in which the company's activities are organised, insofar as these classes and markets differ substantially. This additional information on turnover may be omitted if disclosure would be seriously prejudicial to the company's interests.

(2) Cost of Sales, Distribution Costs and Administrative Expenses (Items 2, 4 and 5)

These must all be stated after taking any provision for depreciation or diminution of asset value into account. (Cost of sales is the direct expenses attributable to bringing the raw materials to the point of sale.)

(3) Income from Other Fixed Asset Investments, Other Interest Receivable and Similar Income (Items 9 and 10)

These must be split between income and interest from group undertakings and income and interest from other sources. The amount of rents from lands must be disclosed if they are a substantial part of the company's income for the year.

(4) Interest Payable and Similar Charges (Item 12)

Again, these must be split between the sums payable to group undertakings and to others, and also between bank loans and overdrafts, and other loans wholly repayable within five years, by instalments or otherwise, secured or unsecured.

Additional general notes on profit and loss account items and presentation are as follows.

- (a) In Format I expenses are classified by function, e.g. distribution costs, administrative expenses.
- (b) Whichever format a company adopts, the account must show separately the amount of the company's profit or loss on ordinary activities before taxation.
- (c) The account must show separately the allocation of profit or the treatment of loss and in particular it must show:
 - The aggregate amount of any dividends that have been paid and proposed.
 - Any amount that is transferred to reserves.
 - Any amount that is withdrawn or proposed to be withdrawn from reserves.
- (d) Goodwill (but not goodwill arising on consolidation) is to be written off over a period not exceeding its useful economic life.

Notes to the Profit and Loss Account Required by the Companies Act

The Companies Act 1985 makes specific provision for the following items to be included in Notes to the profit and loss account.

Items of Income and Expenditure

- (a) Interest on bank loans, overdrafts, and other loans that are:
 - Repayable before the end of a period of five years
 - Repayable after five years from the end of the accounting period
- (b) The amounts set aside for redemption of share capital and of loans.
- (c) The sum involved in depreciation.
- (d) Development costs written off.
- (e) Income from listed investments.
- (f) Rents from land – if material.
- (g) The cost of hire of plant and machinery.
- (h) The auditors' remuneration and expenses.

Taxation

All of the following items must be stated separately.

- (a) The basis on which the charge for corporation tax is computed.
- (b) Particulars of special circumstances which affect liability in respect of taxation of profits, income or capital gains for the current and succeeding financial years.
- (c) The amount of corporation tax charged.
- (d) If, but for double taxation relief, the amount would have been greater, that amount must be stated.

- (e) The amount of income tax.
- (f) The amount of any tax charged outside the United Kingdom.

Classes of Business

Where the company carries on business of two or more classes which, in the opinion of the directors, differ substantially from each other, there must be stated:

- (a) The amount attributable to each class.
- (b) The amount of profit attributable before tax to each class.
- (c) Information regarding different geographical markets if the directors think that the markets differ substantially.

Staffing

- (a) The average number of persons employed during the financial year.
- (b) The average number within each category of persons employed.
- (c) Details of aggregate wages, social security costs and other pensions.

Payments to directors and highly-paid employees

- (a) The aggregate amount of directors' emoluments (including emoluments received by a director of the company from any subsidiary company, fees, commission, expense allowances charged to UK tax, pension contributions, and the estimated money value of any benefits received in kind), distinguishing emoluments received in their capacities as directors (e.g. fees) from other emoluments – e.g. salaries as full-time executives.
- (b) The aggregate amount of directors' or past directors' pensions.
- (c) The aggregate amount of any compensation to directors or past directors in respect of loss of office.
- (d) The number of directors whose emoluments (as given in (i) above, but excluding pension contributions) fall into the brackets 0-£5,000, £5,000-£10,000, £10,000-£15,000, etc., unless the aggregate is under £60,000.
- (e) The emoluments of the highest-paid director, if greater than the emoluments of the chairman, excluding pension contributions.
- (f) The number of directors who have waived rights to receive emoluments during the year, and the aggregate amount thereof.
- (g) The emoluments of the chairman during the year, excluding pension contributions. Where two or more directors have acted as chairman during the year, the figure to be disclosed is the aggregate of the amounts of the various chairmen during the periods they held office.

Prior Year Adjustments

These are adjustments made during the accounting period which apply to prior years. They arise infrequently – e.g. on a change of accounting policy – and they should be shown as an amendment to the balance brought forward.

Extraordinary Items

Particulars (such as the amount and nature) of any extraordinary income or charges must be given in the accounts (e.g. redundancies and closure costs, or profit on the sale of a subsidiary). Tax on the extraordinary loss should also be shown.

Exceptional Items

Items within the normal activities of the business which require disclosure on account of their exceptional size or incidence – e.g. large bad debts or amounts written off stock or long-term contract losses – should be disclosed in computing the profit on ordinary activities.

Additional requirements

- (a) The corresponding figures for the immediately **preceding** year – i.e. comparative figures, except in the case of the first profit and loss account of a business.
- (b) Any material respects in which any items in the profit and loss account are affected by transactions of a sort not usually undertaken by the company; or circumstances of an exceptional or non-recurrent nature; or any change in the basis of accounting.
- (c) Any amounts relating to the previous financial year which are included in the profit and loss account, and the effects thereof.
- (d) Where sums originally in a foreign currency are translated into sterling, the basis of translation (e.g. exchange rate). SSAP 20 gives further guidance on this point.

Example of Internal and Published Profit and Loss Account

In order to see how one kind of profit and loss account can be changed into another, study the following example.

(a) Profit and Loss Account for Internal Distribution

J & K Plastics plc
Trading and Profit and Loss Account for the Year ended 31 December

	£	£	£
Net sales			1,750,000
less Cost of sales:			
Stock 1 Jan	300,000		
Purchases	1,500,000		
	<u>1,800,000</u>		
Stock 31 Dec	<u>400,000</u>		<u>1,400,000</u>
Gross profit			350,000
Distribution costs:			
Salaries & wages	40,000		
Motor vehicle costs	25,000		
General	20,000		
Depreciation: MV	7,000		
Depreciation: Machinery	<u>3,000</u>	95,000	
Administration expenses:			
Salaries & wages	45,000		
Directors' remuneration	22,000		
Motor vehicles	12,000		
General	27,000		
Auditors	4,000		
Depreciation: Office furniture	3,000		
Depreciation: Office machinery	<u>2,000</u>	<u>115,000</u>	<u>210,000</u>
			140,000
Other operating income:			
Rents receivable			<u>9,000</u>
			149,000
Income from shares in related companies (participating interests)		3,000	
Income from shares in non-related companies		1,500	
Other interest receivable		<u>1,000</u>	<u>5,500</u>
			154,500
<i>Continued over</i>			

J & K Plastics plc, Trading and Profit and Loss Account *Continued*

	£	£
Interest payable:		
Loans repayable in less than 5 years	5,500	
Loans repayable in less than 10 years	5,000	10,500
Profit on ordinary activities before taxation		144,000
Tax on profit on ordinary activities		48,000
Profit on ordinary activities after tax		96,000
Undistributed profits brought forward from last year		45,000
		141,000
Transfer to general reserve	47,000	
Proposed ordinary dividend	60,000	107,000
Undistributed profits carried forward to next year		34,000

It would be legally possible for the internal accounts shown above to be published as they stand because the items are shown in the correct order. However, the Companies Act does not force companies to publish full details as this would lead to competitors being placed in a better position than would be fair to the company.

A more appropriate form of published account would be as shown below.

(b) Profit and Loss Account for Publication

J & K Plastics plc
Profit and Loss Account for the Year ended 31 December

<i>Note</i>	<i>£</i>	<i>£</i>
Turnover		1,750,000
(1) Cost of sales		<u>1,400,000</u>
Gross profit		350,000
(1) Distribution costs	95,000	
(1) Administration costs	<u>115,000</u>	<u>210,000</u>
		140,000
Other operating income		9,000
		149,000
Income from participating interests	3,000	
(2) Income from other fixed asset investments	1,500	
(2) Other interest receivable	<u>1,000</u>	<u>5,500</u>
		154,500
(3) Interest payable		<u>10,500</u>
Profit on ordinary activities before taxation		144,000
Tax on profit on ordinary activities		<u>48,000</u>
Profit for the year on ordinary activities after taxation		96,000
Undistributed profits from last year		<u>45,000</u>
		141,000
Transfer to general reserve	47,000	
Proposed ordinary dividend	60,000	107,000
Undistributed profits carried to next year		34,000

Notes

- (1) These items must be stated after taking into account any necessary provisions for depreciation or diminution of value of assets.
- (2) Income and interest derived from group undertakings must be shown separately from income and interest from other sources.
- (3) The amount payable to group companies must be shown separately.
- (4) The amount of any provisions for depreciation and diminution in value of tangible and intangible fixed assets must be disclosed in a note to the accounts.

Notes disclosing details as given earlier must also be included.

D. FRS 3: REPORTING FINANCIAL PERFORMANCE

This Financial Reporting Standard was introduced by the Accounting Standards Board in November 1992. It requires additional profit and loss account disclosure, together with a number of additional statements.

The theory behind FRS 3 is that, to present a clearer picture to users of financial accounts, the results for the year should be disclosed separately for segments of the business which are **still in operation** at the year-end, and for those which have been **discontinued** during the year. This facilitates making forecasts based on the continuing segments of the business. Users of the accounts will also want information about any **new acquisitions** which the business has made during the year. Analysis of the profit and loss account is required, therefore, in respect of:

- Continuing operations
- New acquisitions
- Discontinued operations

Before examining the implications of these requirements, we should define the three terms.

(a) Ordinary Activities

Any activities which are undertaken by a reporting entity as part of its business and such related activities in which the reporting entity engages in furtherance of, incidental to, or arising from, these activities. Ordinary activities include the effects on the reporting entity of any event in the various environments in which it operates, including the political, regulatory, economic and geographical environments, irrespective of the frequency or unusual nature of events.

(b) Acquisitions

Operations of the reporting entity that are acquired in the period.

(c) Discontinued Operations

Operations of the reporting entity that are sold or terminated and that satisfy **all** of the following conditions:

- The sale or termination is completed either in the period or before the earlier of three months after the commencement of the subsequent period and the date on which the financial statements are approved.
- If a termination, the former activities have ceased permanently.
- The sale or termination has a material effect on the nature and focus of the reporting entity's operations and represents a material reduction in its operating facilities resulting either from its withdrawal from a particular market (whether class of business or geographical) or from a material reduction in turnover in the reporting entity's continuing markets.
- The assets, liabilities, results of operations and activities are clearly distinguishable physically, operationally and for financial reporting purposes.

Profit and Loss Account

The following is based on an example in FRS 3, and shows one way in which the required details can be set out:

Profit and Loss Account (Example 1)

	Year 3	Year 3	Year 2
			(as restated)
	£m	£m	£m
Turnover:			
Continuing operations	550		500
Acquisitions	50		
	<u>600</u>		
Discontinued operations	175		190
	<u>775</u>		<u>690</u>
Cost of sales		(620)	(555)
Gross profit		155	135
Net operating expenses		<u>(114)</u>	<u>(83)</u>
Operating profit:			
Continuing operations	50		40
Acquisitions	6		
	<u>56</u>		
Discontinued operations	(15)		12
	<u>41</u>		<u>52</u>
Profit on sale of properties in continuing operations		9	6
Loss on disposal of discontinued operations		<u>(17)</u>	<u>(4)</u>
Profit on ordinary activities before interest		33	54
Interest payable		<u>(8)</u>	<u>(5)</u>
Profit on ordinary activities before taxation		25	49
Tax on profit on ordinary activities		<u>(8)</u>	<u>(14)</u>
Profit for the financial year		17	35
Dividends		<u>(3)</u>	<u>(9)</u>
Retained profit for the financial year		14	26

Looking at the figures in this example, we can see that we should base our forecasts on an operating profit of £56m (continuing operations £50m + acquisitions £6m). Note that the Year 2 figure of £12m for operating profit from discontinued operations relates to operations which were discontinued in Year 3 (i.e. the current year), again so that like can be compared with like.

Notes to the Profit and Loss Account

To comply with FRS 3 we need to include an analysis of cost of sales and operating expenses. This would normally be shown in the notes to the profit and loss account. An example is as follows:

Note

	Continuing	Discontinued	Total
	<i>£m</i>	<i>£m</i>	<i>£m</i>
Cost of sales	455	165	620
Net operating expenses:			
Administration expenses	41	12	53
Distribution expenses	56	13	69
Other operating income	(8)	–	(8)
	89	25	114

The total figures for continuing operations in the financial year include the following amounts relating to acquisitions:

	<i>£ million</i>
Cost of sales	40
Net operating expenses:	
Administration expenses	3
Distribution costs	3
Other operating income	(2)
	4

Statement of Recognised Gains and Losses

The profit and loss account only deals with realised profits, i.e. where a sale has actually taken place. Other gains and losses are taken directly to reserves; an example is a gain/loss on the revaluation of fixed assets.

The statement of recognised gains and losses is considered a **primary statement** (as are the profit and loss account, balance sheet and cash flow statement). Its importance is that it shows the extent to which shareholders' funds have increased or decreased from all the various gains and losses recognised in the period.

Example***Statement of Recognised Gains and Losses***

	<i>£m</i>
Profit for the financial year	17
Unrealised surplus on revaluation of properties	<u>4</u>
Total recognised gain related to the year	21
Prior year adjustment	<u>(5)</u>
Total gain recognised since last annual report	<u>16</u>

Note that prior year adjustments under FRS 3 are dealt with in the statement of recognised gains and losses. Prior year adjustments are rare and derive from the correction of fundamental errors or changes in accounting practice.

Note of Historical Cost Profit and Losses

Where fixed assets have been revalued, profit or loss for the financial year may be affected in two ways:

- The depreciation will be on the revalued amount.
- When the asset is sold the profit will be the difference between the proceeds and the current book value, which will be higher if the asset has been revalued.

Hence FRS 3 requires companies to present a statement reconciling the reported profit to the historical cost profit which would have been reported if no revaluations had taken place. This statement is only required where the two profit figures differ by **more than 5%**.

Example

	<i>£m</i>
Reported profit on ordinary activities before taxation	25
Realisation of property revaluation gains of previous years	5
Difference between a historical cost depreciation charge and the actual depreciation charge of the year calculated on the revalued amount	<u>3</u>
Historical cost profit on ordinary activities before taxation	<u>33</u>

Reconciliation of Movements of Shareholders' Funds

Shareholders' funds include ordinary share capital and reserves, the most common reserves being the profit and loss account, share premium account, revaluation reserve and general reserve. The aim of this statement is to show what changes there have been in shareholders' funds over the financial period.

Example

	<i>£m</i>
Profit for the financial year	17
Dividends	(3)
Other recognised gains and losses for the year	4
New share capital subscribed	20
Goodwill written off	<u>(25)</u>
Net addition to shareholders' funds	13
Opening shareholders' funds *	<u>365</u>
Closing shareholders' funds	<u>378</u>

* £370m originally, less prior year adjustment 5

Exceptional and Extraordinary Items

Finally, FRS 3 deals with the treatment of exceptional and extraordinary items.

Exceptional items are material items which derive from events or transactions that fall within the ordinary activities of the reporting entity, and which individually, or if of a similar type, in aggregate, need to be disclosed by virtue of their size or incidence if the financial statements are to give a true and fair view. Examples might include a significant stock write-off or an unusually large bad debt. These items should be disclosed under the relevant heading in the profit and loss account and in the notes to the accounts.

However, certain exceptional items should be shown **separately on the face of the profit and loss account, after operating profit and before interest**. These include:

- Profits or losses on the sale or termination of an operation.
- Costs of a fundamental reorganisation or restructuring having a material effect on the nature and focus of the reporting entity's operations.
- Profits or losses on the disposal of fixed assets.

Exceptional items should also be allocated between continuing and discontinued operations.

Extraordinary items are material items possessing a high degree of abnormality which arise from events or transactions that fall outside the ordinary activities of the reporting entity and which are not expected to recur. You should note that these items should be dealt with **on the face of the profit and loss account**.

Study Unit 5

Profit and Cash Flow

<i>Contents</i>	<i>Page</i>
A. Availability of Profits for Distribution	102
Legal Definition	102
Rules Governing Relevant Accounts	103
Goodwill	104
Realised and Unrealised Profits	104
B. Cash Flow Statements	105
Purpose	105
Presentation of Cash Flow Statements	106
Examples	111
C. Funds Flow Statements	120
Example	120
Reasons for Change from Funds Flow	121

A. AVAILABILITY OF PROFITS FOR DISTRIBUTION

There are **three overriding principles** governing the availability of profits for distribution.

- (a) The profits from which the dividend is paid must be bona fide (as we shall see, this gives companies a wide range of options).
- (b) The payment of a dividend must not jeopardise the interests of outside creditors, i.e. the company must be solvent.
- (c) Dividends must never be paid out of shareholders' capital.

If you return to this later after we have considered the legal aspects, you will appreciate these three principles further.

Legal Definition

The **Companies Act 1985** requires that no distribution may be made except out of profits available for the purpose. These are defined as: accumulated realised profits, not on a prior occasion distributed or capitalised, less accumulated realised losses not written off already under reorganisation or reduction of capital. The profits and losses may originally have been revenue or capital based.

A "distribution" is any distribution of a company's assets to its members, by cash or otherwise, other than:

- An issue of bonus shares, partly or fully paid.
- A redemption of preference shares from the proceeds of a fresh share issue and the payment, from the share premium account, of any premium on redemption.
- A reduction of share capital, either by paying off share capital which has been paid up, or by eliminating or reducing a member's liability on partly-paid share capital.
- A distribution to members of a company's assets upon winding up.

In addition to satisfying the condition of having profits available for the purpose of distribution, which is all that is required of a private company, a public company must fulfil two other conditions:

- Its net assets must exceed the aggregate of its called-up share capital together with its undistributable reserves.
- Any distribution must not deplete its net assets to such an extent that the total is less than the aggregate of called-up share capital and undistributable reserves.

Called-up share capital

This is defined as "as much of the share capital as equals the aggregate amount of the calls made on the shares, whether or not the calls have been paid, and any share capital which has been paid up without having been called and share capital to be paid on a specific date included in the articles".

Undistributable reserves

Undistributable reserves are as follows:

- Share premium account.
- Capital redemption reserve.

- Excess of accumulated unrealised profits, not capitalised before, over accumulated unrealised losses not already written off under reorganisation or reduction of capital. Capitalisation excludes transfers of profit to the capital redemption reserve but includes a bonus issue.
- Any other reserve that, for some reason, the company is prohibited from distributing.

Effectively, a public company must make good any existing net unrealised loss before any distribution.

Example

We can illustrate the differences between private and public companies (figures in £000) as follows.

	Company A		Company B		Company C		Company D	
	£000	£000	£000	£000	£000	£000	£000	£000
Share capital		2,500		2,500		2,500		2,500
Realised profits	400		400		400		400	
Realised losses	<u>—</u>		<u>—</u>		<u>(160)</u>		<u>(160)</u>	
		400		400		240		240
Unrealised profits	200		200		200		—	
Unrealised losses	<u>—</u>		<u>(250)</u>		<u>(250)</u>		<u>(250)</u>	
Share capital and reserves		<u>200</u>		<u>(50)</u>		<u>(50)</u>		<u>(250)</u>
		3,100		2,850		2,690		2,490

Taking the companies A to D as alternatively private and public companies, the distributable profits are as follows:

Company	Private Company	Public Company
	£000	£000
A	400	400
B	400	350
C	240	190
D	240	0

Rules Governing Relevant Accounts

The information from which to ascertain the profit available for distribution must come from “relevant items” as they appear in “relevant accounts”, i.e. profits, losses, assets, liabilities, share capital, distributable and undistributable reserves as they appear in the last annual audited financial statements or initial statements.

- An initial financial statement is where a distribution is proposed during a company’s first accounting reference period prior to the first annual audited accounts.

- An interim financial statement would be used as the basis of calculation if the proposed distribution would exceed the maximum possible according to the last annual accounts.

As such strict rules govern distributions, equally strict rules must exist with regard to the relevant accounts. The requirements regarding the relevant accounts are as follows – (a), (b), (e), (f) and (g) not applying to initial or interim accounts of private companies:

- (a) They must be “properly prepared” to comply with the **Companies Acts**, or at least to the extent necessary to enable a decision to be made as to the legality of the proposed distribution. Initial and interim statements must comply with Section 226 of the 1985 Act and the balance sheet must be signed in accordance with Section 233.
- (b) The financial statements must give a true and fair view of the affairs of the company, its profit or loss, unless the company is eligible by statute not to make disclosure.
- (c) A public company must disclose any uncalled share capital as an asset.
- (d) To prevent a company making various individually legal distributions which are in aggregate more than is available for distribution, Section 274 of the 1985 **Companies Act** makes it obligatory that any further proposed distributions are added to those which have already been made and appear in the financial statements.
- (e) The annual financial statements must be audited in accordance with Section 235 of the 1985 Act and initial financial statements must contain the auditor’s opinion as to whether they have been properly prepared. There is no need for interim financial statements to be audited.
- (f) Any qualifications made by the auditors must state if and to what extent the legality of the proposed distribution is affected.
- (g) The statement mentioned in (f) above must be either laid before the company in general meeting or filed with the Registrar, whichever is applicable (Section 271). In addition, the Registrar should receive, with any interim or initial financial statements, a copy of them, and a copy of the auditors’ report and statement (if there is one).

Goodwill

FRS 10 only permits goodwill to be written off over its useful economic life, to the profit and loss account.

Under the previous standard (SSAP 22), companies had the alternative of writing goodwill off directly on acquisition, to reserves. This immediate write-off, as you can appreciate, depleted reserves, sometimes quite significantly, and could therefore reduce the amount available for distribution.

The amortisation of goodwill over its useful economic life has less impact on the possible sums available for distribution – especially if goodwill is written off over, say, 20 years.

Realised and Unrealised Profits

The 1985 **Companies Act** does not actually define either “realised” or “unrealised”. However, help is given in the following guidelines:

- Unrealised profits may not be used to pay up debentures or amounts unpaid on shares issued.
- Provisions are to be “realised” losses except those that account for a drop in the fixed asset value on revaluation.

- As regards the difference between depreciation on cost and depreciation on a revalued sum, this is realised profit.
- If the directors cannot determine whether a profit or loss made before the appointed day was realised or unrealised, the profit can be taken as realised, and the loss unrealised.
- In any other circumstances, best accounting practice rules.

Additional provisions apply to investment and insurance companies.

Unrealised profits may be either capital or revenue.

An unrealised capital profit is not “distributable” and may never be credited to profit and loss account. If the directors of a company wish its books to record the fact that a fixed asset which cost £7,500 is now valued at £10,000, the “appreciation” will be debited to the asset account, a provision for taxation on the appreciation in value will be credited to taxation equalisation account and the balance credited to capital reserve.

Now, what of an unrealised revenue profit? Suppose that the directors insist that stock, previously valued at £16,000 (at lower of cost or market price) shall now be valued at £22,000 (representing selling price). Can they do this, thus increasing the “profit” of the year by £6,000?

The answer is that, no matter how imprudent this might be, they can do so, but since the £6,000 “profit” arises from a “change in the basis of accounting”, it must be separately shown, or referred to, in the published accounts; and if, in the opinion of the directors, any of the current assets are valued in the balance sheet above the amount which they would realise in the ordinary course of the company’s business, the directors must state this fact.

B. CASH FLOW STATEMENTS

The purpose of the cash flow statement is to show the sources and amount of cash which has become available to the company in the year, and how that cash has been applied. FRS 1 *Cash Flow Statements* requires a cash flow statement to be included in published company accounts.

Most organisations must prepare cash flow statements. However, companies able to file abbreviated accounts with the Registrar need not prepare and file them, nor need small organisations or wholly owned subsidiaries where the parent produces Consolidated Cash Flow Statements.

Purpose

The profit and loss account and balance sheet place little emphasis on cash, and yet enterprises go out of business through a shortage of readily available cash. This can happen **irrespective of profitability**, as cash otherwise available may have been overinvested in fixed assets, leaving insufficient cash to maintain the business.

The cash flow statement will help analysts in making judgements on the amount, timing and degree of certainty of future cash flows by giving an indication of the relationship between profitability and cash generating ability and thus the “quality” of the profit earned.

Looking at the cash flow statement in conjunction with a balance sheet provides information about liquidity, viability and financial adaptability. The balance sheet provides information about an entity’s financial position at a particular point in time including assets, liabilities and equity on their interrelationship at balance sheet date.

The balance sheet information is regularly used to obtain information about liquidity but as the balance sheet is only the picture on one day, the liquidity information is incomplete. The cash flow

statement extends liquidity information over the accounting period. However, to give an indication of future cash flows, the cash flow statement needs to be studied in conjunction with the profit and loss account and balance sheet.

The concentration on cash as opposed to working capital emphasises the pure liquidity of the reporting business. Organisations can have ample working capital but run out of cash, and fail.

Presentation of Cash Flow Statements

A cash flow statement prepared under the terms of FRS 1 separates:

- Operating activities
- Returns on investments and servicing of finance
- Taxation
- Investing activities – covering capital expenditure and financial investments, acquisitions and disposals, equity dividends paid and management of liquid resources
- Financing.

Hence the statement gives an overview of changes in these areas to illustrate the success of management in controlling the different functions.

Briefly, the overall presentation of a cash flow statement is as follows:

Operating activities	X
Returns on investments and servicing of finance	X
Taxation	X
Investing activities	<u>X</u>
Net cash inflow/outflow before financing	X
Financing	<u>X</u>
Increase/decrease in net cash and cash equivalents	X
Cash and cash equivalents at start of year	<u>X</u>
Cash and cash equivalents at end of year	<u>X</u>

As you can see, the emphasis at the bottom of the statement is on liquidity. The accumulating effect on cash and cash equivalents (which may appear as a separate note) is clearly shown.

Let us look now at the different terms and what they represent.

(a) Operating Activities

Cash flows from operating activities are, in general, the cash effects of transactions and other events relating to operating or trading activities. This can be measured by a direct or indirect method.

- ***Direct Method***

The direct method picks up individual categories of cash flow including income from customers, cash paid to suppliers, cash paid to employees and cash paid to meet expenses.

In other words, you will see:

Operating Activities

Cash received from customers	X
Cash payments to suppliers	(X)
Cash paid to and on behalf of employees	(X)
Other cash payments	(X)
Net cash inflow from operating activities	X

This would then be followed by any extraordinary items directly relevant to operating activities. Extraordinary items relevant to, say, investing activities would appear under the investing activities heading. Any exceptional items should be included within the main categories of this heading as above and be disclosed in a note to the cash flow statement.

The use of the direct method is encouraged only where the potential benefits to users outweigh the costs of providing it.

- **Indirect Method**

Many businesses will not readily have available cash-based records and may prefer the indirect method (which is accruals based) of dealing with operating activities. This is the method adopted by FRS 1 and therefore the method you are likely to see in limited company accounts.

A typical presentation of the indirect method for operating activities would follow this approach:

Operating Activities

Profit before tax, interest and before extraordinary items	X
Depreciation charged	X
Increase/decrease in debtors	X
Increase/decrease in stock	X
Increase/decrease in creditors	X
Net cash inflow/outflow from operating activities	X

Alternatively, you may well see in practice “Net cash inflow from operating activities” in the cash flow statement with a separate reconciliation as a note to the statement. This reconciliation will be between the operating profit (for non-financial companies, normally profit before interest) reported in the profit and loss account and the net cash flow from operating activities. This should, as above, disclose separately the movements in stocks, debtors and creditors relating to operating activities and other differences between cash flows and profits (e.g. accruals and deferrals).

To illustrate this latter approach, consider the following notes attached to a cash flow statement.

Note: Reconciliation of Operating Profit to Net Cash

Inflow from Operating Activities	
	<i>£000</i>
Operating profit	100
Depreciation charged	10
Increase in debtors	(15)
Increase in creditors	5
Increase in stock	(90)
Effect of other deferrals and accruals of operating activity cash flows	(5)
Net cash inflow from operating activities	5

Although the profit from the profit and loss account is £100,000, this does not mean that the company has received that amount of cash during the year, as profit has been charged with non-cash items such as depreciation. Therefore, in order to arrive at the “cash flow from operating activities” we have to adjust the operating profit figure for any non-cash items, these being **depreciation** and **profit/loss on the sale of fixed assets**. Depreciation, in the above example, has been deducted in arriving at the profit figure of £100,000. So we need to add the £10,000 depreciation back as it was just a book entry and did not involve any cash payment.

Now look at the next three items under “operating activities” – **debtors, creditors and stock**. We are trying to find the net increase/decrease in cash in our cash flow statement and the first stage of this is finding our “cash flow from operating activities”. However, some of the profit has not gone into the cash or bank balance but has been ploughed back into stock. Therefore, we need to deduct any increase in stock from the operating profit to arrive at the cash flow figure. Similarly with debtors, if the debtors figure has increased then some of the sales made during the year have not yet generated cash. Any increase in debtors therefore has to be deducted to arrive at the cash flow figure. On the other hand, if the creditors figure has increased then cash has not yet been paid out for some of the purchases which have been deducted in arriving at the operating profit. Therefore, we need to add back any increase in creditors. Prepayments and accruals are treated in the same way as debtors and creditors.

Lastly, note that we have started with the figure for profit before tax, i.e. we do not adjust for any provision for tax on this year’s profit, as this does not involve the movement of cash. What we do have to do is to **deduct any tax actually paid during the year** (normally the tax on the previous year’s profits), under the appropriate heading later in the cash flow statement, as this reduces our cash flow.

(b) Returns on Investments and Servicing of Finance

For preparation purposes this is a minefield and you must be clear on matters of gross and net dividends and dividends paid and proposed.

We are concerned with dividends **paid** and so you can expect to need to add together:

- the interim dividend paid in the financial year;
- the proposed dividend in the previous year’s balance sheet.

The proposed dividend in this year's balance sheet will not result in a cash outflow until the next year. Thus, it is not included in the computation.

To clarify the advance corporation tax (ACT) situation, dividends are shown **net**.

- Cash inflows from returns on investments and servicing of finance include:
 - (i) interest received including any related tax recovered;
 - (ii) dividends received (disclosing separately dividends received from equity accounting entities), net of any tax credits.
- Cash outflows from returns on investments and servicing of finance include:
 - (i) interest paid (whether or not the charge is capitalised), including any tax deducted and paid to the relevant tax authority;
 - (ii) dividends paid on non-equity shares (i.e. usually preference shares, as ordinary shares are equity), excluding any advance corporation tax;
 - (iii) the interest element of finance lease rental payments.

(c) Taxation

Again the conflict between cash and accruals arises. If you look at published accounts you may find that it is virtually impossible to see how the tax charge in the cash flow statement equates with that in the rest of the accounts.

In some circumstances you may be able to extract the tax information directly but we would, more often, expect you to need to make a computation such as:

Corporation tax + Advance Corporation Tax in Year 1 balance sheet
less Corporation tax + Advance Corporation Tax in Year 2 balance sheet
plus Profit and loss figure for corporation tax (Year 2)

(d) Investing Activities

Note that this item may well be broken down into its constituent parts, showing separately these elements as:

- Capital expenditure and financial investments
- Acquisitions and disposals
- Equity dividends paid
- Management of liquid resources

Note that the accent here is on the cash inflows and outflows arising from these activities, so they are perhaps not what you would expect as being "investments".

- Cash inflows from investing activities include:
 - (i) Receipts from sales or disposals of fixed assets
 - (ii) Receipts from sales or investments in subsidiary undertakings net of any balances of cash and cash equivalents transferred as part of the sale
 - (iii) Receipts from sales of investments in other entities with separate disclosure of divestments of equity accounted entities

- (iv) Receipts from repayment or sales of loans made to other entities by the reporting entity or of other entities' debt (other than cash equivalents) which were purchased by the reporting entity.
- Cash outflows from investing activities include:
 - (i) Payments to acquire fixed assets
 - (ii) Payments to acquire investments in subsidiary undertakings net of balances of cash and cash equivalents acquired
 - (iii) Payments to acquire investments in other entities with separate disclosure of investments in equity accounted entities
 - (iv) Loans made by the reporting entity and payments to acquire debt of other entities (other than cash equivalents).

(e) Financing

- Financing cash inflows include:
 - (i) Receipts from issuing shares or other equity instruments
 - (ii) Receipts from issuing debentures, loans, notes and bonds and from other long- and short-term borrowings (other than those included within cash equivalents).
- Financing cash outflows include:
 - (i) Repayments of amounts borrowed (other than those included within cash equivalents)
 - (ii) The capital element of finance lease rented payments
 - (iii) Payments to reacquire or redeem the entity's shares
 - (iv) Payments of expenses or commission on any issue of shares, debentures, loans, notes, bonds or other financing.

The amounts of any finance cash flows received from or paid to equity accounted entities should be disclosed separately.

Supplementary notes are essential to explain certain movements. Paramount in these notes are reconciliations of the movements in cash and cash equivalents and the items in the financing section of the cash flow statement with the related items in the opening and closing balance sheets of the period.

The terms "cash" and "cash equivalents" should perhaps be defined as they exclude overdrafts which are hardcore in nature.

- **Cash** is defined as cash in hand and deposits repayable on demand with any bank or other financial institution. Cash includes cash in hand and deposits denominated in foreign currencies.
- **Cash equivalents** are short-term, highly liquid investments which are readily convertible into known amounts of cash without notice and which were within three months of maturity when acquired, less advances from banks repayable within three months from the date of the advance. Cash equivalents include investments and advances denominated in foreign currencies provided that they fulfil the above criteria.

Examples

We shall take two examples which illustrate different degrees of complexity. See if you can work them out for yourself as practice will bring out problems and their solutions.

Example 1

This first example sets out the full specimen statement from FRS 1 in the format for full published accounts.

Note that the statement is divided into three main parts:

- Reconciliation of operating profit to net cash inflow from operating activities.
- The cash flow statement itself, in summary form (with analysis given as part of the Notes to the statement)
- Reconciliation of net cash flow to movement in net debt.

XYZ Ltd
Cash Flow Statement for the year ended 31 December Yr 6

	£000
Reconciliation of operating profit to net cash inflow from operating activities	
Operating profit	6,022
Depreciation charges	899
Increase in stocks	(194)
Increase in debtors	(72)
Increase in creditors	234
Net cash inflow from operating activities	<u>6,889</u>
CASH FLOW STATEMENT	
Net cash inflow from operating activities	6,889
Returns on investments and servicing of finance (<i>note 1</i>)	2,999
Taxation	(2,922)
Capital expenditure	<u>(1,525)</u>
	5,441
Equity dividends paid	<u>(2,417)</u>
	3,024
Management of liquid resources (<i>note 1</i>)	(450)
Financing (<i>note 1</i>)	<u>57</u>
Increase in cash	<u>2,631</u>
Reconciliation of net cash flow to movement in net debt (<i>note 2</i>)	
Increase in cash in the period	2,631
Cash repurchase debenture	149
Cash used to increase liquid resources	<u>450</u>
Change in net debt *	3,230
Net debt at 1.1. Yr 6	<u>(2,903)</u>
Net funds at 31.12. Yr 6	327

* In this example all changes in net debt are cash flows

Notes to the Cash Flow Statement

1. Gross Cash Flows

	£000	£000
Returns on investments and servicing of finance		
Interest received	3,011	
Interest paid	(12)	
	<u> </u>	2,999
Capital expenditure		
Payments to acquire intangible fixed assets	(71)	
Payments to acquire tangible fixed assets	(1,496)	
Receipts from sales of tangible fixed assets	42	
	<u> </u>	(1,525)
Management of liquid resources		
Purchase of treasury bills	(650)	
Sale of treasury bills	200	
	<u> </u>	(450)
Financing		
Issue of ordinary share capital	211	
Repurchase of debenture loan	(149)	
Expenses paid in connection with share issues	(5)	
	<u> </u>	57

2. Analysis of changes in net debt

	At 1 Jan	Cash flows	Other changes	At 31 Dec
	£000	£000	£000	£000
Cash in hand, at bank	42	847		889
Overdrafts	(1,784)	1,784		
		2,631		
Debt due within 1 year	(149)	149	(230)	(230)
Debt due after 1 year	(1,262)		230	(1,032)
Current asset investments	250	450		700
Total	2,903	3,230	–	327

We can make the following comments and observations about this statement.

- (a) A reconciliation between the movement in cash in the period and the movement in net debt is required. Net debt is defined as borrowings less cash and liquid resources. (Liquid resources are readily disposable current asset investments.)

The reconciliation should analyse the changes in each component of net debt from the opening to the closing balance sheets, showing separately changes resulting from:

- The cash flows of the company
- The acquisition or disposal of subsidiary undertakings
- Exchange rate movements
- Other non-cash changes

In the above example the only changes in net debt are cash flows.

- (b) We will now look at how the figures have been arrived at in the reconciliation of net cash flow to movement in net debt, and in note 2.

Of the £2,631k increase in cash over the year, £847k has gone into cash and bank, and £1,784k to clear the overdraft at the start of the year (note 2). £149k of cash outflow has been used to repay debentures which fell due for repayment during the year. Another £450k of cash outflow was used to purchase a current asset investment (liquid resource).

We noted above that:

$$\text{Net debt} = \text{Borrowings} - \text{Cash} - \text{Liquid resources}$$

So:

$$\begin{array}{ccccccc} \text{Change in} & = & \text{Change in} & = & \text{Change in} & = & \text{Change in liquid} \\ \text{net debt} & & \text{borrowings} & & \text{cash} & & \text{resources} \end{array}$$

In this case:

$$-3,230 = -149 = -2,631 = -450$$

or

$$149 + 2,631 + 450 = 3,230$$

What this means is that the opening figure for net debt of £(2,903)k has improved by £3,230k, so that at the end of the year cash and bank plus current asset investments exceed outstanding debt by £327k.

One final point in note 2 is that the £230k change from debts due after one year to debts due within one year simply reflects the fact that this amount of debt is due for repayment by 31 December Year 7.

Example 2

The summarised accounts of Frizbee Ltd for the last two years are as follows:

Frizbee Ltd
Profit and Loss Account for the Year ended 31 December 20X2

	<i>£000</i>	<i>£000</i>
Turnover		26,320
Cost of sales		<u>9,280</u>
Gross profit		17,040
Distribution costs	1,070	
Administrative expenses	<u>7,290</u>	<u>8,360</u>
		8,680
Income from other fixed asset investments		660
Interest payable		<u>(890)</u>
Profit on ordinary activities before taxation		8,450
Tax on profit on ordinary activities before taxation		<u>2,370</u>
Profit on ordinary activities after taxation		6,080
Extraordinary income	1,120	
Tax on extraordinary income	<u>360</u>	<u>760</u>
Profit for the financial year		6,840
Dividends		<u>2,000</u>
		4,840
Retained profit brought forward		<u>6,210</u>
Retained profit carried forward		11,050

Frizbee Ltd
Balance Sheet as at 31 December 20X2

	20X1		20X2	
	£000	£000	£000	£000
Fixed assets @ cost		44,190		40,130
less Depreciation		14,660		12,260
		<u>29,530</u>		<u>27,870</u>
Current assets:				
Investments	8,170		5,920	
Stocks	36,170		39,220	
Debtors	33,110		30,090	
Cash at bank and in hand	8,720		—	
ACT recoverable	450		500	
	<u>86,620</u>		<u>75,730</u>	
Creditors: Amounts falling due within one year				
Bank loans and overdrafts	—		6,680	
Trade creditors	30,470		29,940	
Corporation tax	2,170		2,370	
ACT payable	450		500	
Dividends proposed	1,350		1,500	
	<u>34,440</u>		<u>40,990</u>	
Net current assets		<u>52,180</u>		<u>34,740</u>
Total assets less current liabilities		81,710		62,610
Creditors: Amounts falling due after more than one year				
Debenture loans		<u>25,000</u>		<u>—</u>
		56,710		62,610
Capital and Reserves				
Called up share capital				
Ordinary £1 shares		50,000		51,000
Share premium account		500		560
Profit and Loss account		<u>6,210</u>		<u>11,050</u>
		56,710		62,610

You are also given the following information:

(a) Fixed Asset Schedule

	£000
Cost at start of year	44,190
Disposals	<u>4,060</u>
Cost at end of year	<u>40,130</u>
Depreciation:	
At start of year	14,660
Disposals	(4,000)
Charge to profit and loss for the year	<u>1,600</u>
	<u>12,260</u>

Fixed assets disposed of during the year were sold for £20,000.

- (b) The extraordinary item arose on the sale of a business segment and the tax on this was paid during the year.
- (c) Interest received and payable took place within the year, resulting in amounts accrued at the start or end of the year.

Required:

Prepare a Cash Flow Statement for the year ended 31 December 20X2.

Specimen Answer***Cash Flow Statement for the Year Ended 31 December 20X2***

	£000	£000
Cash flow from operating activities		9,710
Extraordinary income		<u>1,120</u>
Net cash inflow from ordinary activities		10,830
Returns on investment and servicing of finance		
Interest received	660	
Interest paid	(890)	
Dividends paid (2,000 + 1,350 – 1,500)	<u>(1,850)</u>	
Net cash outflow from returns on investment and servicing of finance		(2,080)
Taxation		
Corporation tax paid	(2,120)	
(2,370 + 2,170 + 450 – 2,370 – 500)		
Tax on extraordinary item	<u>(360)</u>	(2,480)
Investing activities		
Receipts from sale of fixed assets	<u>20</u>	
Net cash inflow from investing activities		<u>20</u>
Net cash inflow before financing		6,290
Financing		
Issue of ordinary share capital (1,000 + 60)	1,060	
Repayment of debenture loans	<u>(25,000)</u>	
		<u>(23,940)</u>
Decrease in cash and cash equivalents		17,650

Notes to the Cash Flow Statement**(1) Reconciliation of operating profit to net cash inflow from operating activities:**

	£000
Operating profit	8,680
Depreciation charges	1,600
Loss on disposal of fixed assets (4,060 – 4,000 – 20)	40
Increase in stocks (39,220 – 36,170)	(3,050)
Decrease in debtors (33,110 – 30,090)	3,020
Increase in deferred assets (500 – 450)	(50)
Decrease in creditors (30,470 – 29,940)	<u>(530)</u>
	9,710

(2) Analysis of the balances of cash and cash equivalents

	20X2	20X1	Change
	£000	£000	£000
Cash at bank and in hand	–	8,720	(8,720)
Short term investments	5,920	8,170	(2,250)
Bank overdraft	<u>6,680</u>	<u>–</u>	<u>(6,680)</u>
	760	16,890	(17,650)

If, as well as preparing such a statement, you were asked to analyse it you would find that the separate headings prove useful in helping you identify the changes:

- The debenture has been redeemed (financing). Hence as the financing has reduced we can expect the future cost of servicing that financing to reduce. We are not told the amount needed to finance the debentures from the £890,000 interest paid expense but clearly this amount will decrease.
- The debenture redemption has been funded largely by a reduction in cash and cash equivalents – primarily the elimination of the cash and bank balances and creation of an overdraft. However, this is not too worrying as the overdraft is virtually matched by short-term investments and other elements of working capital have largely been left untouched. Assuming similar results by way of profitability in future years, the bank overdraft should be eliminated in a couple of years.

(N.B. We have assumed that the investments are all short-term, i.e. redemption within three months. It is possible that the term is longer so we might need to reclassify these and to alter the figure for cash and cash equivalents. We can also see that the bank loans and overdrafts might well, unless they are on a roll-over basis, comprise some elements not repayable for more than a three-month period. Again we might need to reclassify these – as part of the working capital – and alter our figures for cash and cash equivalents.)

C. FUNDS FLOW STATEMENTS

As the cash flow statement highlights the change in cash and bank balances over the year, the **source and application of funds statement** highlights the **change in working capital** over the year. Working capital is current assets less current liabilities. The statement shows the sources of funds which have become available during the year, deducts the application of funds (i.e. how these funds have been applied during the year) and shows how the balance, i.e. net sources of funds, has been “ploughed into” stocks, bank etc.

Prior to FRS 1, SSAP 10 required limited companies to include a statement of sources and application of funds in their published accounts. SSAP 10 has now been superseded, but you may come across a funds flow statement so it would be useful for you to understand its purpose.

Example

Source and Application of Funds Statement for year ended 31 December

	£	£
Source of Funds		
Profit before tax		47,000
Adjustment for items not involving the movement of funds:		
Depreciation		<u>12,000</u>
Funds generated from operations		59,000
Funds from other sources		
Issue of shares		<u>15,000</u>
		<u>74,000</u>
Application of Funds		
Purchase of fixed assets	6,000	
Payment of taxation	<u>31,000</u>	<u>37,000</u>
		<u>37,000</u>
Increase/Decrease in Working Capital		
Increase in stocks		21,000
Increase in debtors		2,000
Increase in creditors		(2,000)
Movement in net liquid funds:		
Decrease in bank overdraft		<u>16,000</u>
		<u>37,000</u>

Reasons for Change from Funds Flow

Financial Reporting Standard 1 sets out to meet what the ASB identified as a move away in user needs from funds flow information, as in SSAP 10, to cash flow information (i.e. eliminating the long-term provisions and other allocations associated with accruals accounting). Reasons cited for the change in emphasis were:

- Historical cash flows may be directly relevant for business valuation in a way that working capital flows are not.
- Funds flow information may hide significant changes, through the leads and lags, as compared with cash flow, in the viability and liquidity of a business.
- The funds flow statement does not provide any new data – it simply reorganises data already available in the balance sheet.
- Cash flow is an easier concept to understand than working capital changes.

Study Unit 6

Valuation and Depreciation

<i>Contents</i>	<i>Page</i>
A. Valuation of Stocks	124
Definitions	124
Methods of Determining Cost	125
Net Realisable Value	128
Balance Sheet Disclosure of Stocks	128
B. Valuation of Long-Term Contracts	130
Reflecting the Fundamental Concepts	130
Problems Arising	131
C. The Importance of Stock Valuation	131
Closing Stock in the Trading Account	131
Unconsumed Stocks	131
Gross or Trading Profit	132
Stocktaking and Stock Values	133
Effects of Under- or Over-valuation of Stock	133
D. Depreciation	134
Accounting for Depreciation	135
Balance Sheet Disclosure	135
Revaluation of Fixed Assets	136
SSAP 12: Accounting for Depreciation	136
E. Methods of Providing for Depreciation	137
Straight-line Method	137
Reducing Balance Method	138
Sum of the Years Digits	138
Answers to Questions for Practice	140

A. VALUATION OF STOCKS

Accounting standards aim to narrow the differences and variations in practice and ensure adequate disclosure in published accounts. SSAP 9 specifically seeks to define practices for the valuation of stocks and work in progress.

To determine profit, costs have to be matched with related expenses. Unsold or unconsumed stocks and work in progress will have incurred costs in the expectation of future revenue and it is therefore appropriate to carry forward such costs so that they may be matched with future revenues.

The main requirement of SSAP 9 is that **stocks** must be stated at the **lower of cost or net realisable value**; this is that you must remember.

Definitions

(a) Stocks

The component parts of stocks may comprise:

- Raw materials and components bought in
- Consumable stores
- Products or services in an intermediate stage of manufacture (known as work in progress) **but not long-term contracts**, with which we will deal later in this study unit
- Goods and/or assets purchased for resale
- Finished goods

(b) Cost

Cost is expenditure incurred in bringing the product or service to its present location and condition. There are three elements to consider.

- ***Cost of purchase***

This comprises not just the purchase price of materials, etc., but any other costs incurred in acquiring them:

- (i) Purchase price
- (ii) Import duties
- (iii) Transport and handling costs and other attributable costs
- (iv) Trade discounts (subsidies and rebates **must** be deducted)

Trade discounts must not be confused with cash discounts which are allowed or received. **Cash discounts** are made to encourage the early payment of the account and are entered into the accounts and appear in the profit and loss account. **Trade discounts**, on the other hand, **never** appear in the accounts, and are deducted at source. The reason for these discounts is that the seller will be dealing with three possible types of customer:

- (i) The trader who buys a lot
- (ii) The trader who buys only a few items
- (iii) The general public

It is therefore logical that whilst the three types of customer will want to benefit from a discount those under (i) will expect a higher discount than those under (ii), and those under (ii) a higher discount than those under (iii). This means that there would potentially be at least three price levels. To save staff having to deal with several price lists, **all** goods are shown at the **same price** and a negotiated trade discount is given to selected customers. Discounts are deducted at the time of the transaction, are **instant** and are **never** therefore entered in the accounts.

- **Cost of conversion**

The cost of conversion into finished goods consists of:

- (i) Costs attributable to units of production such as raw material, direct labour and expenses and sub-contracted work
- (ii) Production overheads
- (iii) Other overheads, if attributable in the particular circumstances of the business in bringing the product or service to its present location and condition.

- **Production overheads**

These may cause some problems. The direct charges of raw materials, direct labour and expenses are easy to identify but other overheads related to production may be difficult to define accurately.

An appendix to the SSAP gives further guidance. This requires that only production overheads such as insurance and business rates are to be apportioned to units of production because these are period costs and have a future benefit. This is in accordance with the accruals concept of SSAP 2. However, the counter-argument to this is that costs like rents and business rates are incurred whether or not there is production and therefore the prudence concept should apply – the prudence concept overrules the accruals concept. The contradiction shows how difficult it is to apportion overheads.

Selling, distribution, finance and administration costs should be written off in the profit and loss account in accordance with the accruals concept.

Methods of Determining Cost

(a) Unit Cost

This is the cost of purchasing or manufacturing identifiable units of stock, and is the simplest form of determining cost. It can be an impractical method if the volume of stocks or the sales turnover is high.

(b) Average Cost (Weighted Average)

The units of stock on hand are multiplied by the average price. The average price is calculated by:

$$\frac{\text{Total cost of units}}{\text{Total number of units}}$$

(c) Simple Average

This method is used to good advantage when it is impossible to identify each item separately, and the prices of purchases do not fluctuate very much. To calculate the issue price, the total **prices** paid are divided by the **number of prices paid** in the calculation, e.g.:

1 unit cost: £1.00 per unit

100 units cost: £0.50 per unit

Average price is $\frac{£(1.00 + 0.50)}{2} = £0.75$

As you can see, a danger with this method arises where there are large variations in the numbers of items purchased.

(d) First In First Out (FIFO)

Here it is assumed that the earliest purchases are taken into production or sold first, and the stock on hand then represents the latest production or purchases.

Advantages

The stock valuation follows the physical movement of the stock.

The most recent purchases appear on the balance sheet – see following example.

Receipts		Issues		Stock After Each Transaction	
Units	£	Units	£	Units	£
20 @ £45	£900			20 @ £45	
10 @ £50	£500			10 @ £50	£1,400
		10 @ £45	£450	10 @ £45	
				10 @ £50	£950
		10 @ £45			
		5 @ £50	£700	5 @ £50	£250
10 @ £52	£520			5 @ £50	
				10 @ £52	£770

Disadvantages

The revenue is charged at current prices and is potentially matched with out-of-date costs. This means that the profit is based on price change and the profit margin may not be consistent.

(e) Last In First Out (LIFO)

This works the opposite way to FIFO, and the calculation of stocks and work in progress taken to production or sold represents the most recent purchases. Stock on hand represents the earliest purchases or cost of production.

Receipts		Issues		Stock After Each Transaction	
Units	£	Units	£	Units	£
20 @ £45	£900			20 @ £45	£900
10 @ £50	£500			20 @ £45	
				10 @ £50	£1,400
		5 @ £50	£250	20 @ £45	
				5 @ £50	£1,150
10 @ £52	£520			20 @ £45	
				5 @ £50	
				10 @ £52	£1,670
		5 @ £52	£260	20 @ £45	
				5 @ £50	
				5 @ £52	£1,410

Advantages

The current revenue is matched with the current purchases, meaning that the profit should be realistic. In the ideal situation where items purchased equal items sold, the cost of sales will be the current cost of goods sold.

Disadvantages

The SSAP does not approve this method but, on the other hand, the **Companies Act 1989** does include this as an acceptable method.

- The stock values on the balance sheet are out-of-date and unrealistic.
- There is always the problem of keeping accurate records of stock movements.

(f) Replacement Cost

This is the cost at which an identical asset could be purchased or manufactured. The difficulty with this method arises where the replacement cost is greater than the historic cost because unrealised gains will be included in the resulting profit. Conversely, where the replacement cost is less than either the realisable value or the historic cost, then a greater loss will be incurred.

You should also note that the SSAP does not approve of this method unless it provides the best measure of net realisable value.

Net Realisable Value

This is the actual or estimated selling price net of trade discounts, less:

- All further costs to completion
- All costs which will be incurred in marketing, selling and distribution

In short, it is the value that can be expected without creating either a profit or loss.

Remember, the rule laid down in SSAP 9 is that stocks and work in progress must be valued at cost or net realisable value, whichever is the lower.

There are many reasons why the net realisable value might be lower than cost:

- Errors in purchasing
- Errors in production
- Falling selling prices
- Obsolescence
- Increasing costs
- The company has decided to sell at a loss, e.g. the supermarket practice of “loss leaders”

Balance Sheet Disclosure of Stocks

Certain factors must be stated in the notes to published company accounts. The accounting policies used in calculating cost, net realisable value, attributable profit and foreseeable losses must all be stated.

Stocks and work in progress should be analysed in the balance sheet, or in notes to the financial statements, in a manner which is appropriate to the business, so as to indicate the amounts held in each of the main categories.

Remember that the amount at which stocks are valued in the final accounts directly affects the amount of gross profit.

QUESTIONS FOR PRACTICE

1. This will help reinforce your understanding of manufacturing and trading accounts, as well as emphasising the importance of the stock figure(s).)

The trainee accountant in your costing department has tried to draw up a manufacturing and trading account as shown over.

Required

Correct the account

	£	£
Opening stocks raw materials		20,590
Purchases	90,590	
Returns inwards	2,718	
	<u>93,308</u>	
<i>less</i> Carriage inwards	<u>4,920</u>	
	88,388	
<i>add</i> Returns outwards	<u>2,920</u>	91,308
		111,898
<i>add</i> WIP 1 Jan		<u>2,409</u>
Prime cost		114,307
Indirect wages	10,240	
Direct expenses	9,110	
Factory insurance	<u>2,240</u>	21,590
		135,897
<i>less</i> WIP 31 Dec		<u>5,219</u>
		130,678
<i>less</i> Direct wages	14,209	
Indirect expenses	<u>9,240</u>	23,449
		107,229
<i>add</i> Finished goods 1 Jan		<u>18,240</u>
		125,469
<i>less</i> Finished goods 31 Dec		<u>24,000</u>
Cost of production		101,469
Sales		150,500
<i>less</i> Cost finished goods		<u>101,469</u>
		49,031
<i>add</i> Closing stocks raw materials 31 Dec		<u>19,420</u>
Trading profit		68,451

B. VALUATION OF LONG-TERM CONTRACTS

Work in progress may include long-term contracts. SSAP 9 defines a long-term contract as one that is undertaken to manufacture or build a single substantial entity, or to provide a substantial service. In both cases the period taken will extend **beyond one year**, and a substantial amount of the contract will be carried forward.

You should note that:

- The definition of cost is the same as that applied to stocks.
- Foreseeable losses, i.e. anticipated losses, are defined as those which are currently estimated to arise over the duration of the contract. Allowance must be made for estimated remedial and maintenance costs and increases in costs so far as they are not recoverable under the terms of the contract.
- If anticipated losses to date exceed costs to date, less progress payments received and receivable, then such excesses should be shown separately.
- The balance on work carried forward must be shown under the debtor heading in current assets.

Reflecting the Fundamental Concepts

Remember that the four fundamental concepts are stated in SSAP 2, and these are applied in SSAP 9.

(a) **Accruals Concept**

The contract activity is expected to extend over several years, and it is argued that profit should be allocated over those years in order to give a “*true and fair view*” of the results of the years over which the activity takes place. A misleading view could be given if contract profits were not recognised until completion of the contract. Some years could show substantial profits and others substantial losses, causing the analyst to make incorrect interpretations on a company’s progress.

(b) **Prudence Concept**

It may not be possible to predict accurately the outcome of a contract until the contract is well advanced. The prudence concept requires a company to determine the earliest point at which contract profits may be brought into the profit and loss account. Any contract has uncertainties, examples being the actual date on which the contract will be completed, or some unexpected cost arising. If it is expected that there will be a loss on any contract, provision should be made for a loss as soon as it becomes evident.

(c) **Going Concern**

A company entering into any contract must ensure that it has adequate resources to complete the contract.

(d) **Consistency Concept**

Where a company has several contracts of a similar nature, then it should treat such contracts in a similar fashion from an accounting point of view. In addition there should be consistency within any one year and from year to year.

Problems Arising

This is a difficult area of accounting and because of the wide variety of industrial projects there is, of course, a diversity of accounting practice. The SSAP acknowledges that problems which are, perhaps, unanswerable do exist. However, to try to answer some of the problems, the terminology has been restricted. For example, there is no definition of the word “turnover”, but the SSAP does require disclosure of the means by which turnover is ascertained.

In determining the point at which profit is to be recorded, the overriding principle is that there should be **no attributable profit until the outcome of the contract can be foreseen with reasonable certainty**. If the profit can be seen with reasonable accuracy it is only prudent that the profit earned should reflect the amount of work performed to date.

C. THE IMPORTANCE OF STOCK VALUATION

Closing Stock in the Trading Account

Having reviewed the treatment of stocks and work in progress in the manufacturing and trading accounts, we will now turn our attention to those organisations which do not have a manufacturing process. These firms will buy in finished goods for resale, and an example of a trading account is given below to refresh your memory:

	£	£	£
Sales		25,770	
less Returns		<u>1,446</u>	24,324
Cost of goods sold:			
Opening stock		5,565	
Purchases	18,722		
less Returns	<u>576</u>		
	18,146		
Carriage inwards	<u>645</u>	<u>18,791</u>	
		24,356	
less Closing stock		<u>4,727</u>	<u>19,629</u>
Gross (or trading) profit			4,695

After we have added purchases less returns to the opening stock and added the carriage inwards, we have a grand total of the total stock on hand plus all net purchases. From this figure we have to deduct the stock remaining, i.e. unsold, because it is not part of the current year's costs. The net result is known as the **cost of sales**.

Unconsumed Stocks

The cost of unconsumed stocks will have been incurred in the expectation of future revenues which will not arise until a later period, and it is appropriate to carry this cost forward to be matched with

the revenue when it does arise. This reflects the accruals concept, i.e. the matching of costs and revenue in the year in which they arise rather than in the year in which the cash is paid or received.

If there is no reasonable expectation of sufficient revenue to cover the cost incurred, the irrecoverable cost should be charged in the year under review. This may occur due to obsolescence, deterioration, change in demand, etc.

The comparison of cost versus realisable value needs to be made in respect of each item separately. Where this is not practical then groups or categories which are similar will need to be assessed together.

The methods used in allocating costs to stock need to be selected with a view to providing the fairest possible assessment of the expenditure actually incurred in bringing the product to its present location and condition. For example, in supermarkets and retail shops which have large numbers of rapidly changing items, it is appropriate to take the current selling price less gross profit. When you next go shopping take a good look at the goods displayed and ask yourself how you think the retailer would go about valuing the stock.

Stocks should be **sub-classified** so that the categories can be identified, and the SSAP draws attention to the **Companies Act** which indicates three ways in which an estimate of stock may be reached:

- By maintaining detailed records of cost of sales
- By maintaining detailed records so that a stock valuation may be performed at any time (known as the perpetual inventory)
- By using the gross profit margin applied to sales

The stocks should also be classified and identified in the balance sheet or in notes to the accounts under the headings of:

- Raw materials
- Work in progress
- Finished goods

Gross or Trading Profit

As you know, the net sales less the cost of sales (sometimes known as the **cost of goods sold**) is the gross profit (GP). This is an important figure because it reveals the profit from operations.

Gross Profit Ratio

This is a very simple calculation, and is usually quoted as a percentage:

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

If we apply the figures from our trading account example above we get:

$$\frac{4,695}{24,324} \times 100 = 19\%$$

Most businesses have a target gross profit ratio which they aim to achieve. The success or failure of the business depends on maintaining a level of gross profit that will be higher than the expenses incurred in running the business. We will return to this subject in a later study unit when we discuss analysis of final accounts.

You should remember that the level of gross profit varies with the type of business. For example, the grocery trade, furniture stores and newsagents all have their individual profit margins, which may vary even within the industry. A major supermarket chain may operate on quite different profit margins from that planned by a village store. However, it is generally possible to judge whether a business is below or above the average, once we are aware of the average gross profit for the particular trade. This will only be a rough guide because there are many other factors to take into account before a reasoned judgement can be made.

Stocktaking and Stock Values

In large organisations stock control systems usually exist and these adopt one of the methods we looked at earlier. In large supermarkets and DIY stores, stock will be computer-controlled from the tills, using scanning devices. Each sale not only records the value of the sale but also identifies the unit and updates the stock holding, often actually executing a re-order program automatically. This, of course, cuts out the arduous and expensive task of counting individual items of stock. Smaller firms, unable to afford sophisticated systems, do have to resort to counting the individual items.

There are various ways of doing this which range from the perpetual inventory to the once-a-year stock check. Whichever method is chosen, there is the continual problem of pricing the stock. This is made easier by SSAP 9, which suggests that it is acceptable to use the selling price less the estimated profit margin in the absence of a satisfactory costing system. However, the chosen system must give a reasonable approximation of the actual cost.

Perpetual Inventory

This is a method of recording store balances after every receipt and issue to facilitate regular checking and to avoid the need to close down for stocktaking. The essential feature of the perpetual inventory is the **continuous checking** of stock. A number of items are counted every day or at frequent intervals and compared with stores records. Discrepancies can be investigated and clerical errors can be corrected. If there is a physical discrepancy, then the records must be adjusted accordingly. The usual causes of discrepancies are incorrect entries, breakage, pilfering, evaporation, short or over-issues, absorption by moisture, pricing method or simply putting the stock in the wrong bin or location.

Effects of Under- or Over-valuation of Stock

The following three examples explain the outcome if the closing stock valuation is incorrect.

(a) Correct Stock Values

	£	£
Sales		10,000
Opening stock	500	
Purchases	6,500	
	<u>7,000</u>	
Closing stock	<u>700</u>	<u>6,300</u>
Gross profit		3,700

(b) Under-valuation

	£	£
Sales		10,000
Opening stock	500	
Purchases	6,500	
	<u>7,000</u>	
Closing stock	<u>650</u>	<u>6,350</u>
Gross profit		3,650

(c) Over-valuation

	£	£
Sales		10,000
Opening stock	500	
Purchases	6,500	
	<u>7,000</u>	
Closing stock	<u>750</u>	<u>6,250</u>
Gross profit		3,750

Notice the difference in the gross profit. These models show how important it is to get as accurate a stock valuation as possible. Stock adjustments are one of the main ways of “window dressing” a set of accounts, as we will see in a later study unit.

D. DEPRECIATION

Depreciation is a **reduction in the value of an asset over a period of time**. Fixed assets are those assets of a material value that are held for use in the business and not for resale or conversion into cash. With the exception of land, fixed assets do not last for ever and therefore have a limited number of years of useful life. In fact, even some land may have its usefulness exhausted after a number of years – examples include quarries, gravel pits and mines, but here it is possible that when one useful life is depleted, another useful life can be created. For example, an old gravel pit can be filled with water and used for water sports.

Usually there is no one cause that contributes to the reduction in value of an asset; it is more often a combination of factors. Externally there may be technological change and advancements causing obsolescence to existing assets, whilst internally there are inherent causes such as wear and tear in a factory environment.

Depreciation cannot really be determined accurately until the asset is disposed of. At that time the difference between the original cost and the disposal value can be matched. For accounting purposes it is unacceptable to await the time of disposal, mainly because the total reduction in value would fall

within one financial accounting period, whereas the reduction typically takes place over the whole of the period during which the asset is used.

Depreciation can be said to be that part of the cost of the fixed asset which is consumed during its period of use by the firm. Depreciation is an expense and is treated in the same way as other expenses such as wages, electricity, rent, etc. However, the **most significant underlying concept** is that, unlike other charges in the profit and loss account, the charge for depreciation **does not entail actual expenditure**.

Once the initial capital outlay has been made, no further amount is expended, although the firm is suffering a loss by reason of the diminution of the value of the asset which is retained in the business for the sole purpose of earning profit. This brings us back to the earlier rule that capital expenditure must **not** be mixed with revenue expenditure.

Accounting for Depreciation

The accounting entry is created by charging the relevant account, e.g. plant and machinery would be charged in the manufacturing account unless there were no manufacturing account, in which case it would be charged in the profit and loss account. For delivery vehicles or salesmen's cars the charge would be shown in the distribution section of the profit and loss account.

If we choose a non-manufacturing firm as an example, then the entry in the profit and loss account will be:

	£	£
Gross profit		29,250
Distribution expenses:		
Depreciation motor vehicles	1,000	
Administration expenses:		
Depreciation fixtures and fittings	<u>2,000</u>	<u>3,000</u>
		26,250

Balance Sheet Disclosure

The following extract from a balance sheet shows how the asset and its related depreciation provision must be shown (these details may appear in notes to the final accounts):

	£	£
Fixed assets		
Fixtures & fittings	9,000	
less Depreciation provision	<u>2,000</u>	7,000
Motor vehicles	11,000	
less Depreciation provision	<u>1,000</u>	<u>10,000</u>

Remember the following two points:

- We must charge the accounts and at the same time create the provision as a credit balance.
- When it comes to the balance sheet, we match the asset and its relative provision.

Revaluation of Fixed Assets

Where fixed assets are thought to have permanently increased or decreased in value, they may be included in the accounts at the revalued amounts. The depreciation charge is then calculated on the revalued amount.

SSAP 12: Accounting for Depreciation

This section gives a summary of SSAP 12, which is the governing standard for depreciation in the published accounts of companies.

Depreciation is defined as the measure of the wearing out, consumption or other loss of value of a fixed asset whether arising from use, effluxion of time or obsolescence through technology and market changes.

Depreciation should be allocated to the accounting period so as to charge a fair proportion to each accounting period during the expected useful life of the asset.

(a) Cost of an Asset

The **Companies Act 1985** states that the cost of an asset carried at historical cost comprises purchase or production cost.

The **purchase price** is what is paid plus any expenses incidental to the acquisition, e.g. transport costs, customs duties, etc. **Production costs** include raw materials, consumables and direct production costs.

(b) Residual Value

This is the value which the firm could expect to recover at the end of the asset's useful life. It is a subjective matter and if there is any doubt then it should be treated as nil.

(c) Useful Life of an Asset

This is:

- Dependent upon the extent of use.
- Governed by extraction or consumption.
- Reduced by obsolescence or wear and tear.
- Predetermined as in leaseholds.

This assessment is one of the greatest problems since it depends upon the extent and pattern of future use. It can be described as the period over which the present owner will derive economic benefit from its use.

The assessment of depreciation considers three factors:

- The carrying amount of the assets, whether at cost or valuation
- The expected useful economic life
- The residual value

The useful economic life should be reviewed regularly and, when necessary, revised. Such a review should normally be undertaken every five years and more frequently where circumstances warrant it.

(d) Methods of Depreciation

The SSAP does not lay down any specific methods but states that “there is a range of acceptable methods and management should choose the most appropriate to the asset and its use in the business”.

It is not appropriate to omit a charge for depreciation. **Freehold land is not normally depreciated** unless it is subject to depletion. However, the value of land may be adversely affected by considerations such as the desirability of its location, either socially or in relation to available sources of materials, labour, or sales and in such circumstances should be written down. All buildings have a finite life and should therefore be written down taking into consideration their useful economic life.

(e) Disclosures

The accounts should disclose the following information regarding each **major class** of depreciable asset:

- The method used
- The useful economic life or depreciation method used
- The total depreciation charged for the period

(f) Permanent Diminution in Value

If at any time there is a permanent diminution and the net book value (residual value) is considered not to be recoverable in full (obsolescence, or a fall in demand for a product) it should be **written down immediately** to the estimated recoverable amount. That recoverable amount should then be written off over the remaining useful economic life of the asset.

(g) Changes in the Method of Depreciation

Changes should only be undertaken if the new method gives a fairer presentation of the results and financial position.

(h) Scope of the Standard

The standard applies to all fixed assets other than:

- Investment properties
- Goodwill
- Development costs
- Investments

E. METHODS OF PROVIDING FOR DEPRECIATION

Straight-line Method

The charge is calculated by taking the cost and deducting the residual value and dividing the result by the years of expected use. In some cases there may only be a scrap value if the asset has been used extensively in the business or if it is of a high-tech nature.

Suppose a motor vehicle was bought on the first day of the financial year for £10,000, the disposal or trade-in price was £1,000 and the expected period of usage was four years. If the vehicle is to be written off on a straight-line basis (i.e. in equal amounts each year), then:

$$£10,000 - £1,000 = £9,000 \div 4 = \text{a charge of } £2,250 \text{ per annum}$$

The charge per annum is often expressed as a percentage of cost less residual value.

This is a very common method. It has the benefits that it is simple, effective and produces a uniform charge which affords better comparative costs. The straight-line method is ideal for assets such as leases, copyrights, etc. although it is also commonly used for plant and machinery and motor vehicles.

The argument against the method is that an equal amount is charged each year, even though maintenance charges may be low in the early years of the asset's use and rise in the later years.

Reducing Balance Method

This is also sometimes known as the **fixed percentage method** because a percentage is determined and applied each year to the **reducing balance** of the capital value.

Say we have an asset worth £12,000 with residual value of £2,000 and choose a rate of 50%. In Year 1 the charge will be £5,000, but in the following year the charge will be calculated on the reduced capital value of £5,000 and so would be £2,500 – the year after, the charge would be £1,250 and so on. Those who favour this method claim that the high charge in the earlier years offsets lower maintenance costs, and in the later years the higher maintenance costs are offset by the reduced depreciation charge.

You should also note that this method **never** writes off the asset completely.

Sum of the Years Digits

This is not as popular a method in Britain as it is in the USA. It follows the same principle as the reducing balance method but it is easier to use because there is no difficult computation when assessing the amount to be charged.

Again, if we buy an asset for £10,000 with a life of four years and the residual value is estimated to be £2,000, we would write down the asset over four years by weighting earlier years' charges higher than later years. Therefore over four years the charge in year 1 would be assigned a value of 4, in year 2 a value of 3, in year 3 a value of 2, and year 4 a value of 1, as follows:

$$4 + 3 + 2 + 1 = 10 \text{ or } 4(4 + 1) \div 2 = 10$$

For example:

Year 1:	4/10ths × £8,000	3,200
Year 2:	3/10ths × £8,000	2,400
Year 3:	2/10ths × £8,000	1,600
Year 4:	1/10ths × £8,000	<u>800</u>
		<u>£8,000 total</u>

QUESTIONS FOR PRACTICE

1. J Limited purchased the following assets on 1 January: buildings at £150,000, plant and machinery at £75,000, fixtures and fittings at £50,000 and motor vehicles at £35,000. The company's financial year ends on 31 December.

Calculate the depreciation using the straight-line method.

The percentage rates of depreciation to be applied are: buildings 2% pa, plant and machinery 25% pa, fixtures and fittings 12½% pa and motor vehicles 25% pa.

It is assumed that the residual values will be as follows: buildings nil, plant £2,000, fixtures £8,000 and motor vehicles £5,000.

2. Calculate the depreciation on the following assets, showing exactly how much will be charged annually in respect of each. Use the sum of the years digits methods.
- (a) Plant costing £150,000 with a residual value of £10,000 and an expected useful life of 5 years.
 - (b) Fixtures and fittings costing £25,000 with a residual value of £1,000 and an expected life of 15 years.
 - (c) Motor vehicles costing £45,000 with a residual value of £5,000 and an expected life of 4 years.
-

ANSWERS TO QUESTIONS FOR PRACTICE

1. *Manufacturing and Trading Account*

	£	£
Opening stocks raw materials		20,590
Purchases	90,590	
<i>less</i> Carriage inwards	<u>4,920</u>	
	95,510	
Returns outwards	<u>2,920</u>	92,590
		113,180
Closing stocks raw materials		<u>19,420</u>
		93,760
Direct wages	14,209	
Direct expenses	<u>9,110</u>	23,319
Prime cost		117,079
Indirect wages	10,240	
Indirect expenses	9,240	
Factory insurance	<u>2,240</u>	21,720
		138,799
<i>add</i> WIP 1 Jan		<u>2,409</u>
		141,208
<i>less</i> WIP 31 Dec		<u>5,219</u>
Cost of production		<u>135,989</u>
Sales	150,500	
<i>less</i> Returns	<u>2,718</u>	147,782
Opening stocks	18,240	
Cost of production	<u>135,989</u>	
	154,229	
Closing stocks (finished goods)	<u>24,000</u>	130,229
Gross trading profit		<u>17,553</u>

2.

Asset	Cost £	Residual Value £	Depreciate on £	Depreciation £
Buildings	150,000	Nil	150,000	3,000
Plant	75,000	2,000	73,000	18,250
Fixtures & fittings	50,000	8,000	42,000	5,250
Motor vehicle	35,000	5,000	30,000	7,500

3.

Year	Plant £	Year	Fixtures and Fittings £	Year	Motor Vehicle £
1	46,666	1	3,000	1	16,000
2	37,333	2	2,800	2	12,000
3	27,999	3	2,600	3	8,000
4	18,666	4	2,400	4	4,000
5	9,336	5	2,200		40,000
	<u>140,000</u>	6	2,000		
		7	1,800		
		8	1,600		
		9	1,400		
		10	1,200		
		11	1,000		
		12	800		
		13	600		
		14	400		
		15	200		
			<u>24,000</u>		

Study Unit 7

Further Accounting Standards and Concepts

<i>Contents</i>	<i>Page</i>
Introduction	145
A. SSAP 3: Earnings Per Share	145
B. SSAP 4: Accounting for Government Grants	145
C. SSAP 5: Accounting for Value Added Tax	146
D. SSAP 8: The Treatment of Taxation	146
E. SSAP 13: Accounting for Research and Development Expenditure	146
Types of R & D Expenditure	147
Accounting Treatment	147
Disclosure	148
F. SSAP 17: Accounting for Post Balance Sheet Events	148
Adjusting Events	148
Non-adjusting Events	149
Standard Accounting Practice	149
Window Dressing	150
G. SSAP 18: Accounting for Contingencies	150
Standard Accounting Practice	151
H. FRS 4: Capital Instruments	151

(Continued over)

I.	FRS 10: Goodwill and Intangible Assets	152
	How does Goodwill Arise?	152
	The Accounting Treatment Required by FRS 10	153
	Amortisation Treatments Required by FRS 10	154
J.	Accounting for Inflation	155
	Limitations of Historical Cost Reporting	155
	Current Cost Accounting (CCA)	156
	SSAP 16	159
	Exposure Draft (ED)51	160
	Financial and Operating Capital Maintenance Concepts	160

INTRODUCTION

In this section we will look at other Statements of Standard Accounting Practice (SSAPs) and Financial Reporting Standards (FRSs) that you should be aware of, and outline how they affect company accounts. Remember that accounting standards do not themselves have the force of law, although the main recommendations of some, such as SSAP 2, have been included in the **Companies Act**. They do, however, have the backing of the major accounting bodies and professional accountants are expected to adhere to their provisions.

In addition, we review here the issue of accounting for inflation which, whilst not currently the subject of an accounting standard, remains an issue of importance.

A. SSAP 3: EARNINGS PER SHARE

SSAP 3 requires earnings per share to be shown on the face of a company profit and loss account. FRS 3, which amends SSAP 3, defines earnings per share as:

“the profit in pence attributable to each equity share, based on the profit (or in the case of a group the consolidated profit) of the period after tax, minority interests and extraordinary items and after deducting preference dividends and other appropriations in respect of preference shares, divided by the number of equity shares in issue and ranking for dividend in respect of the period.”

An example of the profit and loss account presentation could be as follows:

Profit and Loss Account (extract)

	Year 2	Year 1
Basic earnings per ordinary share of 25p	16.25p	13.0p
Fully-diluted earnings per ordinary share of 25p	12.85p	

Notes to Accounts (extract)

The basic earnings per share are calculated on earnings of £1,300,000 (Yr 1 £1,040,000) and eight million ordinary shares in issue throughout the two years ended 31 December Yr 2.

The fully-diluted earnings per share are based on adjusted earnings of £1,430,000 after adding back interest net of corporation tax on the 8% convertible loan stock. The maximum number of shares into which this stock becomes convertible on 31 December Yr 4 is 3.125 million, making a total of 11.125 million shares issued and issuable.

B. SSAP 4: ACCOUNTING FOR GOVERNMENT GRANTS

Government grants should be recognised in the profit and loss account so as to match them with the expenditure towards which they are intended to contribute. Grants relating to leased assets in the accounts of lessors should be accounted for in accordance with the requirements of SSAP 21: *Accounting for Leases and Hire-Purchase Contracts*.

The following information should be disclosed in the financial statements:

- The accounting policy adopted for government grants.
- The effects of government grants on the results for the period and/or the financial position of the enterprise.
- Where the results of the period are affected materially by the receipt of forms of government assistance other than grants, the nature of the assistance and, to the extent that the effects on the financial statements can be measured, an estimate of those effects.

C. SSAP 5: ACCOUNTING FOR VALUE ADDED TAX

Most businesses act as **collectors** of the tax and it thus follows that VAT is **not to be included in the revenue statement**. The tax collected from customers is credited to the Customs and Excise account. The tax paid is debited to this account, the balance representing the liability for VAT or (if the balance is a debit) it indicates the recoverable tax. It is not considered necessary to show the debtor or creditor balance as a separate item in the balance sheet.

D. SSAP 8: THE TREATMENT OF TAXATION

The full title of this standard is “The Treatment of Taxation under the Imputation System in the Accounts of Limited Companies”. Companies have to pay corporation tax on their profits. The following information is required to be disclosed:

(a) Profit and Loss Account

The tax liability estimated for the current year and the basis of the charge, together with particulars of any special circumstances affecting the liability for the financial year or for succeeding years.

(b) Balance Sheet

The amount of any provisions for taxation other than deferred tax.

The disclosure requirements for **advance corporation tax (ACT)** (this is payable on dividends) are:

- Dividends paid or proposed should be shown in the profit and loss account at their **net** cost to the company.
- Any irrecoverable ACT **written off** should be shown in the profit and loss account.
- ACT **already paid** may be deducted from current taxation.
- ACT on **proposed dividends** should be shown as a creditor falling due within one year, and the amount recoverable shown as a deferred asset.

E. SSAP 13: ACCOUNTING FOR RESEARCH AND DEVELOPMENT EXPENDITURE

The accounting policies to be followed in respect of research and development expenditure must have regard to the fundamental accounting concepts, including the **accruals concept** by which revenue and costs are accrued, matched and dealt with in the period to which they relate, and the **prudence concept** by which revenue and profits are not anticipated but are recognised only when realised in the

form either of cash or of other assets, the ultimate cash realisation of which can be established with reasonable certainty. As a result of the prudence concept, expenditure should be written off in the period in which it arises unless its relationship to the revenue of a future period can be established with reasonable certainty.

Types of R & D Expenditure

The term 'research and development' is used to cover a wide range of activities. Classification of the related expenditure is often dependent on the type of business and its organisation. However, it is generally possible to recognise three broad categories of activity, which are defined in SSAP 13 as follows:

(a) Pure (or Basic) Research

Experimental or theoretical work undertaken primarily to acquire new scientific or technical knowledge for its own sake, rather than directed towards any specific aim or application.

(b) Applied Research

Original or critical investigation undertaken in order to gain new scientific or technical knowledge and directed towards a specific aim or objective.

(c) Development

Use of scientific or technical knowledge in order to produce new or substantially improved materials, devices, products or services, to install new processes or systems prior to the commencement of commercial production or commercial applications, or to improve substantially those already produced or installed.

Accounting Treatment

- (a) The cost of fixed assets acquired or constructed in order to provide facilities for research and development activities over a number of accounting periods should be capitalised and written off over their useful life through the profit and loss account.

Depreciation written off in this way should be treated as part of research and development expenditure.

- (b) Expenditure on **pure and applied research** (other than that referred to above) should be **written off in the year of expenditure** through the profit and loss account.

The argument for doing so is that this form of expenditure can be regarded as part of a continuing operation, required to maintain a company's business and its competitive position; and as no particular accounting period will benefit, it is appropriate to write off such expenditure when incurred.

- (c) **Development expenditure** should be **written off in the year of expenditure except in the following circumstances**; it may be **deferred** to future periods when:

- There is a clearly defined project, and
- The related expenditure is separately identifiable, and
- The outcome of such a project has been assessed with reasonable certainty as to:
 - (i) Its technical feasibility, and

- (ii) Its ultimate commercial viability considered in the light of factors such as likely market conditions (including competing products), public opinion, consumer and environmental legislation, and
- The aggregate of the deferred costs, any further development costs, and related production, selling and administration costs is reasonably expected to be exceeded by related future sales or other ventures, and
- Adequate resources exist, or are reasonably expected to be available, to enable the project to be completed and to provide any consequential increases in working capital.

In the circumstances above, development expenditure may be deferred to the extent that its **recovery can be reasonably regarded as assured**.

Deferred development expenditure for each project should be reviewed at the end of each accounting period and where the circumstances which have justified the deferral of the expenditure no longer apply, or are considered doubtful, the expenditure, to the extent to which it is considered to be irrecoverable, should be written off immediately, project by project.

Disclosure

- (a) The accounting policy on research and development expenditure should be stated, and explained in the notes to the financial accounts.
- (b) The standard requires the amount of R & D costs to be charged to P & L (some enterprises have exemption from this). What is needed is disclosure analysed between the current year's expenditure and amounts amortised from deferred expenditure. The standard emphasises that the amounts disclosed should include any amortisation of fixed assets used in R & D activity

F. SSAP 17: ACCOUNTING FOR POST BALANCE SHEET EVENTS

SSAP 17 concerns events which arise after the balance sheet date but for which evidence exists at the balance sheet date. In the interests of accurate reporting, it is essential that these be reflected in the financial statements. If a proper understanding of the financial position cannot be obtained without some disclosure, then notes must be provided to indicate those conditions existing at the balance sheet date.

A post balance sheet event is **any event which occurs between the balance sheet date and the date on which the financial statements are approved by the board of directors**. There are two main categories of post balance sheet events.

Adjusting Events

These are events which provide **additional evidence** relating to **conditions existing at the balance sheet date**. They require changes in amounts to be included in the financial statements.

Examples are:

- The subsequent determination of the purchase price or the proceeds of sale of fixed assets purchased or sold before the year end.
- A valuation which provides diminution in the value of property.

- Guidance concerning the net realisable value of stocks, e.g. the proceeds of sales after the balance sheet date, or the receipt or evidence that the previous estimate of accrued profit on a long-term contract was materially inaccurate.
- The negotiation of amounts owing by debtors, or the insolvency of a debtor.
- Receipt of information regarding rates of taxation.
- Amounts received or receivable in respect of insurance claims which are in the course of negotiation at the balance sheet date.
- Discovery of errors or frauds which show that the financial statements were incorrect.

Non-adjusting Events

These are events which arise after the balance sheet date and concern **conditions which did not exist** at the time. As a result they do not involve changes in amounts in the financial statements. On the other hand, they may be of such materiality that their disclosure is required by way of notes, to ensure that financial statements are not misleading.

Examples are:

- Mergers and acquisitions
- Issues of shares and debentures
- Purchases or sales of fixed assets and other investments
- Losses of fixed assets or stocks as a result of catastrophe such as fire or flood
- Decline in the value of property and investment held as fixed assets, if it can be demonstrated that the decline occurred after the year end
- Government action, such as nationalisation
- Strikes and other labour disputes

Standard Accounting Practice

- (a) Financial statements should be prepared on the basis of conditions existing at the balance sheet date.
- (b) A **material** post balance sheet event even requires changes in the amounts to be included in the financial statements, where it is either an adjusting event, or it indicates that application of a going concern concept to the whole or a material part of the company is not appropriate.
- (c) A material post balance sheet event should be disclosed where:
 - It is a non-adjusting event of such materiality that its non-disclosure would affect the ability of the users of financial statements to reach a proper understanding of the financial position; or
 - It is the reversal or maturity after the year end of a transaction entered into before the year end, the substance of which was primarily to alter the appearance of the company's balance sheet.
- (d) The disclosure should state, in note form, the nature of the event and an estimate of the financial effect, or a statement that it is not practicable to make such an estimate.

- (e) The estimate of the financial effect should be disclosed before taking account of taxation, and the taxation implications should be explained, where necessary, for a proper understanding of the financial position.
- (f) The date on which the financial statements are approved by the board of directors should be disclosed in the financial statements.

Window Dressing

The term 'window dressing' refers to the practice of manipulating a balance sheet so as to show a state of affairs more favourable than that which would be shown by a mere statement of the balances as they stand in the books. Over the years window dressing became a rather uncertain term because it encompassed two rather different situations:

- (a) The fraudulent falsification of accounts in order to show conditions existing at the balance sheet date in a more favourable light than should have honestly been the case.
- (b) A perfectly lawful exercise carried out at the year end which tended to make the situation, viewed from the standpoint of the user of the financial statements, appear different from the real state of affairs.

The fraudulent falsification of accounts is clearly unacceptable and unlawful and is not the subject for an accounting standard. The meaning in (b) above, however, is dealt with in SSAP 17, where the term 'window dressing' is taken to mean the lawful arrangement of affairs over the year end to make things look different from the way they usually are at the year end.

The method in (b) above (i.e. adoption of special policy at end of accounting period) can be put into effect in any of the following ways:

- **Special efforts to collect book debts**

A special effort to collect book debts just prior to the date of the published accounts, in order to show a substantial balance of cash at the bank, is a form of window dressing. If the effort is successful and easy collection of the debts proves to be possible, the company can claim to be in as liquid a position as is shown by the balance sheet.

- **Borrowing**

An increasing bank overdraft tends to create an unfavourable impression of the prospects of a company. By paying off part of the bank overdraft just before the annual accounts are prepared, a growing overdraft may be shown at a reasonable and steady level, even if the position of the company will make it necessary to increase it again early in the new financial year.

Special loans may be raised to increase the ratio of liquid assets to floating liabilities at the time the balance sheet is prepared.

G. SSAP 18: ACCOUNTING FOR CONTINGENCIES

A contingency is a condition which exists at the balance sheet date where the outcome will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events. This does not include uncertainties connected with accounting estimates - the lives of fixed assets, for example.

Contingencies existing at the balance sheet date should be taken into consideration when preparing financial statements. Estimates of the outcome and financial effect of contingencies should be made

by the board of directors, based on the information available up to the date on which the financial statements were approved. This will include a review of events occurring after the balance sheet date. (An example would be a substantial legal claim against a company - the progress of the claim would be considered, and the opinion of legal advisors.)

Standard Accounting Practice

- (a) A material contingent **loss** should be accrued in the financial statements where it is probable that a future event will confirm a loss which can be estimated with reasonable accuracy at the date on which the financial statements are approved by the board of directors.
- (b) A contingent **gain** should not be accrued in financial statements. The only occasion on which a material contingent gain should be disclosed is when it is likely that such a gain will be realised.
- (c) The information to be disclosed is:
 - The nature of the contingency.
 - The uncertainties which are expected to affect the ultimate outcome.
 - A prudent estimate of the financial effect, made at the date on which financial statements are approved by the board of directors, or a statement that it is not practicable to make such an estimate.

(Where an estimate is involved, the amount disclosed should be the **potential** financial effect. In the case of a contingent loss, that should be reduced by any amounts accrued and by the amount of any components, where the possibility of loss is remote.)

- (d) The estimate of the financial effect should be disclosed before taking account of taxation, and the taxation implications of the contingency crystallising should be explained, where necessary for a proper understanding of the financial position.
- (e) Where several items are involved, a number of such contingencies may be conveniently grouped.

H. FRS 4: CAPITAL INSTRUMENTS

We will look briefly at this FRS, partly to familiarise you with other forms of company financing than those we have discussed earlier.

During the 1980s there was a proliferation of financial instruments. There were widely differing views as to how these instruments should be treated in the financial statements. This resulted in the same capital instrument being accounted for differently by different companies.

Complex financial instruments frequently have some characteristics of debt and some of equity. Therefore it can be difficult to classify them within the balance sheet.

Examples of capital instruments include:

- **Deep discount bonds** are issued at a substantial discount to the value at which they will be redeemed. They carry a low interest charge. In some cases no interest is payable at all and these are known as 'zero coupon bonds'.
- **Convertible capital bonds** are debts issued by a special-purpose subsidiary incorporated outside the UK. Interest is payable on the debt, and prior to maturity the debt may be

exchanged for shares of the subsidiary which, at the option of the bondholder, are either immediately redeemed or immediately exchanged for shares in the parent company.

- **Convertible debt with enhanced interest** contains an undertaking that the interest will be increased at a date in the future. At the time the debt is issued, it is uncertain whether it will be converted before the enhanced interest is payable.
- **Convertible loan stock** is issued bearing a low interest rate, but carries a high premium on redemption. The holder of the loan stock has the right to convert his stock to ordinary shares on a fixed pro-rata basis. Thus the issuing company obtains the loan capital at a low interest rate and, on the assumption that the share price will rise, does not have a problem in redeeming the loan stock, as the holder will convert to ordinary shares.
- **Stepped interest bonds** carry a rate of interest which increases progressively over the period of issue.

Instruments such as convertible loan stock and deep discount bonds create problems in addition to those of classification in the balance sheet. If companies only account for the interest paid, the profit and loss account charge does not reflect the true cost of servicing the finance. This is because the true cost of the finance is made up of the interest payable **and** the premium on redemption.

The problem of capital instruments became more urgent as companies sought to manipulate their financial statements by using these instruments. For example, some companies treated debt as equity in order to lower their gearing ratio (see later study unit). FRS 4 also forces companies to recognise finance costs and ensures they charge the interest over the life of the instrument rather than when the issue is redeemed.

The aim of FRS 4 is to ensure that financial statements provide a clear and appropriate distinction in the balance sheet between the various kinds of financial instruments, and that their respective costs are properly reflected in the profit and loss account. Reporting entities should also provide relevant information concerning the nature and amount of their sources of finance. In practice only companies with complex capital structures are affected by FRS 4.

I. FRS 10: GOODWILL AND INTANGIBLE ASSETS

This Standard replaced SSAP 22 with an effective date for accounting periods ending on or after 23 December 1998.

The definition of goodwill is as follows:

“The difference between the cost of an acquired entity and the aggregate of the fair value of the entity’s identifiable assets and liabilities”.

How does Goodwill Arise?

Where the cost of an acquisition exceeds the fair values of the net assets acquired, positive purchased goodwill will arise, as the following example illustrates:

	£000	£000
Cost of the acquisition		300
Fair value of assets acquired:		
Fixed assets	150	
Stocks	40	
Other monetary items	10	200
Positive goodwill		100

Purchased positive goodwill may arise due to the following factors: the location or reputation of the acquired business; its order book; the skills of its workforce; or similar reasons with which you should be familiar from your foundation studies.

Purchased negative goodwill may also arise when the cost of an acquisition is less than the fair value of the net assets acquired. This is likely to constitute a “bargain purchase” and is likely to arise in relation to the fair values of non-monetary assets such as fixed assets and stocks. After all, a purchaser is unlikely to pay less than the fair values of any monetary items acquired!

The following example illustrates the calculation of purchased negative goodwill:

	£000	£000
Cost of the acquisition		160
Fair value of assets acquired:		
Fixed assets	160	
Stocks	40	
Other monetary items	10	210
Negative goodwill		50

The concept of negative goodwill may seem rather strange to you. It could arise if a business has acquired a bad reputation for its standards of service, or if its products are of consistently poor quality. A purchaser will therefore have a problem in reversing the factors leading to the negative goodwill, before the benefits from the investment are seen.

Non-purchased goodwill is that which an entity generates on its own account. This is not to be recognised in the entity’s financial statements.

The Accounting Treatment Required by FRS 10

Positive purchased goodwill is to be capitalised and amortised in the profit and loss account over its useful economic life.

Purchased intangible assets may be capitalised provided they are capable of being reliably measured. The usual approach to the assessment of the value of a purchased intangible will be to assess the fair value by reference to replacement cost or market value. Therefore, it is expected that there is an active market in which the items are traded. FRS 10 does make the point that whilst purchased intangibles may be capitalised, such an approach must not create or increase purchased negative goodwill.

Non-purchased goodwill is not to be recognised.

Non-purchased intangible assets may be capitalised provided they have a readily ascertainable market value. Items such as franchises and quotas are specifically mentioned as examples under FRS 10. Unique items such as brand names are unlikely to have a readily ascertainable market value and are thus not examples of purchased intangible assets which may be capitalised.

Amortisation Treatments Required by FRS 10

(a) Where the life of an item is considered to be limited

Amortisation is carried out on a systematic basis over the useful economic life of the item. There is a rebuttable presumption in FRS 10 that useful economic life is 20 years. As you might expect, the assessment of the useful economic life is fraught with difficulty and some items could have indefinite lives or lives which are less than 20 years. (For example, a purchased franchise agreement may only legally apply for a defined contractual period, in which case that period would be used for amortisation.)

In any event, an entity must be able to justify its choice of useful economic life (auditors will have great difficulty here) and it is possible that the Financial Reporting Review Panel may be called to adjudicate where useful economic life is considered to be excessive or inappropriate.

An impairment review will be required for items whose life is considered limited only in the year after acquisition; adjustments may then be required.

Clearly, a prudent assessment of useful economic life is needed.

(b) Where the life is considered to be indefinite

In this case, goodwill is not amortised at all. Note that this constitutes a departure from the **Companies Act** rules on depreciation and therefore a “true and fair override” disclosure will be needed. Where goodwill is considered to have an indefinite life, an annual impairment review is required leading to possible adjustments.

(c) Where negative goodwill exists

As positive goodwill is charged against profits when it is amortised, negative goodwill is credited to profits. The question is, how can this be done prudently?

As explained earlier, negative goodwill is likely to arise in relation to non-monetary assets such as fixed assets and stocks. The approach which FRS 10 requires is that negative goodwill is credited to the profit and loss account in the periods when the non-monetary items are realised (usually either by depreciation in the case of fixed assets or sale in the case of stocks).

An example will explain this. Referring back to the one at the start of this section, when negative goodwill of £50,000 arose in relation to the purchase of stocks of £40,000 and fixed assets of £160,000, the total value of the non-monetary assets acquired was thus £200,000. If we assume that the stock was sold in the year following acquisition and that the fixed assets concerned are depreciated over a five-year period starting in the year following acquisition, the initial credit to the profit and loss account is as follows.

Realisation of stock £40,000 plus depreciation of $\frac{£160,000}{5} = £32,000$ means that a total value of £72,000 of non-monetary assets is treated as a realised item. This equals 36% ($\frac{£72,000}{£200,000}$) of the total of the non-monetary items acquired. Therefore the profit and loss account will be credited with 36% of the negative goodwill i.e. £18,000 (£50,000 @ 36%).

The balance of negative goodwill, £32,000 will be shown on the balance sheet as a “negative asset” underneath any positive purchased goodwill.

The remaining negative goodwill will be credited to the profit and loss account over the remaining useful life of the fixed assets, i.e. 4 years at £8,000 per annum.

J. ACCOUNTING FOR INFLATION

In recent years accountants and other interested parties have become increasingly aware of the problem posed by the impact of inflation on financial accounts. The problem can be analysed into two main factors:

- Maintaining intact in **real** terms the value of capital invested.
- Showing a true and fair view of trading results when certain charges, notably depreciation, are based on historical cost.

After many years of debate, the Accounting Standards Committee issued SSAP 16 on Current Cost Accounting in 1980. This has subsequently been abandoned, so companies can produce final published accounts without supplementary current cost statements. However, it will be useful here to briefly review some of the main points of what remains an issue in accounting.

Limitations of Historical Cost Reporting

By this point in your studies, you will have no doubt become aware of the limitations of cost reporting using the historical accounting convention. Those limitations include:

(a) Unrealistic Fixed Asset Values

The values of some assets, particularly land and property, may increase substantially over the years, especially in times of high inflation. This makes comparisons between organisations using ratios such as return on capital employed very dangerous. You must ensure that you are comparing like with like. Also, it is not sensible for a company to undervalue its assets.

(b) Invalid Comparisons over Time

Because of the changing value of money a profit of £50,000 achieved this year is not worth the same as £50,000 profit earned five years ago. Again, there is the problem of comparing like with like.

(c) Inadequate Depreciation

There are two reasons for this:

- Sufficient sums may not be provided to replace an asset which has increased in value.
- The annual depreciation charge may not be a true indicator of the economic value of the asset used in that year.

(d) Holding Gains Not Disclosed

Assume that we buy an article on 1 January for £100 and sell it on 31 March for £200. Historical cost accounting tells us that a profit of £100 has been made and we may be tempted to withdraw £100 and spend it on private needs. However, if at 31 March it costs us £150 to replace the article sold, we cannot now do so because we have only £100 left. The true position at 31 March when the article was sold was a holding gain of £50 and an operating profit of only £50.

(e) Gains on Liabilities and Losses on Assets Not Shown

This means that we will pay creditors in money worth less than when we bought goods but, similarly, debtors will pay us in money worth less than when we sold goods.

You should be able to appreciate that the effect of the above problems will lead to an overstatement of what might be considered to be the correct profit figure. This may lead to companies being pressed by shareholders to declare higher dividends than is prudent and almost certainly will lead to higher taxation!

Current Cost Accounting (CCA)

The purpose of preparing current cost accounts is to **provide more useful information than that available from purely historical cost accounts**, for the guidance of the management and shareholders of a business and others in matters of financial viability, return on investment, pricing policy, cost control and gearing.

CCA is based on the concept of capital represented by the net operating assets of a business, i.e. fixed assets, stock and monetary working capital. These are no different from a historical cost approach but in current cost accounts the fixed assets and stock are expressed at current cost. The net operating assets represent in accounting terms the operating capability of the business and will be financed by a mixture of shareholder's capital and borrowings. Any changes to input prices of goods and services affect the operating capability of a business and the current cost accounting approach is designed to reflect this.

(a) Application of CCA

The CCA objectives were achieved by determining the current cost profits for an accounting period and presenting asset values in the balance sheet based on current price levels. This then provided for users of the financial statements a realistic view of the assets employed in the business, and enabled the relationship between current cost profit and net assets employed to be established.

The preparation of current cost accounts did not affect the use of existing techniques for interpretation (see next unit). The same tools for analysis could be adopted, as appropriate, for both current and historical cost figures. The results, however, should be more meaningful on a current cost basis when making comparisons between entities in respect of gearing, asset cover, dividend cover, return on capital employed, etc.

CCA was not a system of accounting for general inflation and equally did not show the economic value of a business. This is because it did not measure changes in the general value of money, or give any indication of the market value of the equity.

(b) CCA Technique and Methods

- ***Current Cost Operating Profit***

This is the surplus calculated before taxation and interest on net borrowing arising from ordinary activities in a financial period, after allowing for the impact of price changes on funds needed to maintain the operating capability of the business.

Trading profit before interest calculated on a historical cost basis had to be adjusted with regard to three main aspects to arrive at current cost operating profit. The main adjustments were in respect of depreciation, cost of sales, and monetary working capital.

- **Depreciation Adjustment**

This was the difference, caused by price changes, between the value to the business of the proportion of fixed assets consumed during a period, and the amount of depreciation charged for that period on a historical cost basis.

The total depreciation charged in a financial period on a current cost basis represented the value to the business of that proportion of fixed assets consumed in generating revenue for that period.

- **Cost of Sales Adjustment (COSA)**

This was the difference, caused by price changes, between the value to the business of stock consumed during an accounting period and the cost of the stock charged on a historical cost basis.

The total stock value charged in a financial period on a current cost basis represented the value to the business of the stock consumed in generating revenue for that period.

- **Monetary Working Capital Adjustment (MWCA)**

The aggregate monetary value arising from day-to-day operating activities as distinct from transactions of a capital nature, i.e.:

Trade debtors, prepayments and trade bills receivable

plus

Stock not subject to Cost of Sales Adjustment (COSA)

less

Trade creditors, accruals and trade bills payable

When credit sales are made, funds are tied up in debtors, and conversely if input goods and services are obtained on credit, funds needed for working capital are less than they would have been if such inputs had to be paid for immediately. These aspects are an integral part of an enterprise's monetary working capital and had to be taken into account when determining the current cost profit.

The adjustment represented the additional (or reduced) finance needed on a current cost basis during a financial period as a result of changes in prices of goods and services used to generate revenue for that period.

(c) Gearing Adjustment

A gearing adjustment had to be made before arriving at the current cost profit attributable to shareholders, where a proportion of the net operating assets was financed by borrowing. The adjustment, where applicable, would normally be a credit (but could be a debit if prices fell) and was calculated by:

- Using average figures for the financial period to express net borrowing as a proportion of net operating assets; and
- Using this proportion to calculate the shareholders' portion of charges (or credits) made to allow for the impact of price changes on the net operating assets.

No gearing adjustment arose where a company was wholly financed by shareholders' capital.

It could be argued that, rather than applying the gearing adjustment only to realised holding gains etc., it could also (ignoring accruals and prudence) be applied to all holding gains no

matter whether realised or unrealised. The feeling behind this is that as the gearing adjustment ignores unrealised gains, the profit figure only partially reflects gains attributable to the shareholder involvement.

Remember that the net figure of the gearing adjustment and interest takes out the effect of outside interest in a business, to produce the current cost net profit attributable to shareholders. Gearing only applies where there is a net borrowing. Where there are net monetary assets, no gearing is used.

This idea can be challenged on the basis that if gains can be made from borrowing then losses can be made from having surplus monetary assets and, because of this, the current cost profit could be overstated.

(d) Indices and Valuation

There are basically two methods of effecting any adjustment to reflect price changes: the use of indices and revaluation. Much will depend on the industry, the enterprise, the class or category of asset involved, and on the circumstances. Whichever method is selected, it is important for it to be appropriate and consistent, taking one financial period with the next.

Where indices were to be used, reference was to be made to two HMSO publications:

- Price Index Numbers for Current Cost Accounting
- Current Cost Accounting – Guide to Price Indices for Overseas Countries

Indices would probably be appropriate for COSA and MWCA but for fixed assets and depreciation, revaluation could be more appropriate in some cases. If revaluation was to be used, the accountant or auditors had to seek the technical assistance of engineers and surveyors.

(e) Valuation of Assets

The profit figure and its significance depends on the concept of capital maintenance selected. The basic approach to current value accounting is that a business should only strike its operating profit after providing in full for the replacement cost of the assets used up in earning that profit. Unrealised holding gains should be deducted but reported separately.

The underlying values to be placed on the assets are defined as their value to the business. In all cases this will be net current replacement cost, or the recoverable amount if below the net current replacement cost. The recoverable amount may in turn be either the net realisable value or the amount recoverable from its further use in the business. The amount recoverable from an asset's further use is alternatively known as its economic value.

The underlying concept of "value to the business" has been expressed as a deprival value. In other words, **the amount of loss a business would suffer if it were deprived of the asset in question.** Should the business intend to continue to use the asset, then the deprival value would be its net replacement cost. On the other hand, if it intended to put the asset out of use then its deprival value would be either the net realisable value from sale or the cash flow benefits from continuing to use the asset.

Let's define these values further:

- Replacement cost – In the case of fixed assets, the replacement cost is the gross replacement cost less an appropriate provision for depreciation to reflect the amount of its life already used up.

- Net realisable value – This is the amount the asset could be sold for, after deducting any disposal costs.
- Economic value (or utility) – This represents what the asset will be worth to the company over the rest of its useful life.

SSAP 16

Whilst this standard is no longer applicable, we can briefly acknowledge the approach it took to the disclosure of information in published accounts on a CCA basis. SSAP 16 required current cost information to be shown as follows.

(a) Current Cost Profit and Loss Account

- Current cost operating profit
- Interest/income relating to net borrowing on which the gearing adjustment has been based
- The gearing adjustment (if applicable)
- Taxation
- Extraordinary items
- Current cost profit or loss (after tax) attributable to shareholders

A reconciliation was to be provided between current cost operating profit and the profit or loss before charging interest and taxation on the historical cost basis, giving respective amounts for the depreciation adjustment, COSA, MWCA (and, where appropriate, interest relating to monetary working capital), and any other material adjustments made to historical cost profits to determine current cost operating profit. COSA and MWCA could be combined.

(b) Current Cost Balance Sheet

This could be summarised when a full historical cost balance sheet was disclosed. The net operating assets and net borrowing were to be presented in their main elements by way of notes and supporting summaries of fixed asset accounts and movements on reserves.

The current cost balance sheet was to include a reserve in addition to those included in historical cost accounts. This was referred to as the current cost reserve and included, where appropriate:

- Unrealised revaluation surpluses on fixed assets, stock and investments.
- Realised amounts equal to the cumulative net total of current cost adjustments, i.e. depreciation adjustments (and any adjustment on disposal of fixed assets), COSA, MWCA, gearing adjustment.

(c) Current Cost Accounts Supporting Notes

The bases and methods adopted in preparing the current cost accounts were to be described, with particular reference to:

- The value to the business of fixed assets and the depreciation thereon
- The value to the business of stock and work in progress and the COSA
- MWCA
- The gearing adjustment

- The basis of translating foreign currencies and dealing with translation differences arising
- Other material adjustments to the historical cost information
- The corresponding amounts

(d) Earnings per Share

The current cost earnings per share based on the current cost profit attributable to equity shareholders before extraordinary items was to be shown for companies listed on the Stock Exchange.

Exposure Draft (ED)51

ED 51: Accounting for Fixed Assets and Revaluations (May 1990) proposed that if companies chose to revalue their fixed assets, then this must be followed through for **all** aspects of company reporting, i.e. determining a profit or loss on disposal, depreciation, permanent diminution of fixed assets etc. The revalued amount thus becomes a substitute for historic cost for all accounting purposes.

This went some way towards introducing a replacement to historic cost accounting. It suggested that revaluation of fixed assets should be permitted but not required, and brought in the controversial issue that, under historic cost accounting, fixed assets should **not** be revalued. This went against the previously held notion that revaluation was to be encouraged as an alternative valuation to the current cost accounting system under SSAP 16.

Where companies did opt for revaluation, then valuations were to be kept up-to-date. Depreciation, profit or loss on disposal of revalued assets, and the determination of whether there had been a permanent diminution in value would all be calculated with reference to the revalued amounts.

Financial and Operating Capital Maintenance Concepts

Operating capital can be expressed in a number of ways, although it is usual to express it as the **productive capacity of the company's assets** in terms of the volume of goods and services capable of being produced. The maintenance of operating capital may be best understood by looking at examples:

- A book trader buys and sells one publication only. He incurs no costs other than the cost of purchasing books and has no assets other than unsold books, which means that his operating capital consists entirely of unsold books.

Under the historical cost convention he will recognise a profit if the revenue from the sale of a book exceeds the cost he incurred when acquiring that book. Under the operating capital maintenance concept, he will recognise a profit only if the revenue exceeds the cost of buying **another** book to replace the one sold. The cost of this replacement is the cost of maintaining the operating capital.
- A mini-cab driver's only costs are the depreciation of the mini-cab and the cost of the petrol. His operating capital consists of the mini-cab and the petrol in its tank.

Under the historical cost convention he will recognise a profit if the fares during a period exceed the historical (i.e. original) cost of the petrol and of the element of the mini-cab consumed in earning those fares (i.e. the historical cost depreciation charge). Under the operating capital maintenance concept, he will recognise a profit only if the fare exceeds the **current** (i.e. replacement) cost of the petrol and of the element of the mini-cab consumed (i.e. the current cost depreciation charge).

Profit under the operating capital maintenance concept depends upon the effects of specific price changes on the operating capital, that is the net operating assets of the business. Some systems also take into account the way in which these net assets are financed.

The alternative capital maintenance concept is that of financial capital maintenance.

Financial capital maintenance in money terms is the familiar foundation to historical cost accounting.

A system of accounting which measures whether a company's financial capital (i.e. shareholders' funds) is maintained in real terms, and which involves the measurement of assets at current cost, is known as the **real-terms** system of accounting. The method is appropriate for all types of company and is particularly suitable for value-based and other types of company that do not have a definable operating capital. The basic approach to profit measurement under the real-terms system is to:

- (a) Calculate the shareholders' funds at the beginning of the period based on current cost asset values.
- (b) Restate that amount in terms of pounds of the reporting date (by adjusting (a) by the relevant change in a general index such as the RPI).
- (c) Compare (b) with the shareholders' funds at the end of the year based on current cost asset values.

This comparison indicates whether or not the real financial capital has been maintained. If the year-end figure is larger than the restated opening figure, a real-terms profit has been made.

Which of the two concepts of capital maintenance – operating or financial – should a company adopt?

Both are useful in appropriate circumstances. They have different objectives and the choice of which to use depends in part on the nature of the company's business.

Some companies may wish to provide information based on both concepts. A real-terms system can incorporate both concepts. Operating profit is reported using the operating capital maintenance concept but then incorporates various gains and losses that result from changes in the value of the assets and liabilities of the business, to yield a final measure of total gains which is based on real financial capital maintenance.

A company that is seeking to measure the real return on its shareholders' capital will do this by comparing its capital at the end of the period with opening shareholders' invested capital restated in terms of constant purchasing power. In this way the company will show its shareholders whether it has succeeded not only in preserving their initial investment, but in increasing it. Alternatively, where the company's aim is to demonstrate its capacity to continue in existence by ensuring that, at the end of the accounting period, it is as capable of producing a similar quantity of goods and services as it was at the beginning, profit would be regarded as the surplus remaining only after its operating capital had been maintained.

● Users' Needs

A company may determine its reporting objective based on its perception of the users of its accounts. To shareholders in general, a financial capital maintenance view may seem the most natural. They may be uneasy with the operating capital maintenance concept, which charges against profit the full cost of replacement of assets used when those assets have risen in cost, but does not credit to profit any of the gain derived from buying those assets at historical costs which were below current cost. Managers and employees, however, may consider shareholders

to be only one of the many stakeholders in a company and consider the company's major objective as maintaining its ability to produce goods and services.

Employees and management therefore could well look at a company's objectives in terms of maintaining operating capital.

- **Nature of Company**

The selection of reporting method is often influenced by the nature of the company's business. Financial capital maintenance is more suitable for companies in which asset value increases are viewed as an alternative to trading as means of generating gains. It is particularly suitable for companies which do not have an easily definable operating capital to maintain, or for companies that do not have the maintenance of their operating capital as an objective. Some companies involved in unique or discontinuous ventures, such as the extraction or construction industries or commodity trading, may find it difficult if not impossible to define their operating capital.

The true measure of the performance of such companies in times of inflation is their ability to produce real profits, above the level of those nominal profits which arise simply as a result of general inflation. The consistent measurement of real gains requires not only that opening capital be adjusted by a general index, but also that assets be valued at their current costs.

A company could maintain its operating capital while the current cost of its assets falls. A case could, therefore, be made for all companies to report the change in their real financial capital even after determining profit using an operating capital maintenance method.

The real-terms system is able to provide both a profit figure on an operating capital maintenance concept and a broader figure which encompasses gains on holding assets, to the extent that these are real gains after allowing for inflation. Which of these figures is found to be most useful will depend on the circumstances. For example, in the case of a manufacturing company which intends to maintain its present operating capital, current cost operating profit may be an important piece of information to an investor wishing to estimate future earning capacity (while the real gain or loss on assets held may be relatively unimportant). Conversely, for a property company, in which capital appreciation of properties may be as important a factor as rents earned, the wider concept of total gains may be considered relatively more important.

One objection which may be made against the total gains concept is that, like operating capital, it relies heavily on asset valuations which may be subjective. Moreover, in the real-terms system, annual changes in such valuations directly affect reported total gains, whereas in the operating capital approach they are taken to current cost reserve and affect reported current cost profit only gradually through the depreciation adjustment. The objection about the subjectivity of asset valuations may have greater force in particular circumstances, for example, the partly-used assets of a manufacturing operation will probably be more difficult to value at current cost than will the assets of a property investment company. However, the real-terms system, in which changes in asset values affect reported total gains, is perhaps more likely to be used by companies whose assets are relatively easy to value at current cost. Despite the practical problems that sometimes arise, it can be argued that greater usefulness compensates for less objectivity.

Study Unit 8

Assessing Financial Performance

<i>Contents</i>	<i>Page</i>
A. Interpretation of Accounts	165
Matters of Interest	165
The Perspective	166
B. Ratio Analysis	167
Common Accounting Ratios	168
Sample Set of Accounts	168
C. Profitability Ratios	171
Profit : Capital Employed	171
Secondary Ratios	172
Expense Ratios	173
Fixed Asset Turnover Ratio	173
D. Liquidity Ratios	173
Working Capital or Current Ratio (Current Assets : Current Liabilities)	174
Quick Asset or Acid Test Ratio (Current Assets less Stock : Current Liabilities)	174
E. Efficiency Ratios	175
Stock Ratios (Closing Stock : Cost of Sales per Day)	175
Stock Turnover	175
Debtors Ratio	176
Creditors Ratio	176
F. Capital Structure Ratios	177
Shareholders' Funds : Total Indebtedness	177
Shareholders' Funds : Fixed Assets	177
Capital Gearing Ratio	177
Cost of Capital	178

(Continued over)

G. Investment Ratios	178
Ordinary Dividend Cover	179
Earnings per Share	179
Dividend Yield Ratio	179
Price : Earnings Ratio	180
Other Useful Ratios	180
H. Limitations of Accounting Ratios	181
I. Worked Examples	182
Example 1	182
Example 2	185
Example 3	187
J. Issues in Interpretation	189
Financial Dangers and their Detection	189
Profit and Loss Account Interpretation	191
Balance Sheet Interpretation	192
Capital Gearing	192
Capital Position	195
Answer to Question for Practice	198

A. INTERPRETATION OF ACCOUNTS

Interpretation – or comprehension, assessment or criticism – of accounts usually means the interpretation of balance sheets and trading and profit and loss accounts (often referred to as “final accounts”) or their equivalent.

Such accounts may be either:

- Published accounts, i.e. those prepared for the information of shareholders, etc; or
- Internal accounts, i.e. those prepared for the information of the directors and management.

The second type, being the accounts upon which the policy of the concern is based, are usually in much greater detail than the first.

In either case, greater reliance can be placed on accounts which have been **audited** by a professional firm of standing; in particular accounts drawn up by a trader himself are always open to question.

The primary object of interpretation of accounts is the provision of information. Interpretation which does not serve this purpose is useless.

The type of information to be provided depends on the nature and circumstances of the business and the terms of reference. By the latter we mean the specific instructions given by the person wanting the enquiry to the person making it. Of course, if the person making the enquiry is also the person who will make use of the information thus obtained, he will be aware of the particular points for which he is looking.

The position of the ultimate recipient of the information must be especially noted. Thus, suppose that you are asked by a debenture holder to comment on the balance sheet of a company in which he is interested. It would be a waste of time to report at length on any legal defects revealed in the balance sheet. You would naturally pay attention to such points as particularly concerned the debenture holder, e.g. the security of his loan to the company and the extent to which his interest on the debentures is “covered” by the annual profits. This does not mean that legal defects should be ignored. It is very important that they **should** be mentioned (although briefly), for failure to comply with legal requirements may be indicative of more serious shortcomings, possibly detrimental to the security of the debenture holder.

Matters of Interest

The interpreter must consider and form conclusions on the following matters.

(a) **Profitability**

How does the profit in relation to capital employed compare with other and alternative uses of the capital?

(b) **Solvency**

- Can the business pay its creditors, should they demand immediate payment?
- Does the company have sufficient working capital?
- Is it under- or over-trading?

(c) **Financial Strength**

- What is the credit position of the company?
- Has it reached the limit of its borrowing powers?

- Is it good policy to retain some profits in the business?

(d) Trends

- Are profits rising or falling?
- What are the future profit prospects, based on recent planning and investment?

(e) Gearing and Cover

- What is the gearing (see later) of the company?
- What does this imply for the future dividend prospects of shareholders?

The Perspective

So vital is this matter of **approach** to the task of interpretation that we shall now consider certain special matters in which various persons will be particularly interested. For the sake of illustration, we will deal with their positions in relation to the accounts of a limited company.

(a) Debenture Holder

Debentures may be secured on fixed assets and/or current assets; they may cover uncalled and unissued capital as well. Much depends on the terms of the issue. As a secured creditor, therefore, the debenture holder is primarily concerned with the **realisable** value of the assets which form the security. He will therefore pay attention to the following:

- (i) Bases of valuation of assets; whether depreciation has been provided out of profits and, if so, whether it is adequate.
- (ii) Whether any provision, such as a sinking fund, has been made for repayment of debentures (if not irredeemable) or for replacement of fixed assets.
- (iii) Adequacy of working capital (for if no cash resources exist, the interest cannot be paid).
- (iv) Profits earned; although debenture interest is a **charge** against profits, its payment in the long run depends on the earning of profits.

He will be interested in (iii) and (iv) from the point of view of annual interest.

Point (iv) particularly concerns a debenture holder whose security takes the form of a floating charge over all of the assets, for the assets (his security) are augmented or depleted by profits and losses.

(b) Trade Creditor

As a general rule, a trade creditor will rely on trade references or personal knowledge when forming an opinion on the advisability of granting or extending credit to a company. He is not often concerned with the accounts, which he rarely sees, but if he does examine the accounts he will be as much concerned with existing liabilities as with assets. In particular, he will note the following:

- (i) The existence of secured debts.
- (ii) The net balance available for unsecured creditors.
- (iii) The existence of uncalled capital and undistributed profits.
- (iv) The adequacy of working capital.

Profits are of minor importance in this connection, but a series of **losses** would provide a warning.

(c) Banker

In deciding whether to grant overdraft facilities to a company, a banker will study with great care **all** the points mentioned in (a) and (b) above. He will also wish to be assured that the company can pay off the overdraft within a reasonable time. This may necessitate an estimate as to future profits, dividends, capital commitments, other commitments, e.g. loan repayments, leasing obligations, and whether any assets can be pledged as security.

(d) Shareholder

The average shareholder is interested in the future dividends he will receive. Future profits are of secondary importance, so long as they are adequate to provide the dividend.

Past dividends provide the basis on which future dividends may be estimated, just as past profits afford a similar indication as to future profits. Estimates may, however, be upset because of radical changes in the nature of trade, production methods, general economic conditions, etc.

It is usually recognised that the single most influential factor in determining a company's share price is the amount of dividend paid. Any shareholder will want to ensure that the level of dividend paid is sustainable, i.e. that that much is not just being distributed in order falsely to support the market price of the shares.

The "cover" is a useful way of comparing or appraising a company's dividend policy. This ratio is obtained by dividing the after-tax profits by the amount of the dividend.

B. RATIO ANALYSIS

In order to measure the success or failure of a business, financial analysts often use figures obtained from the annual accounts. Some figures will be more useful to the analyst than others. Absolute figures are usually of little importance, so it is necessary to **compare** figures by means of **accounting ratios** in order to interpret the information meaningfully.

The purpose of calculating accounting ratios is to try to shed light on the financial progress or otherwise of a company by discovering trends and movements in the relationships between figures. The trends revealed will have implications for a company's progress. For example, by comparing the movements of the number of days' sales held in stock from one year to another, an increasing propensity to manufacture for stock may be noticed. This could be inferred from a continuing increase in the number of days' sales held in stock, but it would not be apparent from an examination of stock and sales figures in isolation. A tendency to manufacture for stock could imply a drop in demand for a company's product, which is a serious matter when considering a company's prospects.

Accounting ratios are only a guide and cannot form the basis for final conclusions – they only offer clues and point to factors requiring further investigation. The ratios obtained are subject to the same weaknesses as the financial statements from which they are computed. They are of little value unless they are compared with other ratios.

Thus, it is very important to realise that there is no "correct ratio" for any particular business. What is far more significant than a particular ratio is, say, movement in that ratio from year to year; e.g. a steady decline over the years in a firm's working capital is symptomatic of financial weakness, rather than being the weakness itself. A person's weight is not in itself of great significance, but weight considered in relation to height and age becomes significant when it changes dramatically.

Ratios are, therefore, used to enable comparisons to be made:

- to compare the performance of the business with previous years.
- to compare the actual performance of the business with the budgeted or planned performance.
- to compare results with the performance of similar businesses.

It is very important, also, to realise that financial accounting statements do not provide unlimited information or ready conclusions. The accounts display only those aspects of the organisation that can be translated into money terms. This is, of course, only part of the picture. Other assets are not usually reflected in the accounts, e.g. skills of the workforce.

Thus, we may establish that a company has improved its performance over previous years. However, this does not necessarily mean that the result is satisfactory. It may be more meaningful to compare actual performance with planned performance or, alternatively, compare performance with similar firms in the same industry.

If we adopt the latter method, we must remember that all the information that is required may not be available from an ordinary set of published accounts, and also that accounting rules are capable of different interpretation. Therefore, when examining published accounts, we may not be comparing like with like and it is essential to be aware of this fact when making comparisons and drawing conclusions.

It is vital to ensure that the items to be compared are defined in the same terms and measured by the same rules. For example, one company may have revalued its assets in line with inflation, whereas another may be showing its assets at historical cost.

Common Accounting Ratios

The main ratios that should be investigated will cover the following areas:

- Profitability
- Liquidity
- Efficiency
- Capital structure
- Investment

We shall examine the types of ratio in each area over the next few sections. However, first we need to establish a common basis for illustrating their operation.

Sample Set of Accounts

As an aid to describing the ratios employed in interpreting accounts, we shall use the following annual accounts of ABC Ltd.

ABC Ltd
Profit and Loss Account

	Year 4		Year 5	
	£	£	£	£
Sales		900,000		1,200,000
<i>less:</i> Production: cost of goods sold	630,000		818,000	
Administration expenses	135,000		216,000	
Selling and distribution expenses	45,000	810,000	64,000	1,098,000
Net Profit		90,000		102,000
<i>less:</i> Corporation tax	36,000		40,800	
Proposed dividends	54,000	90,000	61,200	102,000
Retained Profits		NIL		NIL

ABC Ltd
Balance Sheet as at 31 December Year 5

Year 4			Year 5	
£	£		£	£
Fixed Assets				
300,000		Land & Buildings	662,000	
190,000		Plant & machinery	180,000	
<u>10,000</u>	500,000	Motor vehicles	<u>8,000</u>	850,000
Current Assets				
100,000		Stock	150,000	
50,000		Debtors	95,000	
<u>50,000</u>	200,000	Bank	<u>5,000</u>	250,000
less Current Liabilities				
54,000		Proposed dividends	61,200	
<u>46,000</u>	<u>100,000</u>	Creditors	<u>138,800</u>	<u>200,000</u>
	<u>100,000</u>	Net Current assets		<u>50,000</u>
	<u>600,000</u>			<u>900,000</u>
Represented by:				
Share Capital				
800,000		Authorised – 800,000 ordinary shares of £1 each	<u>800,000</u>	
	<u>500,000</u>	Issued and fully paid – Ordinary shares of £1 each		<u>800,000</u>
Reserves				
54,000		General reserve	80,000	
<u>46,000</u>	<u>100,000</u>	Profit and loss account	<u>20,000</u>	<u>100,000</u>
	600,000			900,000

C. PROFITABILITY RATIOS

Before we start to investigate the ratios which can shed light on the profitability of a company, we need to clarify exactly which figures we need to use. The following definitions are, therefore, important.

(a) Profit

There is some debate as to what figure should be taken for profit, i.e. should the figure used be net profit before or after tax and interest? Some argue that changes in corporation tax rates over a number of years can obscure the ratio of net profit after tax to capital employed; others, that taxation management is a specialist job and that profit after tax should therefore be used. The important thing is to **be consistent** and it may be better in practice to compute both ratios.

Another point to remember is that gains or losses of an abnormal nature should be excluded from net profit in order to produce a realistic ratio.

(b) Capital Employed

It is also necessary to decide which of the following items should be used as capital employed:

- **Total shareholders' funds**, i.e. share capital plus reserves.
- **Net assets**, i.e. total assets less current liabilities (when loans are included it is necessary to add back loan interest to net profit).
- **Net assets less value of investments**, i.e. excluding any capital which is additional to the main activities of the business, with a view to assessing the return achieved by management in their particular field (if this approach is adopted it is also necessary to deduct the investment income from the net profit).
- **Gross assets**, i.e. total assets as in the assets side of the balance sheet.

Again there is no general agreement as to which of the above methods should be adopted for the calculation of capital employed.

(c) Asset Valuation

A further factor to consider is that the assets are normally recorded in the balance sheet on a historical cost basis. A clearer picture emerges if all the assets, including goodwill, are revalued at their current going-concern value, so that net profit, measured each year at current value, can be compared against the current value of capital employed.

Profit : Capital Employed

The **return on capital employed (ROCE)** is the first ratio to calculate, since a satisfactory return is the ultimate aim of any profit-seeking organisation. The return on capital employed is sometimes called the **primary ratio**.

We will use "Net profit before tax : Net assets" as the basis for the calculation. The formula and results for ABC Ltd are as follows:

	Year 4	Year 5
$\frac{\text{Profit}}{\text{Capital employed}}$	$\frac{90,000}{600,000} = 15\%$	$\frac{102,000}{900,000} = 11.33\%$

What conclusions can we draw from the above ratios?

- (a) We need to consider the decline in profitability in Year 5 in relation to the current economic climate. It may be that the decline can be accounted for by the fact that the industry as a whole is experiencing a recession, so the ratio of this company should be compared with that of similar firms.
- (b) Another factor to consider is that ABC Ltd appears to have spent £362,000 on additional land and buildings. If the buildings were purchased in December Year 5 it would be wrong to include this additional amount as capital employed for Year 5. In such circumstances it is advisable to use **average capital employed** rather than the year-end figure. This illustrates the fact that ratios are only a guide and cannot form the basis for final conclusions.

Secondary Ratios

The decline in the return on capital employed in Year 5 may be due either to a decline in the profit margins or to not utilising capital as efficiently in relation to the volume of sales. Therefore, the two secondary ratios which we shall now examine are Net profit : Sales and Sales : Capital. (It can also be useful to calculate the **gross profit margin**, i.e. Gross profit : Sales.)

(a) Net Profit : Sales (Net Profit Margin or Percentage)

This ratio measures average profit on sales. The percentage net profit to sales for ABC Limited was 10% in Year 4 and 8.5% in Year 5, which means that each £1 sale made an average profit of 10 pence in Year 4 and 8.5 pence in Year 5.

The percentage profit on sales varies with different industries and it is essential to compare this ratio with that of other firms in the same industry. For instance, supermarkets work on low profit margins while furniture stores work on high profit margins.

(b) Sales : Capital Employed

If profit margins do decline, the return on capital employed can only be maintained by increasing productivity unless there is a greater proportionate increase in capital employed.

The ratio measures the efficiency with which the business utilises its capital in relation to the volume of sales.

- A high ratio is a healthy sign, for the more times capital is turned over, the greater will be the opportunities for making profit.
- A low ratio may indicate unused capacity.

Like the Net profit : Sales ratio, this ratio varies considerably according to the type of business concerned. Again, a supermarket may work on low profit margins with a very high turnover while a furniture store works on higher profit margins with a lower turnover.

	Year 4	Year 5
$\frac{\text{Sales}}{\text{Capital employed}}$	$\frac{900,000}{600,000} = 1.5 \text{ times}$	$\frac{1,200,000}{900,000} = 1.33 \text{ times}$

This indicates that each £1 capital employed produced on average a sale of £1.50 in Year 4 and £1.33 in Year 5.

What are the possible reasons for the decline in this ratio?

- It may be that additional capital has not been justified by increased sales.

- Alternatively, there may have been expansion of plant facilities based on expectation of future sales.

Expense Ratios

The next question we may ask is “Why have profit margins on sales declined?” To answer this question, we must calculate the following expense ratios:

	Year 4	Year 5
	%	%
Production expenses : Sales	70	68.16
Administration expenses : Sales	15	18.00
Selling and distribution expenses : Sales	5	5.34
Net profit : Sales	10	8.50
	<u>100</u>	<u>100.00</u>

We could analyse these items still further by examining the individual items of expense falling within each category, e.g. Material costs of production : Sales, Office salaries : Sales.

On the basis of the above information, we may be justified in investigating the administrative expenses in detail to account for the increased percentage in Year 5.

Fixed Asset Turnover Ratio

In order to find out why capital has not been utilised as efficiently in relation to the volume of sales, we now consider the fixed asset turnover ratio (Sales : Fixed assets). If the ratio is low this may indicate that assets are not being fully employed. The accounts of ABC reveal the following ratios:

	Year 4	Year 5
$\frac{\text{Sales}}{\text{Fixed assets}}$	$\frac{900,000}{500,000} = 1.8 \text{ times}$	$\frac{1,200,000}{850,000} = 1.4 \text{ times}$

This indicates that each £1 invested in fixed assets produced on average a sale of £1.80 in Year 4 and £1.40 in Year 5. In practice it may be advisable to compare the ratio for each individual fixed asset and not merely total fixed assets. The reasons for the decline of Sales : Capital employed may apply equally to this ratio.

D. LIQUIDITY RATIOS

The objects of any business are to earn high profits **and remain solvent**. Because accountants realise revenue when the goods are delivered and match expenses with revenue, it follows that profits may not be represented by cash. Therefore, a company may be successful from a profitability point of view but may still have liquidity problems.

The following areas should be examined when investigating the liquidity position of a company:

(a) Working Capital

Has the company sufficient funds to meet its working capital requirements?

(b) Immediate Commitments

Has the company sufficient resources to meet its immediate commitments?

(c) Stock Control

Is the company carrying excessive stocks?

(d) Debtors and Creditors Control

Is the company maintaining adequate credit control of debtors and creditors?

Working Capital or Current Ratio (Current Assets : Current Liabilities)

This ratio compares current assets, which will become liquid in 12 months, with liabilities due for payment within 12 months (i.e. it measures the number of times current assets cover current liabilities). Therefore, the ratio measures the margin of safety that management maintains in order to allow for the inevitable unevenness in the flow of funds through the current asset and liability accounts.

Creditors will want to see a sufficiently large amount of current assets to cover current liabilities. Traditionally it has been held that current assets should cover current liabilities at least twice, i.e. 2:1, but this depends on the type of business and the requirements of individual firms. Generally, a low ratio indicates lack of liquidity and a high ratio indicates inefficient use of capital.

An investigation of the accounts of ABC Ltd reveals that current assets cover current liabilities twice in Year 4 and 1.25 times in Year 5.

The decline in Year 5 may cause concern but whether this ratio is held to be satisfactory depends on the length of the period from when the cash is paid out for production until cash is received from the customer. It may well be that any planned increase in production is being held back because of lack of funds, and that additional permanent capital is required by means of an issue of shares or debentures.

Quick Asset or Acid Test Ratio (Current Assets less Stock : Current Liabilities)

It is advisable to investigate not only the ability of a company to meet its commitments over the next 12 months but also its ability to meet immediate commitments. Only assets which can be quickly turned into cash are included, so stocks are excluded from current assets since they may have to be processed into finished goods and sold to customers on credit.

Ideally we would expect to see a ratio of 1:1. If the ratio were below 1:1 and creditors pressed for payment, the company would have great difficulty in meeting its commitments. If the ratio were above 1:1, it could be argued that the company was carrying too high an investment in funds which are not earning any return. The ratios for ABC Ltd are 1:1 in Year 4 and 0.5:1 in Year 5.

The ratio for Year 5 appears to be a cause for concern, though much depends on how long the debtors and creditors accounts have been outstanding. Nevertheless, if creditors pressed for payment the company would not have sufficient funds available to pay them. Do not forget, however, that the ratios are taken from figures recorded at one point in time and the position may have been considerably different on 1 January Year 6.

E. EFFICIENCY RATIOS

Stock Ratios (Closing Stock : Cost of Sales per Day)

Excessive stocks should be avoided since, apart from incidental costs (e.g. storage and insurance), capital will be tied up which perhaps could be invested in securities or otherwise profitably employed. Also, where stocks are financed by overdraft, unnecessary interest costs are incurred. Therefore it may be advisable to calculate a ratio which will give us an approximation of how many days' usage of stocks we are carrying at one particular point in time.

Example

Assuming the cost of sales figure is £365,000, dividing by the days in the year, a figure of sales cost per day of £1,000 is obtained.

Assuming this rate of sales continues and the balance sheet stock figure is, say, £80,000, you can see that we have sufficient stock requirements for 80 days.

If the company is a manufacturing company, different types of stocks are involved. Therefore the following stock ratios should be prepared:

- **Raw Material**

This is Raw Material stock : Purchases per day.

- **Work in Progress**

This is Work in progress stock : Cost of production per day.

- **Finished Goods**

This is Finished goods stock : Cost of sales per day.

The average number of days' stock carried by ABC Ltd are as follows:

	Year 4	Year 5
$\frac{\text{Closing stock}}{\text{Cost of sales} \div 365}$	$\frac{100,000}{630,000 \div 365} = 58 \text{ days}$	$\frac{150,000}{818,000 \div 365} = 67 \text{ days}$

From these figures we can see that ABC Ltd appears to have been carrying larger stock requirements in Year 5. Remember, however, that these figures have been taken at one point in time and the position may have been completely different on 1 January Year 6. ABC may have purchased in bulk at special terms, or there may be an impending increase in the price of raw materials. Therefore, the increase in Year 5 may not necessarily be a bad thing. Nevertheless, this ratio does highlight the stock-holding period and, if the increase cannot be accounted for, an investigation into the stock control systems may be warranted.

Stock Turnover

A ratio known as the stock turnover ratio is used to measure the **average time** it takes for stock to turn over. This is calculated as follows:

$$\text{Stock turnover ratio} = \frac{\text{Sales at cost price}}{\text{Average of opening and closing stock}}$$

Therefore if the opening stock is £8,000 and the closing stock is £6,000 the average stock is:

$$\frac{£8,000 + £6,000}{2} = £7,000.$$

If the sales for the period cost £35,000 then the stock has turned over by

$$\frac{35,000}{7,000} = 5 \text{ times during the period.}$$

If we divide this turnover ratio into 365, we can calculate that the stock turns over, on average, every 73 days. This can be used as an efficiency indicator.

Debtors Ratio

$$\text{Debtors ratio} = \frac{\text{Debtors}}{\text{Average credit sales per day}}$$

Cash may not be available to pay creditors until the customers pay their accounts. Therefore an efficient credit control system ensures that the funds tied up in debtors are kept to a minimum. It is useful to calculate a ratio which will give us an approximation of the number of sales in the debtors figure at one particular point in time.

The ratios of ABC Ltd are:

Year 4	Year 5
$\frac{50,000}{900,000 \div 365} = 20 \text{ days}$	$\frac{95,000}{1,200,000 \div 365} = 29 \text{ days}$

It appears that debtors were taking longer to pay their accounts in Year 5, but whether this is good or bad depends on what ABC considers to be an acceptable credit period. Again, this ratio represents the position at one particular point in time and may not be representative of the position throughout the year. It may well be that the credit control department concentrates on reducing the debtors to a minimum at the year-end, so that the figures appear satisfactory in the annual accounts. Therefore there is a need for more detailed credit control information to be provided at frequent intervals. Nevertheless, this ratio gives an approximation of the number of days debtors are taking to pay their accounts and it may be helpful to use this ratio for comparison with competitors.

Creditors Ratio

$$\text{Creditors ratio} = \frac{\text{Creditors}}{\text{Average credit purchases per day}}$$

The above calculation could be made to compare how long ABC are taking to pay their creditors in the two years. The actual cost of purchases is not disclosed in the data given but if we take the production cost of goods sold as an alternative, we find:

Year 4	Year 5
$\frac{46,000}{630,000 \div 365} = 27 \text{ days}$	$\frac{138,000}{818,000 \div 365} = 62 \text{ days}$

F. CAPITAL STRUCTURE RATIOS

Consider the case of X, who starts a business. If he requires various assets worth £10,000 (stock, etc.) where can he obtain the money to finance the business?

- Should he provide all the capital himself or should he obtain most of it from parties outside the business? (For example, a loan of £7,000 at 10% plus £2,000 from trade creditors and £1,000 from himself.)
- What effect will such a capital structure have on the future of the business?
- If there is a business recession, has the business sufficient earnings to meet the annual £700 interest cost on the loan?
- If X requires more funds, how will trade creditors and lending institutions view the fact that X has provided only 10% of the total funds of the business?

These problems suggest that there is a need for the financial analyst to investigate the capital structure of a business.

Shareholders' Funds : Total Indebtedness

This ratio – known as the Proprietorship Ratio – shows what proportion of the total funds has been provided by the shareholders of the business and what proportion has been provided by outside parties. Potential investors and lenders are interested in this ratio because they may wish to see the owners of the business owning a large proportion of the assets (normally over 50%).

The ratios for ABC Ltd are:

	Year 4	Year 5
$\frac{\text{Shareholders' funds}}{\text{Total indebtedness shareholders and creditors}}$	$\frac{600,000}{700,000} = 86\%$	$\frac{900,000}{1,100,000} = 82\%$

Certainly a large proportion of the funds has been provided by the owners of ABC but whether this ratio is good or bad depends on many other factors (e.g. the current economic climate and taxation policy regarding dividends and fixed-interest payments).

Shareholders' Funds : Fixed Assets

This ratio reveals whether any part of the fixed assets is owned by outsiders. If fixed assets exceed shareholders' funds, it is apparent that part of the fixed assets is owned by outside parties, which may be interpreted as a sign of weakness. This does not appear to be the case for ABC Ltd, since shareholders' funds were £600,000 in Year 4 and £900,000 in Year 5, while fixed assets were £500,000 and £850,000.

Capital Gearing Ratio

$$\frac{\text{Fixed-interest capital (i.e. preference shares and debentures)}}{\text{Ordinary share capital}}$$

This ratio measures the relationship between the ordinary share capital of a company and the fixed-interest capital.

- A company with a large proportion of fixed-interest capital is said to be **high-gearred**.
- A company with a high proportion of ordinary share capital is **low-gearred**.

Where the capital structure of a company is low-gearred, preference shareholders and debenture holders enjoy **greater security**, while potential dividends payable to ordinary shareholders will not be subject to violent fluctuations with variations in profits. The opposite applies to a high-gearred capital structure (i.e. less security for preference shareholders and debenture holders, and violent fluctuations in dividends for ordinary shareholders).

The relationship between ordinary share capital and fixed-interest capital is important to an ordinary shareholder because of the effects on **future earning prospects**. Some fixed-interest capital is desirable, provided this capital earns a profit in excess of the fixed-interest charges it creates. Any such excess profit will rebound to the ordinary shareholders, who thereby enjoy a higher return than they would if the whole capital had been contributed by them.

We shall consider aspects of capital structure later in the unit.

Cost of Capital

Because each type of capital carries its own interest rate, we can easily calculate the cost of capital. For example:

	Capital £	Dividend/Interest £
Ordinary shares (expected dividend 15%)	50,000	7,500
10% Preference shares	40,000	4,000
8% Debentures	10,000	800
	<u>100,000</u>	<u>12,300</u>

The cost of capital is £12,300 on capital of £100,000, i.e. 12.3%.

As we have seen, debenture interest is a charge against profits, so this means a high-gearred company's taxable profits are reduced more, and it will pay less tax and be able to pay higher dividends, than a low-gearred company with the same amount of profit.

G. INVESTMENT RATIOS

Investment ratios provide valuable information to actual or potential shareholders. These ratios are also of interest to management, since a company depends upon potential investors for further funds for expansion. We will now calculate the appropriate investment ratios from the annual accounts of ABC Ltd.

Ordinary Dividend Cover

$$\frac{\text{Profit after tax less preference dividend}}{\text{Ordinary dividend}}$$

This ratio indicates how many times the profits available for ordinary dividend distribution cover the actual dividend paid. This ratio is important to the investor for two reasons:

- It gives the investor some idea of security of future dividends.
- Investors can check to ensure that management are not paying out all earnings but are pursuing a prudent policy of ploughing back some part of the annual profit.

Investors and would-be investors may use these ratios as a basis for future investment decisions. Therefore the ratios may have a direct effect on the demand for, and the market price of, the shares. For this reason, the Board of Directors should always endeavour to maintain a careful balance between the payment of dividends and reinvestment.

- (a) If dividends are too low or are infrequent, the market price of the shares may fall.
- (b) Generous distribution of dividends may inhibit the ability of a company to expand without resort to fresh capital or loans, besides depleting current liquid resources.

In practice a dividend cover of 2-3 times is commonly found. We can see that ABC Ltd has distributed all of the profits after tax in the form of dividends in both years. This is not a good sign.

Earnings per Share

$$\frac{\text{Profits after tax less preference dividends}}{\text{Number of ordinary shares}}$$

The ratio is based on the same information as the ordinary dividend cover, but expresses it in a different form.

Investors and potential investors are particularly interested in the total net profit earned in the year which could have been received if the directors had paid it all out as dividend. Such an amount, compared with what the directors have in fact paid out per share, gives an indication of the dividend policy of the company. An investigation of the accounts of ABC Limited in Year 5 reveals an earnings per share of 7.65 pence, i.e.

$$\frac{£61,200}{800,000}$$

Dividend Yield Ratio

$$\frac{\text{Nominal value of share} \times \text{Dividend \%}}{\text{Market value}}$$

Dividends declared are always based on a percentage of the nominal value of issued share capital. Therefore in Year 5 ABC Ltd has declared a dividend of 7.65%, but the true return an investor obtains is on the current market value rather than on the nominal value of the share. If the current market value of the shares of ABC Ltd is £1.20, this indicates that the shareholders are obtaining a yield of 6.375%:

$$\frac{\text{Nominal value } £1.00}{\text{Current market value } £1.20} \times 7.65\% = 6.375\%$$

Whether this is satisfactory depends on the yield acceptable to the investor and the potential for future capital growth. In particular, this ratio should be considered in the light of other investment ratios (e.g. earnings per share) rather than in isolation.

Price : Earnings Ratio

This ratio may be calculated as:

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

or
$$\frac{\text{Total market value of issued share capital}}{\text{Profits after corporation tax and preference dividends}}$$

The ratio is ascertained by comparing the market price of an ordinary share with the earnings per share (after deduction of corporation tax and preference dividends). This may be expressed as so many years' purchase of the profits (in other words, assuming stability of market price, an investor's capital outlay will, at the present level of earnings, be recouped after so many years, in the form of either dividends received or capital growth by virtue of retained profits). On the assumption that a person who buys a share is buying a proportion of earnings, the larger the PE ratio, the higher is the share valued by the market. In other words, the ratio indicates how many times the market price values earnings.

Assuming a market value of £1.20, the price : earnings ratio of ABC Ltd is:

$$15.7 \left(\text{i.e. } \frac{1.20}{7.65\%} \right) \text{pence}$$

Other Useful Ratios

Other useful ratios, which do not apply to ABC Ltd, are:

(a) Preference Dividend Cover

$$\frac{\text{Profit after tax}}{\text{Preference dividend}}$$

This ratio reveals the number of times preference dividends are covered by earnings and thus indicates the preference shareholders' security, so far as income is concerned.

(b) Debenture Interest Cover

$$\frac{\text{Net profit} + \text{Debenture interest}}{\text{Rate of interest} \times \text{Loans outstanding}}$$

This ratio allows debenture holders to assess the ability of a company to meet its fixed-interest payments. Because debenture interest is a **charge** and not an appropriation of profits, it is necessary to add back the interest to net profit to determine profit before interest.

H. LIMITATIONS OF ACCOUNTING RATIOS

Before we go on to examine some worked examples of accounting ratios, we should note that ratios are subject to certain limitations, which must be recognised if maximum benefit is to be derived from them. These limitations stem from the limitations of the accounts from which the ratios are derived – for example:

(a) The Ephemeral Nature of Balance Sheet Information

The balance sheet is prepared at, and it is true for, one date only. From this, it follows the ratios derived from the balance sheet are true for one date only. Thus, it is particularly dangerous to rely on balance sheet ratios of companies involved in seasonal trades.

The balance sheets of a holiday camp organisation, for example, would present very different pictures according to whether they were drawn up in mid-summer or mid-winter. In mid-summer, it would not be surprising to discover large stocks being carried and considerable sums owing to suppliers, whereas in mid-winter these items would probably have disappeared. The ratios calculated from a summer balance sheet would, therefore, differ from those calculated from a winter balance sheet.

(b) The Effect of Inflation

Inflation and changing monetary values do not hamper ratio interpretation if the figures being expressed in terms of ratios are all equally subject to inflation. Unfortunately, this is not always the case, especially where fixed assets are not revalued for considerable periods. Care must be taken to allow for changing monetary values when reasons for changes and trends are being sought and, thus, ratio analysis of current cost accounts can be valuable.

We shall return to the subject of current cost accounting and the limitations of the historic cost convention later in the course.

(b) Imprecise Terminology

The accounting profession is guilty of a certain looseness of terminology, and accounting terms are not always given the same meanings by different companies. When making inter-company comparisons, care should be taken to ensure that like is always compared with like – otherwise, comparisons will be valueless.

(d) Quality of Employees

Ratios do not measure the loyalty, quality or morale of a company's employees, which is a very important factor when assessing its prospects.

I. WORKED EXAMPLES

Example 1

You are given summarised information about two firms in the same line of business, A and B.

	Firm A			Firm B		
	£	£	£	£	£	£
Land			80			260
Buildings		120			200	
less Depreciation		40	80		–	200
Plant		90			150	
less Depreciation		70	20		40	110
			180			570
Stocks		80			100	
Debtors		100			90	
Bank		–			10	
		180			200	
Creditors	110			120		
Bank	50	160	20	–	120	80
			200			650
Capital b/forward			100			300
Profit for year			30			100
			130			400
less Drawings			30			40
			100			360
Land revaluation			–			160
Loan (10% pa)			100			130
			200			650
Sales			1,000			3,000
Cost of sales			400			2,000

Required

- Produce a table of 3 profitability ratios and 3 liquidity ratios for both businesses.
- Write a report briefly outlining the strengths and weaknesses of the two businesses. Include comment on any major areas where the simple use of the figures could be misleading.

Answer**(a) Table of Ratios**

	Firm A	Firm B
Profitability Ratios		
Return on capital employed:		
$\frac{\text{Operating profit (before interest)}}{\text{Total assets less current liabilities}} \times 100$	$\frac{30}{200} \times 100$	$\frac{100}{650} \times 100$
	= 15%	= 15.4%
Net profit percentage:		
$\frac{\text{Operating profit (after interest)}}{\text{Sales}} \times 100$	$\frac{30}{1,000} \times 100$	$\frac{100}{3,000} \times 100$
	= 3%	= 3.3%
Gross profit percentage:		
$\frac{\text{Gross profit}}{\text{Sales}} \times 100$	$\frac{600}{1,000} \times 100$	$\frac{1,000}{3,000} \times 100$
	= 60%	= 33.3%
Liquidity Ratios		
Current ratio:		
$\frac{\text{Current assets}}{\text{Current liabilities}}$	$\frac{180}{160} = \mathbf{1.125}$	$\frac{200}{120} = \mathbf{1.7:1}$
Quick ratio:		
$\frac{\text{Current assets} - \text{Stock}}{\text{Liquid current liabilities}}$	$\frac{100}{160} = \mathbf{0.6:1}$	$\frac{100}{120} = \mathbf{0.8:1}$
Stock turnover ratio:		
$\frac{\text{Cost of sales}}{\text{Average stock (using closing stock figures)}}$	$\frac{400}{80}$	$\frac{2,000}{100}$
	= 5 times	= 20 times

(b) Report

To: Chief Executive

Date:

From: Administrative Manager

Subject: Analysis of Firms A and B for year ended 30 June

In accordance with your instructions, I have analysed and interpreted the final accounts of A and B for the year ended 30 June. My detailed analyses are shown in the appendix to this report.

Analysis of Results

(a) Profitability

The return on capital employed for each firm was similar at 15% for A and 15.4% for B. These returns seem slightly low but are above the returns that could be achieved on many forms of investment. We do not have any previous years' figures to compare them with, so it is difficult to draw a conclusion from only one year's results.

The most significant difference between A and B lies in the gross profit percentages of 60% and 33.3% respectively. A must have a better pricing policy or a means of purchasing goods for resale at more favourable rates.

However, the net profit percentage is similar for both at 3% and 3.3% respectively. This low net profit percentage is a concern for A in particular given its favourable gross profit percentage. A appears not to be controlling overhead expenses as effectively as B.

(b) Liquidity

The current ratios were 1.125:1 and 1.7:1 respectively. Both seem a little low given the norm of 2:1 but A in particular gives cause for concern.

Again both liquidity ratios at 0.6:1 and 0.8:1 are a little low compared with the norm of 1:1. Without knowing the specific trade of A and B it is difficult to conclude whether those ratios are acceptable but again A gives particular cause for concern.

The stock turnover ratio of B at 20 times per annum is four times greater than A at 5 times per annum. It seems unusual to have such a difference in turnover rates given that A and B are in the same line of business. It would appear that B has chosen a high stock turnover but lower gross profit margin than A. Both, however, obtained the same return on capital employed.

Difficulties in Use of Figures Alone

Only closing stock figures are available so their use instead of average stock figures could give a misleading stock turnover ratio. For example, a high year-end stock build-up could explain A's low stock turnover ratio.

We are not told the different accounting policies used by each firm. Therefore we may not be strictly comparing like with like. A, for example, may adopt a very different depreciation policy from B. In addition, B has revalued land whereas A has not.

We have no information on aspects of each business such as staff quality and turnover, geographical location, attitudes to the environment etc. This would need to be considered in addition to the figures.

Conclusion

The return on capital employed for each business is not unacceptable although it could be improved. A's control of overhead expenses gives cause for concern and needs to be examined further. Liquidity of A gives additional cause for concern, although that of B is also lower than would be expected.

Example 2

Roundsby Ltd is a construction firm and Squaresby Ltd is a property company which specialises in letting property to professional firms. The following information is relevant:

	Roundsby Ltd	Squaresby Ltd
	£	£
£1 ordinary shares	600,000	150,000
£1 preference shares (10%)	15,000	450,000
Retained profits	600,000	75,000
8% debentures	75,000	450,000
Operating profit for the year	300,000	300,000
Current market price per ordinary share	£3.65	£10.20

The rate of corporation tax is 25%

Tasks

- (a) (i) What do you understand by the term gearing?
- (ii) Calculate the gearing ratios for both Roundsby Ltd and Squaresby Ltd.
- (b) Prepare a schedule for each company in which you indicate the profit remaining after allowing for debenture interest, taxation and the preference dividend.
- (c) Calculate the earnings per share for each company.
- (d) Calculate the price earnings ratio for each company.

Answer

- (a) (i) Gearing is the relationship of fixed-cost capital to equity capital, normally expressed by the ratio:

$$\frac{\text{Long - term loans} + \text{Preference share capital}}{\text{Total ordinary shareholders' funds}} \times 100$$

(ii) Roundsby: $\frac{15,000 + 75,000}{600,000 + 600,000} = 7\frac{1}{2}\%$

Squaresby: $\frac{450,000 + 450,000}{150,000 + 75,000} = 400\%$

(b)	£	£
Operating profit	300,000	300,000
Debenture interest	<u>(6,000)</u>	<u>(36,000)</u>
Profit before tax	294,000	264,000
Tax (25%)	<u>(73,500)</u>	<u>(66,000)</u>
Profit after tax	220,500	198,000
Preference dividend	<u>(1,500)</u>	<u>(45,000)</u>
Profit available to ordinary shareholder	219,000	153,000

(c) EPS: Roundsby = $\frac{£219,000}{600,000} = 36.5$ pence

Squaresby = $\frac{£153,000}{150,000} = 102$ pence

(e) PE ratio: Roundsby = $\frac{£3.65}{£0.365} = 10$

Squaresby = $\frac{£10.20}{£1.02} = 10$

Example 3

The following are extracts from the final accounts of a trading company over the last two years:

Profit & Loss Data

	Year 1	Year 2
	£	£
Purchases (all on credit)	216,000	285,000
Sales (all on credit)	675,000	834,000
Cost of sales	210,000	272,000
Gross profit	465,000	562,000
Net profit before tax	130,000	200,000

Balance Sheet Data

	Year 1		Year 2	
	£	£	£	£
Fixed Assets		620,000		800,000
Current Assets				
Stocks	11,000		24,000	
Debtors	95,000		106,000	
	<u>106,000</u>		<u>130,000</u>	
Current Liabilities				
Trade creditors	(28,000)		(39,000)	
Bank Overdraft	(39,000)		(77,000)	
Taxation	(10,000)		(20,000)	
Proposed Dividends	(25,000)		(30,000)	
	<u>(102,000)</u>	<u>4,000</u>	<u>(166,000)</u>	<u>(36,000)</u>
		624,000		764,000
Long-term Liabilities				
Mortgage		(100,000)		(90,000)
		<u>524,000</u>		<u>674,000</u>
Capital and Reserves				
£1 ordinary shares		300,000		300,000
Retained profits		<u>224,000</u>		<u>374,000</u>
		524,000		674,000

Tasks:

- Calculate **two** profitability ratios for both years.
- Calculate **two** liquidity ratios for both years.
- Calculate **two** efficiency ratios for both years.
- Briefly comment on the financial performance of the company over the two years.
- Briefly discuss the options available to the company to eliminate the negative working capital.

Answer

(a) Two from:	<i>Year 1</i>	<i>Year 2</i>
Gross profit percentage	$\frac{465}{675} \times 100 = 69\%$	$\frac{562}{834} \times 100 = 67\%$
Net profit percentage	$\frac{130}{675} \times 100 = 19\%$	$\frac{200}{834} \times 100 = 24\%$
Return on capital employed	$\frac{130}{524} \times 100 = 25\%$	$\frac{200}{674} \times 100 = 30\%$

(NB There are acceptable variations to the basis of calculating the ROCE.)

(b) Current ratio	106 : 102 = 1.04 : 1	130 : 166 = 0.78 : 1
Acid test (Quick ratio)	95 : 102 = 0.93 : 1	106 : 166 = 0.64 : 1

- (c) Two from:

Rate of stock turn

(using closing stock)	$\frac{210}{11} = 19 \text{ times}$	$\frac{272}{24} = 11 \text{ times}$
-----------------------	-------------------------------------	-------------------------------------

Debtor collection period	$\frac{95}{675} \times 365 = 51 \text{ days}$	$\frac{106}{834} \times 365 = 46 \text{ days}$
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Creditor payment period	$\frac{28}{216} \times 365 = 47 \text{ days}$	$\frac{39}{285} \times 365 = 50 \text{ days}$
-------------------------	---	---

- (d) You should comment on improvement in profit indicators, deterioration in liquidity and link with increase in level of stock holding.

- (e) Lease assets rather than purchase them

Use debt factoring

Raise more long-term finance through loans or share issue

J. ISSUES IN INTERPRETATION

Financial Dangers and their Detection

(a) Declining Sales

The analyst will not have access to much of the information available to the directors but can still scent any dangerous sales trends from published accounts. Companies are required to include their annual turnover (or net sales – i.e. sales less returns), together with an analysis of the turnover on major activities for all but the smaller companies. Particular attention should be given to the make-up of sales, in order to spot whether total turnover is being maintained or increased by expanding trade in unprofitable areas, thus hiding a loss of business in more profitable fields. A company's sales should be compared with the total output of the industry concerned, to see whether it is holding its own with competitors.

As in all matters of accounting interpretation, one should not lose sight of the effect of inflation on turnover.

(b) Excessive Expenses

Three main tests can be applied to a set of company accounts in order to determine what is happening to the company.

- Comparison of each item in the profit and loss account with the corresponding figure for the past two, three or more years.
- Calculation of the percentage which each profit and loss item forms of the sales total – again, for comparison purposes.
- Subjection of each available item in the profit and loss account to a detailed analysis. Let us take wages as an example: figures relating to numbers employed, staff functions, overtime charges, and labour charges in relation to the turnover in each department should all be obtained if possible and compared with those of previous years and those of other, comparable, companies.

(c) Shortage of Working Capital

A shortage of working capital can soon bring a company to a halt, no matter how profitable its product. Indeed, inability to pay creditors through shortage of working capital is particularly dangerous when companies are expanding rapidly.

To detect a possible shortage of working capital, a careful watch should be kept on the ratio of current assets to current liabilities. If, year by year, trade creditors are growing faster than trade debtors, stock, and bank balances, one may well suspect that, before long, the business will be short of working capital. The speed with which a company collects its debts and turns over its stock are also indicators of the working capital's adequacy.

(d) Excessive Stocks

It is essential for the health of a company that capital should not be locked up unnecessarily in stock. The comparison of stock turnover rates from year to year will reveal whether the stock management of a company is deteriorating or improving; and this will be an indicator of the general management standards of the company.

In the second place (and perhaps this is more important) any tendency to manufacture for stock may be revealed. It should go without saying that manufacturing goods to be held in finished stock is a very dangerous practice. The manufacture of the goods will involve the company in

expenditure on materials, wages, expenses, etc. but no receipts will be obtained to pay for these items.

(e) Slow-paying Debtors

A danger similar to manufacturing for stock but not quite as pernicious is that of “dilatory” debtors. Any increase in the length of time debtors take to pay could indicate one of the following:

- a decline in the number of satisfied customers (implying a drop in standards of management, manufacturing or delivery)
- a drop in the standard of debt control or
- perhaps most serious, a falling-off in favour of the company’s product, forcing the company to maintain turnover by selling on credit to customers to whom it could not, usually, offer credit.

(f) Fixed Assets Needing Replacement

The usual method of presenting fixed assets in the accounts of limited companies is to show them at cost less aggregate depreciation at the balance sheet date. Additions and disposals of fixed assets are also shown.

In considering the fixed assets of a company, you must assess their real value, condition, and future life, in order to estimate when replacement will be necessary. This is important because the company needs sufficient finance available to effect the necessary replacements without seriously depleting working capital.

It is difficult to find a substitute for personal knowledge of the assets concerned – this is, obviously, a problem in the examination. However, an outline of the position can be seen by tracing the movements in a company’s fixed assets over the years and by comparing them with those of other companies in the same industry.

(g) Diminishing Returns

These are suffered when a successful company expands past its optimum size. From then onwards, every successive “dose” of capital put into the company yields a smaller return. This, to a certain extent, is what happened to the Cyril Lord carpet business when it entered the retailing field.

In searching for the tendency to expand beyond the optimum point, a close watch should be kept on the trend of net earnings as a percentage of capital employed. Any reduction in the percentage accompanied by an increase in capital employed must be treated with considerable suspicion.

(h) Over-trading

“Over-trading” means that a business has insufficient funds to carry out its operations at a satisfactory level. It implies that the working capital ratio is too low, and it may mean that a business cannot meet its maturing financial obligations to its creditors.

Over-trading is caused by a rapidly expanding business outgrowing its initial asset structure and capital resources. The remedy would be the raising of temporary loans, short-term finance or, more probably, additional permanent capital.

We have, so far, mentioned the term “over-trading” only in passing, although we have stressed the importance of retaining an adequate balance of working capital. As this is a point to look

for when assessing a set of accounts, you should be able to identify quickly any symptoms of over-trading.

- From the banker's point of view, a call for extended or increased overdraft facilities may suggest over-trading. Alternatively, the hard core of the bank balance or bank overdraft may shift in such a way as to suggest a strain on resources.
- From the customer's viewpoint, a call for additional credit may denote a shortage of funds. Similarly, an extended credit period may also suggest over-trading.
- When stock shows a significant increase over a previous period, this sometimes indicates failure to sell the goods. Funds are being invested in the production process but the money is not returning as quickly in the form of sales.

Be always on the alert for any signs of strain on liquid resources. You should be able to recognise weaknesses in accounting documents in the same way as a doctor identifies symptoms of illness.

Profit and Loss Account Interpretation

The two most important figures in the profit and loss account are at opposite extremes – sales at the top and final net profit at the foot. Remember the effect of concepts and accounting bases, particularly, in assessing the value of the latter.

When considering the profit and loss accounts of a company over a period of three to five years, the following questions should be asked.

- (a)
 - (i) Is the turnover steady, increasing or falling?
 - (ii) If it is steady, why isn't it increasing?
 - (iii) If it is increasing or falling, why?
 - (iv) Is this state of affairs likely to continue?
 - (v) If not, what will stop it?
- (b)
 - (i) Is the pattern of sales the same throughout the period, or has there been a change in composition?
 - (ii) Is the business still selling the same sort of thing as it always did, or has it turned to new markets?
- (c) Has the gross profit percentage been affected? A distinction must be drawn here between a fall in gross profit percentage and a fall in total gross profit.
 - (i) A fall in **gross profit percentage** may be overcome by increased sales so that the final net profit does not suffer. It will, however, bring a corresponding fall in the net profit sales ratio.
 - (ii) A reduction in **total gross profit** is likely to be more disastrous, in view of the effects of fixed costs.
- (d) How do selling and distribution costs vary with changes in turnover? One might expect there to be a significant fixed component, together with a fairly large variable one. Certainly, such costs should normally increase (or fall) less than proportionately to turnover.
- (e) Are the ratios of net profit to sales and net profit to capital employed reasonable, bearing in mind the nature of the business?

- (f) Do the accounts suggest that there may have been changes in the conduct of the business?
- (g) Do the accounts give any hint that there has been lack of prudence in earlier years?

Balance Sheet Interpretation

The **danger points** to look for when examining a balance sheet may be summarised as follows.

(a) Cash Position

Shortage of liquid resources will cause a company considerable trouble.

(b) Stock Position

(i) **Excessive stocks** may be the result of overtrading or weak stock control.

(ii) **Shortage of stock** may be a sign of lack of liquid funds.

Remember that different industries have different stock-holding policies and that seasonal factors may have to be taken into consideration.

(c) Average Collection Period

The average collection period will rise if there is poor credit control or weakness in collection. On the other hand, the average collection period may fall if the concern's credit policy is dictated by a shortage of funds.

(d) Working Capital

Working capital will fall if fixed assets are purchased without increasing the capital funds of the company.

(e) Money Owed

Increases in the amount owed to creditors are, usually, a sign that the business has been forced to "borrow" funds by delaying payment of its debts.

Capital Gearing

Some companies have to have far more fixed assets than others, and this affects the type of capital structure adopted. The term used to describe the relationship between the different classes of capital is **capital gearing**. We distinguish two main types of capital gearing, as follows:

- **High Gearing**

This is where a company has a large proportion of fixed interest and fixed dividend capital, e.g. loan capital and preference shares.

- **Low Gearing**

This is where a company has a large proportion of ordinary share capital plus reserves and undistributed profits.

The gearing ratio is:

$$\frac{\text{Fixed Interest capital} + \text{Fixed dividend capital}}{\text{Ordinary share capital} + \text{Reserves}}$$

An example of the calculation of gearing ratios is given below.

The total capital of two companies, Sea and Breeze, is divided up as follows:

	Sea	Breeze
	£	£
Share Capital		
8% Preference shares £1 each	40,000	10,000
Ordinary shares £1 each	15,000	50,000
Reserves		
Undistributed profits	5,000	30,000
Loan Capital		
7% Debentures of £1 each	40,000	10,000
	<u>100,000</u>	<u>100,000</u>
Gearing ratio	$\frac{40,000 + 40,000}{15,000 + 5,000} = 4:1$	$\frac{10,000 + 10,000}{50,000 + 30,000} = 0.25:1$

Therefore Sea is a high-g geared company and Breeze is a low-g geared company.

When considering whether to have a high-g geared or low-g geared capital structure, the following points are important:

(a) Control

If the directors are to run the company with the minimum amount of interference, it is generally advisable to have a low-g geared capital structure. High gearing can be difficult sometimes if preference shareholders and debenture holders prove to be unhelpful when controversial decisions have to be made.

(b) Nature of Operations

The nature of the operations in which a company is engaged will also affect the gearing. Some companies are engaged, for example, in the manufacture of complicated machinery and need a very large investment in fixed assets. On the other hand, many companies have very few fixed assets, especially in a service industry.

When a company has a large investment in fixed assets it may be possible to obtain funds by issuing secured debentures, which is a relatively cheap method of obtaining money. Thus this type of company may often be a high-g geared company.

(c) Effect on Earnings

Fluctuations in profits have disproportionate effects upon the return to ordinary shareholders in high-g geared companies. This can affect the pricing of ordinary shares on the Stock Exchange, which in turn may influence directors, who will be looking for stability in the price of the company's ordinary shares, when faced with raising more capital.

An example will illustrate the effect of gearing upon earnings:

	Company X (low-gearred)	Company Y (high-gearred)
	£000	£000
Ordinary share capital plus reserves	10,000	2,500
Loan capital: 10% debentures	—	7,500
	10,000	10,000

	Company X		Company Y	
	Year 1	Year 2	Year 1	Year 2
	£000	£000	£000	£000
Operating profit (before deduction of loan interest)	2,000	3,000	2,000	3,000
less Loan interest	—	—	750	750
Available for distribution to ordinary shareholders	2,000	3,000	1,250	2,250
Return on ordinary share capital	20%	30%	50%	90%

We can see that the increase in profits in Year 2 has a much greater effect on the return on ordinary share capital in Company Y than in Company X. Similarly, a decrease in profits would produce a much more severe effect in Company Y.

(d) **Stability of Business Profits**

An increase in a company's level of gearing is accompanied by an increase in financial risk, because fixed interest has to be paid regardless of business performance. If the demand for the product being manufactured/sold is stable, with the result that the profit being earned does not vary much from year to year, it may be possible to have a highly geared capital structure. Conversely, when a business is of a fairly speculative nature, a low-gearred capital structure will generally be essential.

(e) **Cost of Capital**

The ordinary shareholders will want to achieve an adequate return on capital given the risk they are bearing. Since preference shareholders and debenture holders have a first call on earnings, they can be paid a lower rate than the ordinary shareholders. Therefore it is useful to have a reasonable proportion of fixed interest capital, both to reduce costs and to enable the ordinary shareholders to be paid quite a high return on capital invested, providing profits are adequate.

The company must consider all the above factors when deciding on capital structure. It is particularly important to analyse gearing because many companies increase their dependence on borrowed funds in order to try to push up earnings per ordinary share (see (c)). While profits are rising this can prove successful, but if there is a slump in trade, fixed interest must still be paid and many company collapses are due to an inability to meet commitments to debenture holders. This risk in respect of

high-gear companies needs to be recognised and matched against the possibility of continued regular growth in company profits.

Capital Position

(a) Capital Structure

For a company to be successful, it is essential that its capital structure is satisfactory and tailored to its needs. In examining a set of company accounts, you should ascertain whether the capital structure is satisfactory. The points to look for are as follows.

- If the business is of a speculative nature, a large proportion of the capital ought to be made up of ordinary shares.
- Interest on debentures and other prior charges should not be unreasonably high.
- The terms of repayment of debentures, redeemable shares, etc. should be within the capacity of the company.
- The capital structure of the company should be sufficiently elastic to allow for future development – by the issue of additional debentures, for example, if new assets are required.

(b) Under- and Over-capitalisation

Although it is difficult to say what is the optimum amount of capital any one company needs to operate successfully, it is relatively easy to recognise under- or over-capitalisation, and the dangers of these conditions.

- **Over-capitalisation**

A company is over-capitalised when a portion of its capital resources is not fully used in the business and does not earn an adequate return. Sufficient profits will not be earned to justify the capital employed and, in acute cases, preference dividends may be jeopardised.

Over-capitalisation can be caused by:

- (i) Failure to write off redundant assets
- (ii) Excessive valuations of goodwill and similar assets
- (iii) Failure to use surplus liquid resources when branches are closed down
- (iv) Unjustified capitalisation of expenditure that should have been written off (e.g. cost of advertising campaigns).

- **Under-capitalisation**

When the capital resources of a company are not consistent with the volume of its trading, expenditure is likely to increase because of:

- (i) Bank charges
- (ii) Loan interest payments
- (iii) Inability to pay suppliers within the discount period.

Substantial unsecured loans and inadequate or out-of-date plant indicate under-capitalisation.

One of the dangers of under-capitalisation is that the company may not be able to take advantage of attractive new opportunities when they arise.

(c) Return on Capital Employed

In order to appreciate a company's capital position (to see whether it is adequately capitalised or over- or under-capitalised) a computation of the return earned on actual capital employed is very useful. By "actual capital employed" we mean the capital employed in the business, obtained by replacing the book values at which assets and liabilities appear in the balance sheet with market values. Furthermore, in a calculation of this sort, intangible assets such as goodwill are ignored.

Question for Practice

This question is to help you think in a practical way about financial tactics.

The accountant of Wiley Ltd has prepared the following estimated balance sheet as at 31 December, Year 2.

Wiley Limited
Estimated Balance Sheet as at 31 December, Year 2

	£	£	£	£
Freehold property			600,000	
Depreciation			<u>100,000</u>	500,000
Current assets				
Stock (marginal cost)	590,000			
Debtors	<u>160,000</u>	750,000		
Current liabilities				
Overdraft	60,000			
Trade creditors	<u>140,000</u>	<u>200,000</u>		<u>550,000</u>
				1,050,000
Debentures (repayable Year 10)				<u>250,000</u>
				<u>800,000</u>
Capital				
Called-up ordinary shares £1			500,000	
Reserves			250,000	
Profit for Year 2			50,000	800,000

The directors are disappointed with the estimated profit for Year 2 and the financial position displayed in the balance sheet. The following suggestions are made for consideration:

- (i) To make a capitalisation issue to existing shareholders on the basis of one £1 share for every two shares held.
- (ii) To increase the depreciation charged on the freehold buildings from £20,000 to £30,000.

- (iii) To arrange a loan for an extra £100,000 also repayable in Year 10; this is to be paid to the company on 31 December Year 2.
- (iv) To value stock at total cost £680,000 for the purpose of the accounts. The Year 1 accounts included stock at marginal cost (you will understand this term later) of £400,000 and the corresponding figure for total cost at that date was £470,000.
- (v) To offer cash discounts for prompt payment in respect of future sales. If this course is followed, it is estimated that sales will be unaffected, but discounts of £3,000 will be allowed during the period October – December, Year 2 and trade debtors at the end of the year will amount to £120,000.

Required

Taking each course of action **separately**, a statement showing the following:

- (a) Net profit for Year 2
- (b) Bank overdraft (or balance) as at 31 December Year 2
- (c) Working capital as at 31 December Year 2
- (d) Acid test ratio as at 31 December Year 2

Present your answer in the form of a table as shown below:

Course of Action	Net Profit	Bank (Overdraft) Balance	Working Capital	Acid Test Ratio
(i)				
(ii)				
(iii)				
(iv)				
(v)				

Make suitable notes explaining the reasons for your entries in the table. Ignore taxation.

ANSWER TO QUESTION FOR PRACTICE

Course of Action	Net Profit	Bank (Overdraft) Balance	Working Capital	Acid Test Ratio
(i)	£50,000	(£60,000)	£550,000	0.8 : 1
(ii)	£40,000	(£60,000)	£550,000	0.8 : 1
(iii)	£50,000	£40,000	£650,000	1.4 : 1
(iv)	£70,000	(£60,000)	£640,000	0.8 : 1
(v)	£47,000	(£23,000)	£547,000	0.7 : 1

Notes

- (i) Involves purely a book adjustment. No money changes hands.
- (ii) Affects only new profit.
- (iii) Involves £100,000 cash coming into the business and therefore affects the last three columns.
- (iv) Requires a restatement of both opening and closing stocks at total cost.

Profit is £50,000 + (£680,000 – £590,000) – (£470,000 – £400,000)

- (v) Cash discounts reduce trade debtors at close by £40,000 but only £37,000 will actually be received in cash, and £3,000 must be charged to profits, hence the net profit reduction. The overdraft is reduced by £37,000 cash received. £40,000 debtor reduction and £37,000 overdraft reduction means a £3,000 drop in working capital.

Liquidity or acid test ratio = £120,000 ÷ £(140,000 + 23,000)

Study Unit 9

Sources and Costs of Finance

<i>Contents</i>	<i>Page</i>
Introduction	201
A. Finance and the Smaller Business	201
Banks	201
Venture Capital Providers	202
Small Loans Guarantee Scheme	202
Grants	202
Finance Companies and Lessors	203
Hire Purchase and Leasing	203
B. Finance and the Developing Business	204
Investment Capital	204
Short-term Finance	205
C. Finance for the Major Company	207
Treasury Management	207
Managing Exchange Rate and Interest Rate Risk	210
Raising Finance	212
D. The London Money Market	213
E. The Cost of Finance	214
F. Cost of Equity	215
Dividend Valuation Model	215
Dividend Growth Model	215
Share Issue Costs	216
Taxation	217
Retained Earnings	217

(Continued over)

G.	Cost of Preference Shares	217
H.	Cost of Debt Capital	217
I.	Weighted Average Cost of Capital (WACC)	218
J.	Cost of Internally Generated Funds	219
K.	Management of Factors Affecting Share Prices	221
	Relationships with Shareholders	221
	Assessment of Risk in the Debt versus Equity Decision	222
L.	Factors Determining Capital Structure	224
	Ability of the Earnings to Support the Structure	224
	Attitudes of Investors	225
	Cost of Capital	226
M.	Advantages and Disadvantages of the Principal Financial Alternatives	227
	Overdraft	227
	Loan	228
	Hire Purchase	228
	Leasing	229
	Debentures	229
	Equity Capital	230

INTRODUCTION

We looked, in general terms at the funding of businesses earlier in the course and now we return to examine certain aspects in more detail.

We start with a consideration of the various sources of funds available to different types of business according to their needs. In particular we shall look at the position for small businesses and for those which are growing, before reviewing the widening scope of the money markets open to large companies and some of the attendant needs to manage funds.

A. FINANCE AND THE SMALLER BUSINESS

It is generally difficult for a newly formed or small business to obtain more than a limited amount of borrowed funds from a clearing bank, since the bank will look for a track record of past performance on which the future projections have been based. Proportionately many more small businesses fail than larger, more established companies, and generally speaking this is the result of inadequate management experience and lack of working capital facilities with which to develop the business.

The financial markets that support the public company obtain most of their investment funds from unit trust, insurance and pension funds, for the managers of which safety is very important. Despite efforts by the government to support the growing number of small firms which have been established in recently years, raising new capital before the company has established a successful record over three or more years remains extremely difficult.

For the owners of a small business who are expert at what the company does, rather than how to finance it, the world of banking and finance will often appear confusing. There are so many financial and capital instruments available that making the right choice, even when they are available to the company, may seem a formidable task.

Most businesses will need to resort to outside borrowing at some time, and if the rate of return (the earnings) arising from the use of those assets which have been financed by debt exceeds the borrowing cost, the surplus will benefit the shareholders by increasing the revenue reserves. Essentially, when the rate of return on assets is high, a high level of gearing may be considered, since the earnings will exceed the cost of borrowing by a large amount.

Banks

Banks are not risk-takers and do not provide venture capital. They will expect customers to provide a reasonable proportion of the required funding from their own resources. Whilst banks will usually be willing to lend a degree of support, where tangible security is agreed, the customer should expect to be able to negotiate a reduction in the rate of interest charged.

Clearing banks like to lend against assets – in other words, they are **lenders against security**. If the owners of the new business have some property, shares or other tangible assets which they can offer their banker as security, it is possible that funds will be made available by the bank. Without the ability to offer some additional tangible security, the new business will probably have to seek financial backing from its shareholders or an outside private investor, such as a venture capital provider.

Overdrafts provided by a bank are intended to cater for short-term, seasonal fluctuations in financing requirements of its customers' businesses and not to be part of the permanent capital of the business, as such overdraft facilities are technically subject to recall (repayment) on the bank's notice.

Bank loans may be arranged over periods of up to ten years (more in some cases). These will be tailored to the needs of a specific project or capital purchase with repayments scaled to reflect future cash generation. Security will almost always be required in respect of a fixed-term loan from a bank. Although theoretically a bank loan cannot be recalled by the bank whilst the customer continues to honour the terms of the agreement, the majority will be subject to an annual review process when the published financial statements of the business are available.

Venture Capital Providers

Venture capital specialists may be willing to participate in a new project, but they will typically only show an interest in projects which require fairly substantial working capital, and where there is a planned exit route for them to realise their investment at some agreed future date. Venture capitalists will usually expect the principals of the new business to be able to demonstrate a thorough knowledge of the market sector in which the firm will trade, and this should be supported by evidence of successful performance in a managerial capacity in a related business.

Investors in Industry (3i) plc is possibly one of the better known venture capital providers for new ventures. This organisation has its roots back in 1945 when the Bank of England and the clearing banks formed the Industrial and Commercial Finance Corporation (ICFC) with the aim of financing small business development as a way to rebuild the UK in the post-war years. ICFC still exists as an active subsidiary within 3i and aims to assist small firms, but can now call on additional resources from within the group. The group will make a minimum investment of £100,000 (at the time of writing).

Small Loans Guarantee Scheme

When security is a problem, there is a government Loan Guarantee Scheme. Between 1981 and 1993, 33,000 small firms benefited from the **Small Firms Business Guarantee Scheme**, which provided more than £1 billion in loans to small firms.

The scheme is a joint venture between the Department of Trade and Industry (DTI) and several of Britain's High Street banks, and in 1993 improvements were made to it. The maximum loan available for **viable** projects was increased to £250,000, with the proportion guaranteed by government increasing from 70% to 85%.

There is a premium on the cost of borrowing – currently 1.5% per year on the whole loan for variable-rate loans and 0.5% per annum for fixed-rate loans. There are simplified arrangements, requiring less detailed accounting information and projections, permitting very small businesses to borrow up to £30,000.

Grants

Grants are available to **all** businesses, whether private, public, partnerships, sole traders, etc. Most carry a test relating to the number of **new jobs** created from a project or development requiring assistance. The second test for grant assistance will usually be that the project **cannot proceed without financial assistance**.

The following examples provide some insight into the variety of assistance that is available. Note: as this is an area that is continually changing, you should supplement your studies by your reading of the financial press.

- **Regional Selective Assistance** is considered by the local office of the DTI and is only available in areas defined geographically for the purpose of the availability of financial assistance. Where a major project involves investment in more than one area of regional

selective assistance, the DTI will consider the whole project centrally in London. Grants which are available in **special development areas** may carry higher cash amounts in respect of each job created.

- Loans may be available in support of job creation projects from the **European Investment Bank** and, in coal and steel closure areas, grants are available from the **European Coal and Steel Community (ECSC)**. An ECSC fixed-rate loan will be considered for any project which involves the creation of at least two jobs. Loans must be used to purchase fixed assets and up to 50% of the cost of the project can be made available. The ECSC loan rate of interest tends to be slightly higher than that of clearing banks. However, the source of funds can be useful to the managers who are contemplating a new project.
- **Local authorities**, including district and city councils, typically set aside funds to assist business enterprise. Purposes for which grant aid may be sought are as diverse as site clearance in urban development areas to assistance with equipment in light manufacturing businesses.
- In rural areas the **Rural Development Commission** aims to stimulate job creation and the provision of essential services in the countryside. As well as providing help to rural business seeking funding via the Loan Guarantee Scheme, there is an **Enterprise Allowance Scheme** for unemployed people who wish to start their own business. Additionally, there is the opportunity for additional support from the DTI who consider **Regional Enterprise Grants** in Assisted Areas, and the **Prince's Youth Business Trust** can provide loans to young entrepreneurs with sound plans who are under 29 years of age.

Finance Companies and Lessors

The main providers in this market sector are members of the Finance and Leasing Association, a trade association which lays down a Code of Conduct to which members must adhere and which represents members' interests in forthcoming legislation and with government departments. Finance companies typically specialise in providing financial accommodation in respect of fixed assets. Since they generally retain title to the assets throughout the term of the contract through which funds have been provided, they (unlike the clearing bank that often owns them) do not usually seek additional security by way of charges or debentures. They may, however, seek directors' personal guarantees when the directors of a small business are also the principal shareholders. This will support their involvement, which may be significant in proportion to the size of the net assets in the balance sheet.

Hire Purchase and Leasing

The legal distinctions between hire purchase, leasing and rental are well defined, although it may sometimes be difficult for the inexperienced person to distinguish between them simply by reading the supporting documentation of the contract.

Where the company pays rentals for the use of the asset under a leasing arrangement, the financier, who purchases and provides the asset, will be considered to be the legal owner who will be entitled to obtain and retain capital allowances applicable to the nature of the asset. Conversely, if the customer enters into a loan contract, secured by a charge on the asset, the customer will be viewed in law to be the owner, and the financier who provided the funds will, in effect, be the mortgagee (a secured creditor). Any capital allowances which may be available will be granted to the customer.

- (a) **Hire purchase** is in many respects a hybrid lying between the two legal concepts of lending and renting (hiring). The facility may be simply defined as "**hiring with the option to purchase**". By concession the Inland Revenue will generally permit the customer to claim and retain capital allowances, provided that the option-to-purchase fee is less than the market value

at the end of the contract term – in practice this is taken at present to be that the option to purchase fee should be no greater than 1% of the original cost of the asset.

Assets subject to hire-purchase contract will appear on the face of the balance sheet under fixed assets and will be depreciated in accordance with the accounting policy of the business. The liability to make future payments will be shown under creditors, split between payments due within 12 months of the accounting date and those (if any) payable thereafter.

- (b) **Leasing** was traditionally a facility which did not have to be reported on the face of the balance sheet of the customer (known as the lessee). With the growth in the market for leasing (exceeding 23% of all capital expenditure in the UK in the early 1990s), Statement of Standard Accounting Practice (SSAP) 21 introduced the concept of the **finance lease** and the **operating lease**, in an attempt to bring funds provided by leasing projects into the balance sheet.

Remember that:

- **Finance leases** are basically leases in which the owner (the lessor) will expect to recoup the whole (or substantially the whole) of the cost of perfecting the contract during the initial period of rental, referred to as the **basic lease period** (or primary term). Finance leases must be reported on the face of the balance sheet as a fixed asset, with the liability to pay future rentals shown within creditors.
- **Operating leases** do not need to be reported on the face of the balance sheet of a business and are defined within SSAP 21 as “any leases other than finance leases”. Common examples of operating leases include short-term rental contracts for tea-vending machines or office equipment, and contract-hire agreements for the provision of vehicles.

As operating leases are not reported as balance sheet items, they will not be included in gearing calculations. However, liability for payment of future rentals under the terms of contracts will be reported as a note to the accounts. Lenders and analysts will take these commitments into account when reviewing the company’s future financing needs.

B. FINANCE AND THE DEVELOPING BUSINESS

As a company grows, the founder(s) will generally need to recruit specialist managers to run the individual areas of activity. Once a business begins to expand its activities, its approach to financing will require careful planning. Whilst everything we have said about the financing of a small business will still be valid for the growing business at its next stage of development, its enhanced reputation, deriving from a successful past trading record, will provide greater opportunity and flexibility in the selection of the financial and capital instruments available to it.

Investment Capital

Most investment in a growing business will involve the issue of preference shares with special rights. Often a venture capital provider will be invited to participate, and the use of this form of capital instrument will help to ensure that the running yield will be as he or she would expect.

The acronym **CREEPS** means **cumulative, redeemable, and “everything else” preference shares**, illustrating the potentially flexible nature of investment capital once the company has built up an acceptable credit rating.

CREEPS have the following features and benefits:

- **Cumulative**, so that dividends accrue to the provider of funds, but the company is not contracted to make payment until the finances are adequate.
- **Participating**, so that the investor (be he or she a private investor, a venture capital provider, or some other class of provider) has a cumulative and participating dividend – this is typically expressed as a percentage of pre-tax profit.
- **Redeemable** at an agreed date (or possibly a range of dates) in order to give the investor an **exit route**, often achieved by applying to the Alternative Investment Market (in the past, the Unlisted Securities Market).
- **Convertible** to equity if the company should fail to achieve its planned profit targets or to pay dividends over time, to redeem the capital by the agreed dates or otherwise default on its obligations to the investor.

Short-term Finance

A business may not always wish to commit to long-term, fixed-rate debt capital which involves an increased risk. The owners may not wish to accept the partial loss of control resulting from the issue of further share capital (equities). In recent years, the capital markets have recognised this need in the growing company, and there has been an increased concentration on the short- or medium-term floating rate sector.

A major development in this area of capital provision is the arrival of the **note issuance facility** and the similarly rapid growth of the related short-term **Euronote** (the Euro-commercial paper market). This is supplying UK businesses with a means of raising cheap, short-term and flexible finance at floating rates.

A note issuance facility involves a package of medium-term back-up facilities provided by a group of banks. The banks will underwrite the facility to ensure that the borrower will obtain the required funds, usually over a period of three to ten years. The financial manager will usually be afforded other mechanisms so that he can raise short-term funds by a number of methods, not just from the underwriting banks. One example of this will be where the company will issue six-month dollar notes in the European Commercial Paper Market, a facility that will also allow the issue of notes in other currencies. The company will also be able to call for advances of a multi-currency nature, perhaps in dollars or sterling.

These are but a few of the many new arrangements that are developing. You will almost certainly learn of more from your reading of the financial press as new ideas come to market.

(a) Alternative Investment Market (AIM)

The Unlisted Securities Market (USM) of the London Stock Exchange closed its doors to new members at the end of 1994 and closed completely at the end of 1996. It was expected that the new AIM would appeal to a wide variety of companies, including management buyouts, family businesses, former Business Expansion Scheme (BES) companies, and possibly start-ups. The AIM has its own marketing and management team and is regulated by the Stock Exchange's Supervision and Surveillance Departments. To be eligible for admission to the AIM, a company must:

- **Publish a prospectus** which complies with the Public Offers of Securities Regulations and contains a detailed history of the directors, details regarding the promoters of the company and holdings of major shareholders (taken to be 10% or more). In addition there must be a working capital statement and a risk warning to investors. Whilst not

being a requirement, where a company includes a profit forecast this must be accompanied by a statement from the firm's auditors confirming its integrity.

- **Advertising the prospectus** is achieved by providing free copies to the public from the UK address specified in the document for a period of 14 days from the date of admission to the AIM – there are no other advertising requirements.
- **Accounts must have been published** in a form which complies with either the UK or the US Generally Accepted Accounting Principles or with International Accounting Standards.

There are no specific requirements in respect of initial capitalisation, length of trading record or percentage of shares available to the public at large. However, where a company has been in existence for less than two years, directors and employees must agree not to dispose of their holdings in the company for at least 12 months from the time of admission to the AIM. There are no requirements in respect of the method employed for the initial public offering.

Companies trading on the AIM must appoint a nominated **broker** and a nominated **adviser**, although these roles may be combined. The broker's duties will be to assist market liquidity by using "best endeavours" to match bargains in the company where there is no market-maker to make a market in the stock. The adviser will be responsible for advising the directors regarding their compliance with the rules of the Exchange.

Firms must agree to comply with **continuing obligations**, including prompt publication through the Exchange's Regulatory News Service of:

- Price-sensitive information
- Audited annual results
- Unaudited interim results
- Changes in directors
- Dealing in the company's securities by directors
- Other material transactions

The complex class transaction rules affecting listed companies are replaced by a definition of **major transactions**, i.e. those in which a 10% holding arises in a particular class of shares; it is at this level that a disclosure must be made. Where related parties are concerned, a 5% test is substituted and details must be sent to shareholders at least seven days before the transaction is completed. Transactions between related parties below the 5% level must be reported in the annual financial statements.

Once a company has traded on the AIM for two years, it may apply to be included in the Official Listed Market without producing listing particulars, although some additional information will be required with its application.

Debt is usually cheaper than equity, mainly because it represents a lower risk to the financial institution, and therefore the use of debt finance will, in most circumstances, reduce the overall cost of capital to the business. However, if there is too much debt capital, there is the risk that the market value of the company will be adversely affected. The AIM provides the growing company with the chance to "go public", with the advantage that it should be much easier to obtain fresh capital as the result of issues made to the public at large.

(b) Insurance Companies and Mortgages

As companies grow, this form of financing typically becomes less common. The institutions involved provide loans secured by the right to take over the building(s) of the company in the event of default under the terms of the loan agreement. In common with **building societies**, some of whom also provide commercial mortgage facilities, the period of the loan may extend to in the region of 20 years.

Large firms will generally arrange term funding from a bank or merchant bank, or finance their building requirements through an issue on the market.

(c) Sale and Leaseback of Real Property

Under this financing arrangement, a company will sell its building to an investment company or other specialist in the field. The purchasing company (lessor) takes an interest in the freehold land on which the property stands, and the selling company becomes the lessee who then rents the building which it previously owned.

The main disadvantage of this method is that fewer assets remain to support future bank borrowing, and the effect of the removal of a significant asset from the balance sheet may cause an adverse reaction by financial commentators and the market in general.

C. FINANCE FOR THE MAJOR COMPANY

The trend of internalisation of corporate finance means that the financial manager of the major or multinational company must become expert in a wide variety of areas. He or she must also remain up-to-date in a worldwide market in which material change occurs in one area or another almost every day. Clearly, this is a massive task, and to combat the problems that result, larger companies have typically created specialist functions, each reporting to the financial director.

Treasury management is invariably the area concerned with financial management, often on an international scale.

Treasury Management

There are four key areas to the role of a treasury in a major company.

(a) Working Capital and Liquidity Management

Management of the short-term needs of the organisation will be fundamental. Whilst individual operating units will often arrange their own working capital needs through local banks, reports of facilities arranged, level of utilisation, interest and other charges, etc. will be collated and controlled from the central treasury function. The treasurer will be actively involved in full liquidity control and this includes all areas of activity that have an impact on cash flow.

(b) Cash Management

Cash management may be described briefly as an action to achieve optimum use of the organisation's overall financial resources. The discipline involves:

- Minimising aggregate borrowing needs.
- Minimising interest costs and lending fees.
- Optimising the use of alternative financing methods.

- Maximising return on investments.
- Putting idle credit balances to work.
- Controlling bank accounts.
- Controlling transmission charges.
- Optimising automated processes for information-gathering and money movements where this can be cost-justified.
- Managing exposure to financial risk (e.g. exchange rate movements).
- Generating relevant information for management reporting.

Specific problems may arise where the treasurer has to deal with:

- Foreign, quasi-autonomous subsidiaries in other countries
- A vast number of accounts with many different banks
- Multiple foreign currency arrangements
- Subsidiaries with different banking arrangements.

Large corporate organisations employ a variety of skills, techniques and services to manage these potential pitfalls brought about by growth. Some of the most important of these are:

(i) *Set-off*

This is where credit balances on some accounts are netted against debit balances on other of the company's accounts with the same bank. Interest will then only accrue on the **net** overdrawn balance(s).

(ii) *Automated Transfers*

This achieves the same goal as set-off, but a system is in place to concentrate all individual account balances into one nominated account using information technology.

(iii) *Centralised Investment Funding*

This is a means of controlling a large number of accounts by carrying out investments (if in net credit) and funding (if the account is net overdrawn). One nominated account will be used, in effect as a cash reservoir, and this account will form part of a set-off, or automated transfer, facility.

(iv) *Interest Allocation*

This is a means of internally allocated interest debits and interest credits for accounts that are part of a set-off arrangement. The aim is to maintain the individual accounting autonomy of individual operating units, since each carries a fair proportion of the financing costs.

(v) *Balance Reporting*

Using a computer terminal linked to the bank's computer, the treasurer can obtain up-to-the-minute information about the organisation's bank accounts, allowing him or her to react in good time to arrange **funds transfers**.

(vi) *Rate Indication Services*

Up-to-date information on a range of interest rates and exchange rates can be obtained through a computer terminal.

(vii) Treasury Workstation

This is a computer package designed to facilitate the compilation of data on spreadsheets to assist with cash or exposure management. It should improve the close monitoring and regular updating of forecasts.

(c) Surplus Funds Management

Ideally, treasurers will employ surplus funds to obtain the best possible returns and with maximum security. A typical strategy to achieve this goal would include:

- Establishing objectives which follow from the overall objectives of the business.
- A clear definition of acceptable risk versus return established by the board to define the parameters in which the treasury function can operate.
- Establishing a framework through which to identify surplus funds and plan to accommodate future needs.
- Ascertaining periods of availability and need from business plans.
- Evaluating courses of action, which may include:
 - (i) Do nothing as very short-term.
 - (ii) Invest internally by funds transfer elsewhere in the organisation.
 - (iii) Invest externally for the term projected for the surplus.
 - (iv) Simply monitor progress (i.e. wait and see what happens if the outcome is uncertain or the market is particularly volatile).

In evaluating the alternatives, a variety of factors will need to be taken into account. These might include:

Risk	Return	Interest rates
Liquidity	Accessibility	Complexity
Term	Type of rate	Minimum/maximum criteria
Cost	Taxation	Image/policy

Facilities available to assist the large company treasury department include:

- Money market deposits
- Bills
- Equities
- Commercial paper
- Bonds
- Gilts
- Certificates of deposit

(d) Exposure Management

Exposure, or risk, is a continuing feature of life and nowhere more certainly than in business. Most commonly this will manifest itself in the guise of **commercial risk**, such as (for example) buyers' financial failure. Financial stability and future performance can, of course, be affected

by market and economic movements and these factors also fall within the concept of exposure management.

However, the principle concern will be with **exchange rate** and **interest rate movements**. This concept of exposure is most readily understood by reference to exchange rate fluctuations. These can potentially give rise to three types of currency exposure:

- **Transaction:** exposure arises where a transaction is entered into which requires the conversion of one currency into another, **and** there is a time delay factor between the debt being incurred and the time for settlement.
- **Translation:** this occurs where items on the face of the balance sheet need to be converted from a foreign currency to the home currency to comply with accounting standards.
- **Economic:** basically this is any exchange rate risk arising other than as a result of those mentioned above. Typically it may arise as a result of currency fluctuations that impact (adversely or otherwise) on sales of goods exported by the organisation.

Interest rate movements also give rise to risk – something that is sometimes overlooked in the rapidly growing firm that has limited financial expertise. Clearly, borrowers are exposed when rates start to rise; investors are exposed when rates fall.

Managing Exchange Rate and Interest Rate Risk

The exposure create by these risks can be managed to a reasonable extent through **hedging**, a process of taking any action that protects against adverse movements in exchange rates or interest rates.

Hedging can take several forms, including:

- Do nothing and leave the exposure position uncovered.
- Hedge everything.
- Hedge selectively.

You should remember that movements may profit the organisation. This is where the skill of the treasurer will be of particular value – the skill of balancing cost with risk, with opportunity, within the policy laid down by the board.

There are a number of financial instruments to accommodate the treasurer's need to reduce risk. The most common are as follows.

(a) Interest Rate Techniques and Instruments

- ***Smoothing***

This is the process of creating a balance between fixed and floating rates.

- ***Interest Rate Swaps***

This is an agreement between two parties under which each agrees to pay the other's interest based on the underlying **notional** amount (there is no exchange of the principal sum) and for an agreed period. Different interest base rates apply, for example, parties may swap fixed-rate LIBOR payments for variable LIBOR payments.

- ***Options***

The most common options include:

- (i) **Interest rate guarantee** – a short-term option used for single transactions.

- (ii) **Interest rate cap** – this puts a maximum rate on the transaction and can relate to a number of transactions over several years.
- (iii) **Interest rate floor** – this sets a minimum rate below which interest rates will not fall and is the converse of the cap.
- (iv) **Interest rate collar** – this establishes both a maximum and a minimum rate outside which no movements will occur, or (alternatively) within which rates remain fixed.

- **Financial Futures**

These contracts are fixed in terms of rate, delivery period and in amount and provide an interest rate commitment for a future period that is agreed at the outset.

- **Forward Rate Arrangements (FRAs)**

These contracts provide for rates to be fixed in advance for a specific period commencing at some agreed future date. Unlike futures, which are highly standardised contracts, FRAs can be tailored to meet individual needs. FRAs are entirely separate from the principal amount of the loan or deposit, relating only to the interest element.

- **Fixed Forwards**

These are agreements to borrow or deposit an agreed amount for a fixed term commencing from a future date, but with the rate determined at the outset.

- **Matching**

Here, borrowing and deposits are linked to the same interest base. This provides a degree of cover and an alternative way of **hedging**.

(a) **Exchange Rate Techniques and Instruments**

- **Forward Contracts**

This is the most common **hedge** against exchange rate risk and provides a way of fixing the rate in respect of currency on an agreed future date. The amount involved will be agreed at the outset.

- **Forward Contracts with Option**

This is not a pure option contract as the exchange still has to take place. However, in this type of forward contract, delivery (i.e. the exchange) may take place at any time between two dates agreed at the outset. This allows the treasurer some flexibility in trying to select the optimum time to perform his or her obligations under the contract.

- **Currency Options**

The buyer has the right, but not the obligation, to buy or sell a specified amount of currency at a specified rate and within a future period of time (or on a nominated future date).

- **Currency Swaps**

These are agreements under which two parties commit to buy specific amounts of foreign currency from each other, at an agreed rate, and to sell the same back on an agreed date in the future at the same rate. During the intervening period, payments are exchanged in respect of the interest payments relating to the principal sum.

- **Matching**

This is an alternative to the forward contract where exposure in respect of loans or receivables is short-term. A currency loan is taken to match the sum(s) due at maturity of the loan – repayment will be in the same currency as the loan taken for matching.

- **Leading and Lagging**

This is the process of accelerating or delaying payments to take advantage of perceived future fluctuations.

- **Currency Accounts**

This can be a good way of avoiding the expense and risks involved in exchanging currency where there is a two-way flow of funds available.

- **Basket Currencies**

Because the core or base is made up of several constituent currencies, individual rate movements will have a less dramatic.

Raising Finance

All types of finance can be broadly defined within two headings: **equity** and **debt**. These can be compared as follows:

Equity	Debt
Usually permanent	Repayable in due course
Holders receive dividends	Interest must be paid
Holders have a stake in the business	Holders are creditors
Increased equity can improve the financial base	Increased debt can have an adverse effect
It is a permanent cost	It is a temporary cost
Can be costly and complicated to arrange	Usually quick and easy to arrange

The treasurer will need to take account of many factors when deciding on the most appropriate form of finance to use. Some of the main headings are listed below:

● Debt v. equity	● Purpose	● Amount
● Sole or syndicated	● Availability	● Currency
● Fixed v. floating rate	● Maturity	● Repayment
● Loan or revolving	● Cost	● Committed or uncommitted
● Documentation	● Security	● Complexity
● Public or private	● Exposure	● Balance sheet
● PR/image	● Timing	● Taxation
● Policy	● Politics	● Alternatives

D. THE LONDON MONEY MARKET

The London money market in its broadest sense covers a wide range of UK institutions, among them:

- The Bank of England
- Merchant banks
- Discount houses
- Finance houses
- Pension funds
- Unit trusts
- Parallel markets
- Clearing banks
- Other banks
- The Stock Exchange
- Insurance companies
- Investment trusts
- Building societies

The Stock Exchange is now less of a central market as a result of technology which has resulted in traders being able to work principally from their offices.

The discount houses represent a particularly important market in Britain as they act as a buffer between the Bank of England and the clearing banks. By a system of Treasury bills which are tendered for by the discount houses weekly, the Bank can control to a large extent the rate prevailing in the domestic banking market, and this in turn impacts on other rates which are generally available. The discount market is a peculiarity of the UK system and is not mirrored in the US.

The parallel markets consist of the following:

- **Local Authority Market**

Generally the maximum term on this market is five years and much of its business is concerned with very short periods. The short-term local authority market is concerned with loans on call, overnight, at two, seven and up to 364 plus seven days' notice.

Lending comes mainly from banks and other financial institutions – generally local authorities can only afford to lend to each other after local taxes have been received. Transactions in this market tend to be around the £100,000+ bracket. Local authority securities and loans up to five years will be dealt with in this market.

- **Inter-bank Market**

This is a very short-term market with the majority of transactions being agreed for periods of three months or less. Money is often lent overnight, on call or for very short periods. Dealings on the market are only between banks on an unsecured basis and sums range from upwards of £250,000. Rates of the previous day's business will be published in the principal financial papers.

- **Certificate of Deposit (CD) Market**

First introduced into the UK in 1968, a certificate of deposit is a negotiable instrument which certifies that a sum of money has been deposited with a bank at a fixed or floating rate of interest. There is a maturity date on the certificate stating when the deposit will be paid by the issuing bank.

Certificates must be issued for periods of between three months and five years and in multiples of £10,000, with a minimum of £50,000 and a maximum of £500,000 per certificate. (There have been rare issues of £1 million in the past.) The market is available to banks, discount houses, building societies and a few non-financial companies.

Certificates are issued at par and quoted at an interest rate on maturity – they may be bought and sold in the same way as securities on the Stock Exchange.

- **Finance House Market**

This market is similar to the inter-bank market but between finance houses. Deposits will be for similar periods also.

- **Inter-company Market**

Companies are able to lend to each other, rather than through a third-party bank. The market has few controls and relies heavily on brokers to match borrowers with lenders. This market has grown through the recession as, we assume, companies desire to save on bank-related costs.

- **Eurocurrency Market**

Eurocurrency transactions apply to any transactions undertaken in a currency outside the country of origin of the particular currency concerned. This market started as a dollar market. On the short-term inter-bank Eurocurrency market, transactions may take place between banks on an unsecured basis from overnight to five years' duration. Most transactions are for six months or less and transactions of over £1 million are common.

Certificates of deposits in dollars, etc. have become important negotiable instruments in the currency deposit markets. These are issued for periods of three months to over five years, with minimum denominations of \$25,000. Generally, the secondary market for dollar CDs is confined to CDs issued by London banks in the UK.

- **Foreign Exchange Market**

This is a market frequently publicised in the national media. It is a wholesale market run through electronic systems linking brokers and the main banks in London and the main financial centres. Deals usually take only seconds and will be confirmed in writing.

The market's general business is to enable companies and others who trade to cover their deals from the time goods are delivered, to protect them from potentially volatile exchange rate fluctuations. Floating rates make life harder for speculators, since countries no longer choose to prop up their currencies in the way that has been seen in earlier times.

There are two markets, spot and forward. In the former a deal is struck and deliveries made in two days' time. Dealings in the latter involve delivery on any business day, after two days, often ranging for periods up to one year forward. Dealing is exclusively through banks.

E. THE COST OF FINANCE

In this second part of the study unit we will look at how the financial manager will review the cost of the various types of funds that make up his or her company's capital. In a listed company, the financial manager will need to know this in order for him or her to be able to satisfy the needs of investors, for if they are not satisfied they may cease to invest. For example, if the return on a company's ordinary shares is 8%, whilst a building society deposit will yield 10%, it is unlikely that the shares will seem very attractive (unless there is a real prospect of capital growth in the short term).

In all businesses, the managers should be aware of the cost of capital that is available to them. If they are not, they will be unable to make considered decisions regarding new projects, since they will be

unable to determine whether the project will generate a sufficient return on the funds needed to support it.

We will firstly consider the cost of the different types of funds such as equity, retained earnings, preference shares and debit capital, before then going on to look at the calculations behind the Weighted Average Cost of Capital (WACC), the assessment of the cost of internally generated funds and other factors which the financial manager will need to take into account in managing share prices.

F. COST OF EQUITY

The financial manager must take account of the expectations of the shareholders and the effect that changes in earnings and dividends may have on the share price. There are management tools available to him or her in the form of financial models to help with the appraisal.

Dividend Valuation Model

In order to calculate the **cost of equity** the dividend valuation model is used. The formula applied is expressed as:

$$K_e = \frac{D_e}{S_e}$$

where: K_e = cost of equity

D_e = current dividend payable

S_e = current share price (ex div)

For example, if the current dividend payable is 25p and the market value of each share is £2, then the cost of equity is:

$$\frac{25}{200} = 0.125 = 12\frac{1}{2}\%$$

The assumptions used in this model are as follows:

- The level of dividends is expected to remain constant in the future.
- Taxation rates applying to different classes of shareholders are ignored.
- The costs of any share issue are ignored.
- All investors receive the same, perfect level of information.
- The cost of capital to the company remains unaltered by any new issue of shares. In other words, any project undertaken utilising the funds from a share issue is no more and no less risky than any other project in which the company is currently involved.

Dividend Growth Model

Where it is expected that dividends will not remain the same in future but will grow at a constant rate, the dividend growth model can be applied. The formula is expressed as:

$$K_e = \frac{D_e(1+g)}{S_e} + g$$

where: g = the expected annual rate of growth.

Using our previous example, if the rate of growth is expected to be 5% pa, the cost of equity would be:

$$\begin{aligned} K_e &= \frac{0.25(1 + 0.05)}{2.00} + 0.05 \\ &= 0.1312 + 0.05 \\ &= 0.1812 \text{ or approximately } 18\% \end{aligned}$$

The biggest problem in applying this model is in deciding the level of growth that will be sustained in future years. The most usual approach is to take several years' historical data and then attempt to extrapolate forward. Using our example again, we will assume that the past dividends have been:

<i>Dividend per Share</i>	
Year 1	0.26
Year 2	0.27
Year 3	0.28
Year 4	0.32

We can now find the average rate of growth by using the following calculation:

$$1 + g = \sqrt[3]{\frac{\text{Latest dividend}}{\text{Earliest dividend}}}$$

Note: here we are using the **cube root** because there are three years of growth. Had there been five years' data (from which we could project four years' growth), we would have used the **fourth root** and so on.

$$\begin{aligned} 1 + g &= \sqrt[3]{\frac{0.32}{0.26}} \\ 1 + g &= 1.0717 \end{aligned}$$

so, $g = 0.0717$, or 7.17% (approximately 7%)

This level of growth can be incorporated into the dividend growth model as usual. In the case below, we are assuming shares with a market value of £2.50.

$$\begin{aligned} K_e &= \frac{0.32(1.07)}{2.5} = 0.072 \\ &= 0.137 + 0.072 = 20.9\% \end{aligned}$$

Share Issue Costs

Share issue costs can be high, and where it is necessary for the financial manager to take account of them, he or she can best do this by deducting costs from the value per share. The valuation formula would then be affected as follows.

We will assume for this example that the shares have a value of £2, the dividend is 25p and the issue costs per share are 5p:

$$K_e = \frac{D_e}{(S_e - I)}$$

where: I is the cost of issue.

$$K_e = \frac{0.25}{(2 - 0.05)} = 12.8\%$$

Taxation

These models ignore tax considerations. They are **gross** dividends paid out from the company's point of view. The investor will receive his or her dividend **under the deduction of tax** and will account for higher rates of tax separately. The value of the dividend to the investor will therefore be determined by the recipient's current tax rates.

A dividend of 25p will be worth:

20p at 20% tax; 19p at 24%; 15p at 40% tax

Retained Earnings

Retained earnings will also have an effect because, when left in the business rather than being distributed, they should achieve higher returns in the future to offset the lack of current dividends. Thus shareholder's expectations of increasing future dividends, rather than constant payments, may persuade them to accept initial lower dividends.

G. COST OF PREFERENCE SHARES

Preference shares carry a fixed dividend which is payable at the discretion of the company's management. Their popularity has declined in recent years, mainly because interest payable on debentures is allowable for tax relief whilst the preference dividend is not. The formula for calculating the cost of preference shares is:

$$K_p = \frac{D_p}{S_p}$$

where: K_p = cost of preference shares

D_p = fixed dividend based on nominal value

S_p = market price of preference shares

To clarify this we will take as an example a company whose 8% preference shares have a nominal value of £1 and a market price of 80p. The cost of the preference shares would therefore be:

$$K_p = \frac{8}{80} = 10\%$$

H. COST OF DEBT CAPITAL

Debentures issued by a company in the form of debt capital can be either redeemable or irredeemable. Where they are irredeemable, the formula for calculating the cost is:

$$K_d = \frac{I}{S_d}$$

where: K_d = cost of debt capital

I = annual interest payment

S_d = current market price of debt capital

The real cost of debt capital is, of course, lower than its nominal rate because the interest can be offset against taxation. The formula therefore becomes:

$$K_d = \frac{I(1-t)}{S_d}$$

where: t is the rate of corporation tax applicable.

Example

If a company has £10,000 worth of 8% debentures in issue with a current market price of £92 per £100 of nominal value and a corporation tax rate of 33%, the cost of debt capital would be:

$$\begin{aligned} K_d &= \frac{800(1-0.33)}{9,200} \\ &= 0.0583 = 5.83\% * \end{aligned}$$

* The higher the rate of corporation tax payable by the company, the lower will be the after-tax cost of debt capital. For example at 35% corporation tax, the cost will fall to 5.65%.

Bearing in mind the impact of taxation, the advantages of issuing debt capital rather than preference shares can be shown by calculating the cost of preference shares with the same coupon rate and market value as the debentures. Of course, no allowance for taxation is made in the calculation as shown below:

$$K_p = \frac{8}{92} = 0.0870 = 8.7\%$$

Clearly, from this you can immediately see that the cost of debt capital is much lower because of the availability of tax relief. Naturally this only applies if the business has taxable profits from which to deduct its interest payments. Where the business has generated a taxable loss, the interest will increase that loss for carry-forward to be offset against future taxable profits in later years, and the immediate benefit of tax relief will be lost. (This will be covered in more detail in the taxation section of your course.)

In the case of **irredeemable capital**, it will be possible to calculate the cost to the date of redemption by finding the internal rate of return (IRR). This will involve calculating all the necessary cash flows and generally the assumption will be made that all payments and receipts are made at the end of a year. Wherever possible the ex-interest values should be used, so if the cum-interest value is quoted and an interest payment is due shortly, we should deduct the interest payment from the market price.

I. WEIGHTED AVERAGE COST OF CAPITAL (WACC)

Problems often occur with the use of each of these ways of calculating the different costs of the various types of capital when they do not relate specifically to one particular project. Additionally, it would be wrong simply to calculate the cost of debt capital and then to apply it to the project for which the finance was raised. This is because, without the equity capital, there could be no borrowings.

Generally therefore, it is considered prudent to calculate a cost of capital that is **weighted** by the proportion of the different forms of capital employed within the business. The financial manager will therefore need to ensure that any project which is under consideration will produce a return that is positive in terms of the business as a whole and **not** just in terms of an issue of capital made to finance it.

There are two approaches to calculating the WACC and we will take a look at each in turn. One method is based on book values and the other on market values.

(a) Using Book Values in the Proportions Appearing in the Company's Accounts

	Weighting	Cost	Weighted Cost
Ordinary shares	60%	12%	7.2%
Debentures	40%	8%	3.2%
WACC			10.4%

(b) Using Market Values

	Number	Price	Market Value	Cost	Weighted Market Value
Ordinary shares	6,000	2.50	15,000	12%	1,800
Debentures	4,000	1.50	6,000	8%	480
			21,000		2,280

The WACC is then calculated as:

$$\frac{2,280}{21,000} = 10.86\%$$

Both methods produce the historic WACC and you should remember that raising fresh capital could well alter the weighting and therefore the cost of capital.

J. COST OF INTERNALLY GENERATED FUNDS

Internally generated funds typically represent a round 60% of all sources of capital available to a business. The principal benefit of using internal funds, as you will no doubt realise, is derived from the fact that there are no formalities to their acquisition. However, it will often be difficult to generate the optimum amount at exactly the time the business needs the additional funding.

By the very nature of the way internally generated funds arrive in the company, it is easy to make the mistake of assuming that they are free of cost. This is **not** the case, although the formal costs of equity issues and so forth, which involve issuing houses, brokers, and so on, will be avoided.

Retained earnings in any form (whether as provisions, retentions, etc.) belong to the shareholders and, in order to justify their retention, the company must be able to earn a return in excess of that which the shareholders could earn before tax had they been distributed to them.

This is best illustrated by way of an example, and to do this, a comparison of two companies is given below.

Example

Company X pays out most of its earnings, whereas Company Y retains a high percentage.

		Company X		Company Y	
		£	£	£	£
Year 1	Profits		200,000	Profits	200,000
	<i>less</i> Dividend		<u>160,000</u>	<i>less</i> Dividend	<u>20,000</u>
	Balance c/f		40,000	Balance c/f	180,000
Year 2	Capital needs of both companies are an additional £200,000. X obtains equity of £160,000 and Y equity of £20,000. Assume dividends of 10% on new capital.				
	Profits (Year 2)		200,000	Profits (Year 2)	200,000
	<i>less</i> Dividends:			<i>less</i> Dividends:	
	on existing capital	160,000		on existing capital	20,000
	on new capital	<u>16,000</u>	<u>176,000</u>	on new capital	<u>2,000</u>
	Balance c/f		24,000	Balance c/f	178,000
Year 3	Suppose in Year 3 profits fell sharply to £100,000 for each company. The following would be the result:				
	Profits		100,000	Profits	100,000
	Dividend paid (i.e. halved)		<u>88,000</u>	Dividend paid (doubled)	<u>44,000</u>
	Balance c/f		12,000	Balance c/f	56,000

What do these figures mean? That Y is more efficient than X? No, because profits each year have been the same, the only difference being that Y obtains large amounts of cost-free capital, whereas X is paying out most of its profits as it has to pay for its capital in the form of a dividend.

Is Y able to weather the storm better than X? Yes, because it has a large balance, made possible by its low pay-out ratio. Sooner or later the shareholders of Company Y will realise that they are losing out, to the benefit of the company itself.

From this two important principles emerge:

- **All** capital has a cost.
- Even retained profits should carry a cost (an implied or imputed cost).

This implied cost is often referred to as an **opportunity cost** concept related to the cost of retentions. Where the company is unable to meet that rate from its operations, then it would appear to have an obligation to distribute its retentions to its shareholders, allowing them to obtain better returns on their investments elsewhere.

An alternative approach is offered by G.D. Quirin in *The Capital Investment Decision*, where he suggests that the change in share price following the retention of profits must equal the capitalised value of the potential dividend increase which the shareholder has forgone in order for the retentions to have been made. By observing share price movements following the retention of profits, the rate of share price change can be used to calculate the capitalisation (i.e. the cost) rate attached to the retention by the market.

The underlying problem of quantifying human behaviour is again present in this hypothesis and therefore limits this method. For this reason, perhaps the **opportunity cost method** is preferable. Shareholder behaviour continues to be an area for future research in the meantime.

K. MANAGEMENT OF FACTORS AFFECTING SHARE PRICES

A number of aspects of financial management expertise revolve around the determination of future share prices and the behaviour of shareholders as far as it affects share price.

The dominant financial objective in a commercially run business will be the maximisation of the wealth of the shareholders. Their wealth is dependent firstly upon dividends and secondly upon capital growth, in the longer term reflected in upward movement in share prices. Management of the share price, so far as possible, becomes an important aspect of the work of the financial manager.

It is appropriate, therefore, for us to consider this from another perspective now. So far in this study unit we have talked about the cost of funds in the business. This cannot be the financial manager's only consideration. He or she must try to anticipate shareholders' reaction to financing decisions. The typical shareholder wishes to see the company correctly structured with adequate minimum-cost capital effectively utilised. Dividends and capital growth are two of the principal factors to affect share prices, but the company will need to work hard on its public relations in order to encourage investors to buy, and then to hold on to, shares in the business.

Relationships with Shareholders

It is the shareholders who make the market in a company's shares and it is they who ultimately determine the market price. Many companies issue only one detailed communication to their shareholders every year, that being the annual report and accounts. This usually includes a prepaid card inviting the shareholder to appoint one of the directors as his or her proxy to vote at the forthcoming Annual General Meeting (AGM). A problem arises because many shareholders may be unable to interpret the accounts fully, and the proxy card may be taken by them to be a suggestion that they should not bother to attend the AGM anyway.

Companies are beginning to recognise this shortcoming and increasing numbers are improving their relationships in their attempt to retain their shareholders' confidence. They may send shareholders a copy of the company's in-house magazine, or allow them privileged rights to acquire the company's goods or services. They personalise their communications, keeping shareholders informed of planned developments, and in many cases a gradual improvement is taking place in the format and content of the published accounts. As well as the statutory information, companies are incorporating graphs and bar charts and other visual aids, to assist and improve the shareholders' level of comprehension.

Some companies circularise shareholders to gain a clearer picture of their nature and of their investment ambitions and, where appropriate, they may place national advertisements aimed at emphasising the strengths and solidarity of the company.

Direct contact with the shareholders may also be supplemented by indirect contact via the media with which many shareholders will be familiar, such as the *Investors' Chronicle*, Stock Exchange publications, stockbrokers' circulars to clients and, perhaps most important of all, the financial sections of the press.

Assessment of Risk in the Debt versus Equity Decision

(a) Effect on Market Value

The direct cost of borrowing is represented by the interest charges and fees which are applied by the lender. In common with debenture interest, such charges will generally be deductible for tax purposes, and therefore the after-tax cost of borrowing will usually be less than the gross cost. Although the cost of borrowing will by and large appear cheaper than equity, there is a **risk** to the company and the financial manager should take this into account when comparing the costs of borrowing. To demonstrate this an example is given below.

Example

A company has a current profit before interest and tax (PBIT) of £5 million pa and current interest payable of £1.7 million. The company's issued share capital comprises £10 million in ordinary shares and the earnings per share (EPS) are 5p.

The firm needs to invest £7.5 million of new capital and it expects to increase its PBIT by £1.25 million pa as a result. The alternatives under consideration by the directors are as follows:

- To issue 3.75 million shares at 200p, representing a discount on the current market price of 240p.
- To borrow £7.7 million on 10-year debentures at 12% annual interest

Solution

One approach to decide on the better route would be to attempt to predict the effect on the market value of the ordinary shares. The company would then elect for the opportunity which gives the best return to shareholders (remember the dominant objective of financial management). The following table shows the effect on the earnings per share:

	Current <i>£m</i>	Projected Equity <i>£m</i>	Projected Debt <i>£m</i>
PBIT	5.00	6.25	6.25
Interest payable	(1.70)	(1.70)	(2.60)
Profit before tax	3.30	4.55	3.65
Tax at 33%	(1.09)	(1.50)	(1.20)
Profit after tax	2.21	3.05	2.45
Issued ordinary shares	10m	13.75m	10m
Earnings per share	22.10p	22.18p	24.50p

From this we can see that the market value of the shares will be improved by choosing to raise the debt capital, on the assumption that the PBIT really does increase by £1.25 million.

However, the financial manager should always remember that debt is a riskier route than equity. This is because:

- Debt payments cannot be deferred, whereas dividends to shareholders can, should trading estimates fail to materialise.
- Use of debt capital could result in a lower price/earnings ratio than an equity issue.

In our example the financial gearing ratio would increase and the interest cover will fall from the present 2.94 to 2.4.

Interest cover should be calculated as the number of times the interest payable can be divided into the PBIT figure. Unequivocally, the higher the number of times, the better the result and the less risk will be attached to the decision.

A low figure, generally less than three times cover (when interest rates themselves are low), indicates that the company should be cautious regarding further borrowings if these are likely to be sensitive to adverse (upward) movements in interest rates, because its ability to service the necessary payments may be in doubt.

(b) Breakeven Profit Before Interest and Tax

The financial manager may choose to compute the breakeven PBIT at which the earnings per share will be the same for the use of either equity or debt. This is done as follows:

$$\frac{\text{Debt}}{67\%(y - 2.60)} = \frac{\text{Equity}}{67\%(y - 1.70)}$$

$$\frac{10}{13.75}$$

Note: 67% is used to represent the position net of tax at 33%, and y represents the breakeven PBIT.

$$13.75(y - 2.60) = 10(y - 1.70)$$

$$13.75y - 35.75 = 10y - 17$$

$$3.75y = 18.75$$

$$\text{so, } y = 5.00$$

This shows us that the breakeven PBIT in our example is £5 million. Earnings per share will be **greater using debt above this level**, but below it equity should be favoured. In practice, more than one source of financing may be used, and it will be important for the financial manager to consider the risks and rewards of the alternatives.

It is quite common for a company to lease a large part of its expenditure on capital items and to use equity for its increased working capital needs, although due to the costs involved, a quoted company will be unlikely to consider issuing less than £250,000 in new shares to be worthwhile. Whilst the calculations demonstrated in this study unit will be simpler to apply to quoted companies (because of the ease with which share prices can be determined), the underlying principles will be appropriate to all businesses seeking to increase the capital available for investment.

L. FACTORS DETERMINING CAPITAL STRUCTURE

Ability of the Earnings to Support the Structure

When the assets to be financed cost £100 and the earnings generated by them are £10, then such a level of earnings could only service the £100 if the return expected by the ordinary shareholders for a class of risk of this type was 10%. To achieve this, **all** the earnings would have to be paid out as dividends.

If the dividend required was, say, 12%, then an alternative structure would be needed to overcome the problem that the earnings were only £10. Examples of two alternatives are given below (in both cases we will continue to use our £100 basis).

Capital		Earnings Required	
	£		£
Ordinary shares	50	Ordinary shares at 12%	6
Debentures	50	Debentures at 8%	4
Capital	100	Earnings	10

Or we could have:

Capital		Earnings Required	
	£		£
Ordinary shares	40	Ordinary shares at 12%	4.8
Preference shares	30	Preference shares at 7%	2.1
Debentures	30	Debentures at 8%	2.4
Capital	100	Earnings	9.3
		Available for reserves	0.7
			10.0

Simple though this example is, it should clarify in your mind how the financial manager can combine securities to arrive at the optimum capital structure for his or her company. As we can see, by using less risky fixed-interest capital, it should be possible to reduce the demands on equity amounts. In other words, the earnings expectation can be **geared down**.

The earnings of the capital, the company's policy in paying dividends or distributing retained earnings, and the return required by the providers of capital will all influence the pattern of finance that the business is able to raise. In turn the financial manager will take account of present and predicted future interest rates in his or her assessment of the most suitable security to be issued.

Attitudes of Investors

Potential suppliers of capital or equity will take account of other factors in addition to the rate of return offered by the company.

Providers of **debt capital** will consider the security offered and the ability of the business to meet its interest payments (i.e. the **interest cover**). In the first of our two examples above, debenture interest is covered 2½ times by the earnings of 10%. Typically an unsecured lender would look for cover of between three and five times and we can therefore assume that security would be required in this case.

Providers of **equity capital** must allow all other forms of capital to be serviced before their dividend can be paid. They will look closely at the debt holder's stake as the volume of debt will significantly affect ordinary dividends in times when earnings fall.

Consider the following figures, which assume total pay-out and no retention. Taxation has been ignored:

	Company High	Company Low
Ordinary shares	1,000	9,000
8% Debentures	9,000	1,000
Capital	10,000	10,000
Year 1:		
Earnings	1,500	1,500
Debenture interest	720	80
Available for dividend	780	1,420
Dividend %	78%	15.8%
Year 2:		
Earnings	720	720
Debenture interest	720	80
Available for dividend	NIL	640
Dividend %	NIL	7.1%

Debenture interest is, of course, a fixed charge, and the effect of having to service this payment when earnings fall is clearly demonstrated. Ordinary shareholders will only be entitled to their dividend after this fixed charge has been met. In Year 1 the earnings are high and the shareholders in the highly-gearred company obtain a higher return than those in the low-gearred business. The reverse position is shown when earnings are low, and in our example the shareholders in the highly-gearred company receive nothing.

The effect of the mixture of debt and equity effectively **gears up** the effect of fluctuating profits and will generally influence the decision of an ordinary shareholder on whether or not to invest. Where

gearing is high, dividends can be expected to fluctuate in response to profit fluctuations and this will impact on share prices in due course.

This reaffirms that **profit maximisation** does not always operate in the best interests of the shareholders' future wealth. An influx of debt capital may help to generate additional profit, but there will be a risk that it will disturb the financial gearing ratio, with the result that the market will then demand a higher return in order to compensate for what it sees as increased risk. This may result in the share prices falling and the reduction of the shareholders' wealth in capital gains terms, without a significant increase in future dividend to compensate for the fall.

Concepts of profit maximisation and shareholder wealth need to be set against **a relative time background**. They should not be viewed as simple, absolute requirements. In planning the mix of debt and equity capital, the financial manager must take account of the risk attitude of existing and potential investors.

Cost of Capital

As we have already seen, conventionally the cost of capital will be calculated on a weighted average basis. One of the fundamental objectives of financial management is to seek to provide adequate capital for the business requirements at a minimum possible cost. Since debt capital is cheaper than equity capital, the introduction of debt into the total mix will have the effect of reducing the overall cost of capital.

Lenders (debt capital providers) will feel happier if someone has already taken some risk (evidenced by the issue of equities) to insulate them from the effects of future trading problems. Remember that, when debt capital is introduced, not only does gearing increase, but interest cover falls. The prudent debt capital provider will take this into account in assessing the investment and will expect a higher return in return for the increased risk factor that has been introduced.

Debt capital providers do not have voting rights in the affairs of the company, and if a provider feels he or she is supplying more than a fair share in proportion to the equity investors, he or she will expect a return commensurate with participation and which is in excess of that available to the ordinary shareholders. Of course, in these circumstances the provider may not agree to participate at all.

As with other factors which the financial manager must take into account, it is balance that will be important. The introduction of some debt capital will bring about a reduction in the weighted average cost of capital. This reduction will remain for as long as the debt and the equity holders agree to accept the gearing structure. However, as gearing increases, the respective providers of capital will begin to expect higher returns to compensate for additional risk, and this will then manifest itself in an increase in the weighted average cost of capital.

In every business there will be an optimum mix of equity and debt capital at which the weighted average cost of capital will be minimised, and this can be demonstrated diagrammatically as in Figure 9.1:

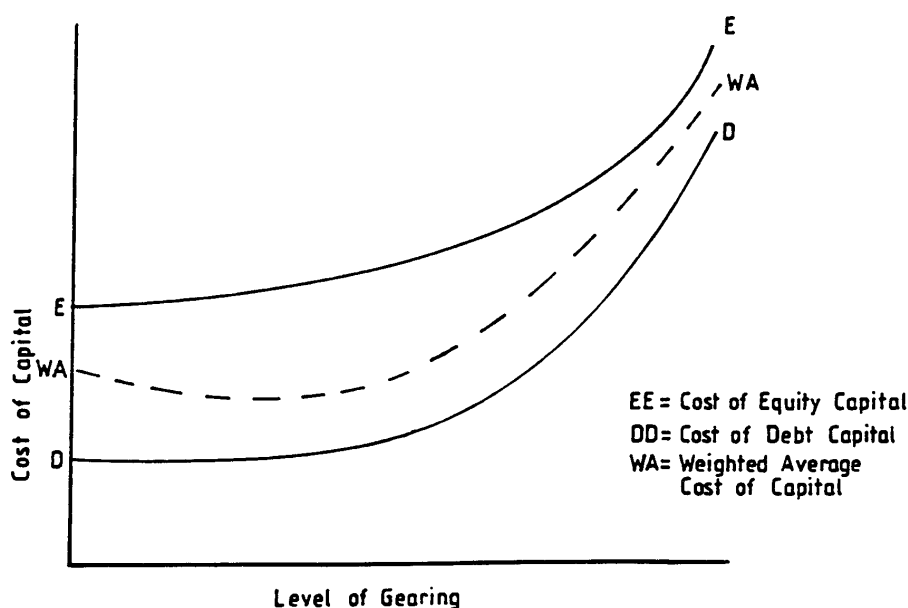


Figure 9.1

The position shown in Figure 9.1 represents the generally accepted traditional theory. However, we should bear in mind that, as with determining the cost of equity capital, this is another topic where basic theory is far from conclusive. There are various claims and counter-claims and only further research will eventually clarify the best approach. As with other problems that revolve around shareholder behaviour, the greatest difficulty arises because the investor is not just one person whose attitudes and reactions can be predicted fairly accurately.

Questions of security may often arise in the process of deciding on the best way to generate additional funding for the business. Banks will often seek security by way of a fixed or floating charge over the assets of the business. Providers of leasing or hire-purchase facilities may be content to rely on their asset as security.

M. ADVANTAGES AND DISADVANTAGES OF THE PRINCIPAL FINANCIAL ALTERNATIVES

The principal advantages of the major financial instruments are summarised on the following tables.

Overdraft

Advantages	Disadvantages
Easy to arrange and relatively cheap.	Security may be required.
Useful as a method of easing cash flow strains during peak periods.	Can be withdrawn by the bank at any time or may not be renewed when it is required in future.
Interest charges are only incurred whilst the facility is overdrawn and only the exact amount of funding required is utilised.	Banks may require management figures at regular intervals in order to monitor progress.

Loan

Advantages	Disadvantages
Can be structured so that repayments can be met out of future income deriving from a project.	Security will generally be required which adds to the initial costs and puts the business at a degree of risk.
Cannot technically be withdrawn as long as the borrower honours all of the terms of the facility.	Management figures may be required at regular intervals.
Repayments can be structured to meet the needs of the business.	An agreed sum of money is lent and this may be more than is actually needed at the time.
	Can be expensive for a small company.

Hire Purchase

Advantages	Disadvantages
The period can generally match the life of the asset.	
There are usually no setting-up costs.	Interest rates may be higher than those of a bank (but this may be outweighed by the absence of fees).
Repayments can be structured to suit the cash flow of the business.	
Only the actual amount of cash is advanced – there are no surpluses on which charges accrue.	
The facility cannot be withdrawn whilst the customer honours his or her commitments under the contract.	
Additional security is often not required.	

Leasing

Advantages	Disadvantages
Can be on-balance-sheet (the finance lease) or off-balance-sheet – for longer-life assets (the operating lease).	In an operating lease, the benefit of any residual value in the asset is lost to the lessor.
The period can generally match the life of the asset.	
There are usually no setting-up costs.	Costs may be higher than those of a bank (but this may be outweighed by the absence of fees).
Repayments can be structured to suit the cash flow of the business.	Capital allowances are lost to the lessor (owner) but the rentals will usually be tax-deductible.
Only the actual amount of cash is advanced – there are no surpluses on which charges accrue.	
Additional security is often not required.	
The facility cannot be withdrawn whilst the customer honours his or her commitments.	Early settlement of the facility is usually expensive.

Debentures

Advantages	Disadvantages
Cash can be raised for long periods.	Money cannot usually be repaid if the project generates cash more quickly than envisaged.
Large sums can be secured against specific assets, leaving other assets free for use as security for other facilities.	It may not be possible to arrange an extension at the redemption date if the cash flow of the business is poor.
	A high ratio of borrowing in this form may deter investors when they compare fixed-interest securities with equity capital.

Equity Capital

Advantages	Disadvantages
Can be a cheaper form of raising capital and dividends will only have to be paid when the business can afford it.	A degree of control over the business will be lost.
Capital is raised in the long term.	Possibility of takeover is increased when the shares are widely held.
Increasing the equity capital should increase the ability of the company to borrow in the market.	

Study Unit 10

Financial Reconstruction

<i>Contents</i>	<i>Page</i>
Introduction	232
A. Redemption of Shares	232
B. Accounting Treatment	233
C. Example of Redemption of Preference Shares	233
D. Example of Redemption of Ordinary Shares	236
E. Redemption of Debentures	239
Redemption by Means of a Sinking Fund – Accounting Treatment	239
Example of Redemption of Debentures	241

INTRODUCTION

One key reason for a company to wish to buy-in its own shares stems from the desire of management to improve earnings per share, a financial ratio in which investors are becoming increasingly interested. Buy-in opportunities will be considered against financial performance, share price and capital structure. For instance, a company with a low level of gearing may find it advantageous to trade on borrowed cash which will improve the P/E ratio. A further option may be to provide a cash realisation for a large shareholding of a director.

Repurchases, or buy-ins, of shares may be made by companies out of their distributable profits or out of the proceeds of a new issue of shares made especially for the purpose, provided that they are authorised to do so in the company's Articles of Association. A company may not, however, purchase its own shares:

- Where, as a result of the transaction, there would no longer be any member of the company holding other than redeemable shares.
- Unless they are fully paid and the terms of the purchase provide for payment on purchase.

From a tax point of view, the share buy-in is a partial distribution, on which Advance Corporation Tax will be payable, and a partial return of prescribed capital.

The change in the capital base will cause management to rethink its investment decisions, gearing, interest cover, earnings, etc. This is particularly important as the financial institutions focus their attention more towards income and gearing as an indicator of financial risk.

A. REDEMPTION OF SHARES

The issued share capital of companies, like the fixed capital of partners, should be regarded as a permanent fund in the business. However, the **Companies Act 1948** allowed the issue of preference shares which are redeemable. The **Companies Act 1981** (now the CA 1985) gave greater flexibility, allowing a company, if authorised by its Articles, to issue redeemable shares of any class. The Articles must specify the terms of redemption, i.e. the time and the price to be paid. Preference shares are used in the illustration that follows. The principles are the same for redeemable ordinary shares.

Public companies may only redeem or purchase their own shares out of distributable profits, or out of the proceeds of an issue of new shares made expressly for the purpose. Private companies may redeem or purchase their own shares out of capital, but only to the extent that the purchase price exceeds available distributable profits and the proceeds of a new share issue.

Where shares are **not** redeemed wholly out of the proceeds of a new issue of shares, in order that the capital of the company is not depleted, a sum is required to be transferred to a capital redemption reserve (CRR), equal to the difference between the nominal value of the shares redeemed and the aggregate proceeds of any new shares issued. The capital redemption reserve cannot be used to pay a dividend to shareholders, and its only use is to make a bonus issue of shares to the existing shareholders. The purpose of this is again to prevent a reduction of capital.

Note that any premium payable by the company on redemption of shares must be provided in all cases out of the share premium account, if one exists, or out of profits available for appropriation (payment of a dividend), i.e. the premium cannot be provided out of the proceeds of a new issue of shares, neither can it be carried forward in the balance sheet and written off out of future profits.

B. ACCOUNTING TREATMENT

The accounting entries necessary to redeem preference shares are set out below by way of a series of steps:

Description	Accounts	
	<i>Debited</i>	<i>Credited</i>
1. Making a bonus issue of shares	General reserve Bonus account	Bonus account Share capital account
	<i>or double entry direct</i>	
	General reserve	Share capital account
2. Making a fresh issue – nominal value	Cash	Share capital account
3. Redemption of preference shares otherwise than out of proceeds of fresh issue of shares	General reserve <i>or</i> Profit and loss account	Capital redemption reserve (CRR)
4. Upon commencing redemption of preference shares – nominal value of shares to be redeemed	Preference share capital account	Preference share redemption account <i>(a temporary ledger a/c opened just for purposes of the redemption)</i>
5. Upon repaying shareholders (full sum due including any premium on redemption)	Preference share redemption account	Cash
6. Balance on preference share redemption account, being premium	Share premium account <i>and/or</i> profit and loss account	Preference share redemption account

C. EXAMPLE OF REDEMPTION OF PREFERENCE SHARES

A company's share capital comprises:

	Authorised £	Called Up £
Ordinary shares	100,000	50,000
Preference shares 10% redeemable	50,000	50,000
	150,000	100,000

In addition, the balance on the share premium account is £750 and on the profit and loss account £42,500.

The preference shares are redeemable at a premium of 2% at any time during the year ended 31 October, and the following transactions took place:

31 March: 25,000 of the preference shares were redeemed

31 October: 20,000 ordinary shares were issued at a premium of 1p per share

31 October: The balance of the preference shares was redeemed

The ledger accounts to record the above transactions and the balance sheet extract at 31 October, will be as follows:

ORDINARY SHARE CAPITAL ACCOUNT

£	£
	1 Nov Balance b/f 50,000
	Cash 20,000

PREFERENCE SHARE CAPITAL ACCOUNT

£	£
31 Mar Redemption a/c 25,000	1 Nov Balance b/f 50,000
31 Oct Redemption a/c 25,000	
50,000	50,000

SHARE PREMIUM ACCOUNT

£	£
31 Mar Preference share redemption a/c 500	1 Nov Balance b/f 750
31 Oct Preference share redemption a/c 450	Cash 200
950	950

CAPITAL REDEMPTION RESERVE

£	£
	31 Mar Profit and loss a/c 25,000
	31 Oct Profit and loss a/c 4,800
	29,800

PROFIT AND LOSS ACCOUNT

	£		£
31 Mar CRR	25,000	1 Nov Balance b/f	42,500
31 Oct CRR	4,800		
Preference share redemption a/c	50		
Balance c/d	12,650		
	<u>42,500</u>		<u>42,500</u>
		Balance b/f	12,650

NB This account is shown in this form for simplicity of explanation.

PREFERENCE SHARE REDEMPTION ACCOUNT

	£		£
31 Mar Cash	25,500	31 Mar Preference share capital	25,000
		Share premium a/c	500
	<u>25,500</u>		<u>25,500</u>
31 Oct Cash	25,500	31 Oct Preference share capital	25,000
		Share premium a/c	450
		Profit and loss a/c	50
	<u>25,500</u>		<u>25,500</u>

Workings
CRR Transfers

Date	Preference Shares Redeemed (Nominal)	New Issue of Shares (Aggregate Proceeds)	CRR Transfer
31 Mar	25,000	–	25,000
31 Oct	<u>25,000</u>	<u>20,200</u>	<u>4,800</u>
	50,000	20,200	29,800

Balance Sheet (extract at 31 October)

	£	£
Share Capital and Reserves		
Called-up share capital		70,000
CRR	29,800	
Profit and loss account	12,650	42,450
		<u>112,450</u>

Authorised capital would be shown by way of a balance sheet note.

D. EXAMPLE OF REDEMPTION OF ORDINARY SHARES

The balance sheet of Mutter Vater plc at 31 December Year 1 showed the following extract:

	£
Capital and Reserves	
Authorised ordinary share capital (£1 each)	<u>200,000</u> (by way of note)
Called-up ordinary share capital	80,000
7% redeemable ordinary shares at 50p each	60,000
Share premium account (arising on issue of 7% redeemable ordinary shares)	2,000
General reserve	186,000

During Year 2 the following transactions took place:

- 1 March:
- (1) The redeemable shares were all redeemed at a premium of 20p per share.
 - (2) 20,000 £1 8% debentures were issued at 95, to help pay for the redemption. (95 means at a discount of 5%.)
 - (3) 40,000 ordinary shares were issued at an issue price of £1.40 to assist in paying for the redemption.
- 1 July: A bonus issue of one for every four ordinary shares held was made using the balance on the capital redemption reserve and general reserve.

The relevant ledger account entries (excluding cash) and the final balance sheet extract will be as follows:

Year 2		£	Year 2		£
1 July	Balance c/d	150,000	1 Mar	Balance b/f	80,000
				Application and allotment account	40,000
			1 July	1 for 4 Bonus issue:	
				CRR	4,000
				General reserve	26,000
		<u>150,000</u>			<u>150,000</u>

Year 2			£	Year 2			£
1 Mar	Redemption of ordinary shares		60,000	1 Mar	Balance b/f		60,000

Year 2		£	Year 2		£
1 Mar	Redemption of ordinary shares a/c	2,000	1 Mar	Balance b/f	2,000
	Debenture discount	1,000		Application and allotment account	16,000
	Balance c/d	15,000			
		<u>18,000</u>			<u>18,000</u>

Year 2			Year 2		
£			£		
1 Mar	Balance c/d	20,000	1 Mar	Cash	19,000
				Debenture discount	1,000
		<u>20,000</u>			<u>20,000</u>

DEBENTURE DISCOUNT ACCOUNT

<i>Year 2</i>		£	<i>Year 2</i>		£
1 Mar	8% Debentures	1,000	1 Mar	Share premium account	1,000

REDEMPTION OF ORDINARY SHARES ACCOUNT

<i>Year 2</i>		£	<i>Year 2</i>		£
1 Mar	Cash	84,000	1 Mar	Ordinary shares	60,000
				Premium on redemption:	
				Share premium	2,000
				General reserve	22,000
		<u>84,000</u>			<u>84,000</u>

GENERAL RESERVE

<i>Year 2</i>		£	<i>Year 2</i>		£
1 Mar	Redemption of equity shares	22,000	1 Mar	Balance b/f	186,000
	CRR	4,000			
1 July	Ordinary share capital	26,000			
	Balance c/d	<u>134,000</u>			
		186,000			<u>186,000</u>

CAPITAL REDEMPTION RESERVE

<i>Year 2</i>		£	<i>Year 2</i>		£
1 July	Ordinary share capital	4,000	1 Mar	General reserve	4,000

Extract from Balance Sheet as at 1 July Year 3

	£	£
Creditors: Amounts falling due after more than one year		
8% £1 Debentures		20,000
Capital and Reserves		
Called-up share capital	150,000	
Share premium account	15,000	
General reserve	134,000	299,000

NB Authorised share capital details would be shown by way of a note to the balance sheet.

Calculations:

	£
New issue proceeds $40,000 \times £1.40$	56,000
Nominal sum of redemption	60,000
Transfer to CRR	4,000

E. REDEMPTION OF DEBENTURES

Debentures are a written acknowledgment of a loan to the company, given under seal, and carrying a fixed rate of interest. Debentures do not form part of the share capital of the company and may be issued at a premium or discount. They are, however, shown in the ledger and hence the balance sheet at their nominal value, interest being calculated on this figure.

The debenture trust deed will specify whether debentures will be redeemed at par or at a premium and the way the company will actually redeem the debentures. Along with the share capital and reserves, the debentures finance a company's operating assets. Thus although there is no statutory requirement to establish the equivalent of a CRR, the financing must be maintained. This can be achieved by either:

- The proceeds of a new issue of shares or debentures; or
- Annual appropriations from the profit and loss account to a debenture redemption account.

The cash needed to redeem the debentures must also be found. This can be accumulated by investing an amount each year equal to the appropriation to debenture redemption account. This is also known as the sinking fund method.

Redemption by Means of a Sinking Fund – Accounting Treatment

The accounting entries necessary to redeem debentures are set out by way of a series of steps below:

Sinking Fund Maintenance

	Description	Accounts	
		<i>Debited</i>	<i>Credited</i>
1.	Amount appropriated to sinking fund each year	Profit and loss account	Sinking fund account
	Amount transferred to sinking fund investment account	Sinking fund investment account	Ordinary cash
2.	Interest received from sinking fund	Sinking fund cash	Sinking fund account
3.	Reinvesting income received	Sinking fund investment account	Sinking fund cash
4.	Sale of sinking fund investment	Sinking fund cash	Sinking fund investment account
5.	Profit on sale of sinking fund investments	Sinking fund investment account	Sinking fund account
	Loss on sale of sinking fund investments	Sinking fund account	Sinking fund investment account

Actual Debenture Redemption

	Description	Accounts	
		<i>Debited</i>	<i>Credited</i>
1.	Nominal value of debentures redeemed	Debenture account	Debenture redemption account
2.	Amount paid to redeem debentures	Debenture redemption account	Sinking fund cash
3.	Profit on redemption debentures (redeemed at a discount)	Debenture redemption account	Sinking fund account
4.	Loss on redemption debentures (redeemed at a premium)	Sinking fund account	Debenture redemption account
5.	Nominal amount of debentures redeemed	Sinking fund account	Non-distributable reserves
6.	Balance of sinking fund account	Sinking fund account	Profit and loss account
7.	Balance on sinking fund cash account	Ordinary cash	Sinking fund cash

Note: the balance on 6 and 7 above should be equal.

Example of Redemption of Debentures

X Co. has £50,000 5% debentures redeemable at 31 October Year 2. On 1 November Year 1 a sinking fund stands in the books at £45,000 represented by investments.

During the year ended 31 October Year 2 the following transactions occurred:

- Investments which cost £5,000 were sold for £6,000.
- £5,000 debentures redeemed for £4,900 which included £100 of accrued interest.
- £3,000 income from sinking fund investments was received.
- Interest on debentures for half-year paid.
- The balance of the investments remaining were sold for £47,500.
- Balance of debentures redeemed at a premium of 2%.
- Interest on debentures for half-year paid.

The necessary ledger accounts recording the above transactions will be as follows.

Note that the book-keeping rules are based on the following equation:

$$\begin{array}{l} \text{Sinking fund (investments plus cash)} = \text{Asset accounts} \\ \text{(a credit balance)} \qquad \qquad \qquad \text{(debit balances)} \end{array}$$

5% DEBENTURES ACCOUNT			
	£		£
Debenture redemption account	5,000	Balance b/f	50,000
Debenture redemption account	45,000		
	<u>50,000</u>		<u>50,000</u>

DEBENTURE REDEMPTION ACCOUNT			
	£		£
Sinking fund cash	4,800	Debenture account	5,000
Sinking fund account (profit on purchase)	200		
	<u>5,000</u>		<u>5,000</u>
Sinking fund cash	45,900	5% Debenture account	45,000
		Sinking fund account 2% premium	900
	<u>45,900</u>		<u>45,900</u>

SINKING FUND ACCOUNT

	£		£
Reserves	5,000	Balance b/f	45,000
Debentures redemption account - 2% premium	900	Sinking fund investment account	1,000
Reserves	45,000	Debenture redemption account	200
Profit and loss account	5,800	Sinking fund cash – income	3,000
	<u>56,700</u>	Sinking fund investment account	<u>7,500</u>
			56,700

SINKING FUND INVESTMENT ACCOUNT

	£		£
Balance b/f	45,000	Sinking fund cash	6,000
Sinking fund (profit on sale investment)	1,000	Sinking fund cash	47,500
Sinking fund account (profit on sale investment)	<u>7,500</u>		
	53,500		<u>53,500</u>

SINKING FUND CASH

	£		£
Sinking fund	6,000	Debenture redemption account	4,800
Investment account ordinary cash (reimbursement of accrued interest)	100	Debenture interest account	<u>100</u>
Sinking fund account	3,000		4,900
Sinking fund investment account – proceeds	<u>47,500</u>	Debenture redemption account (45,000 + 2% × 45,000)	45,900
	56,600	Ordinary cash	<u>5,800</u>
			56,600

DEBENTURE INTEREST ACCOUNT

£	£
Sinking fund cash – accrued interest on redemption of debentures	Profit and loss account – debenture interest for year
100	2,600
Ordinary cash – interest for half- year ($5\% \times 50,000 \times \frac{1}{2}$)	
1,250	
Ordinary cash – interest for half- year	
1,250	
<u>2,600</u>	<u>2,600</u>

NON-DISTRIBUTABLE RESERVES

£	£
	Sinking fund
	5,000
	Sinking fund
	<u>45,000</u>
	50,000

Study Unit 11

Group Accounts 1: Regulatory and Accounting Framework

<i>Contents</i>	<i>Page</i>
Introduction	247
A. Companies Act Requirements	247
Definitions of Group Companies	247
Exemption from Preparing Group Accounts	248
Exclusion of a Subsidiary Undertaking from Consolidation	249
Associated Undertakings	249
B. FRS 2: Accounting for Subsidiary Undertakings	250
Definitions	250
Exclusion of a Subsidiary from Consolidation	250
Accounting for a Subsidiary Excluded from Consolidation	251
Other Accounting Requirements	253
C. FRS 9: Accounting for Associated Undertakings and Joint Ventures	253
Standard Accounting Practice for Associated Companies	253
Standard Accounting Practice for Joint Ventures	255
Example of Normal Presentation Under FRS 9	256
D. FRS 7: Fair Values in Acquisition Accounting	259
E. Alternative Methods of Accounting for Group Companies	260
Acquisition Method	261
Proportional Consolidation	262
Equity Method	263
The Different Methods in Practice	263

(Continued over)

F. Merger Accounting	264
Features of Merger Accounting	265
Companies Act Provisions	265
FRS 6 Merger Accounting Provisions	266
Preparation of Financial Statements using Merger Accounting Principles	266

INTRODUCTION

Many companies have more than one type of business activity and trade in different geographical locations. In these circumstances there are often advantages in establishing separate companies to undertake separate activities or to trade in other countries. The shares in the individual companies, the subsidiaries, are usually owned by a holding company which may or may not be quoted on the stock market.

Each company is required by the **Companies Act** to prepare its own individual published accounts. In the holding company's accounts the investments in the subsidiary companies will be carried at cost and the only income recognised in its accounts concerning the subsidiaries will be dividends receivable.

Over the years the subsidiaries will hopefully earn profits and, if these are not all paid in the form of dividends, will accumulate assets. Hence the holding company's accounts will not reflect the true value of the investment nor its earnings.

The solution adopted to this problem was for the holding company to prepare an additional set of **consolidated** or **group** accounts which would reflect the "economic substance over the legal form" of the group. The consolidated accounts would show the assets and liabilities of the group as if they were owned directly by the holding company.

Over the years the various definitions concerning group companies have evolved along with the criteria for preparing group accounts. The rules dealing with the preparation of group accounts are now contained in:

- The **Companies Act 1985** (as amended by the **Companies Act 1989** – see below)
- FRS 2: Accounting for Subsidiary Undertakings
- FRS 6: Merger Accounting
- FRS 7: Fair Values in Acquisition Accounting
- FRS 9: Associated Companies

We will consider all of these over the last part of your course.

A. COMPANIES ACT REQUIREMENTS

Definitions of Group Companies

A group consists of a parent or **holding** company and one or more **subsidiaries**. The **Companies Act 1989** provides a legal definition of a group for both non-accounting matters (i.e. directors' loans etc.) and for the purpose of preparing consolidated financial and also of a "subsidiary undertaking" for accounting purposes only.

(a) Holding Company and Subsidiary

The general definition is:

A company is a subsidiary of another company, its holding company, if that other company:

- (i) Holds a majority of the voting rights in it; or

- (ii) Is a member of it and has the right to appoint or remove a majority of its board of directors; or
- (iii) Is a member of it and controls alone, pursuant to an agreement with other shareholders or members, a majority of the voting rights in it;

or if it is a subsidiary of a company which is itself a subsidiary of that other company.

(b) Parent and Subsidiary Undertaking

Under the **Companies Act** an undertaking is a **parent undertaking** if it has a subsidiary undertaking.

An undertaking is a **subsidiary undertaking** if:

- (i) That undertaking is a subsidiary of another; or
- (ii) Regardless of whether the parent owns any shares in it, the parent undertaking has the right to exercise a **dominant influence** over it by virtue of provisions in its memorandum or articles or a control contract (S.258(2) CA 85); or
- (iii) If a **participating interest** is held and:
 - The investing undertaking actually exercises a **dominant influence**; or
 - The investing undertaking and the subsidiary undertaking are **managed on a unified basis** (S.258(4) CA 85).

A **participating interest** is an interest in the shares of an enterprise which is held on a long-term basis for the purpose of securing a contribution to the investor by the exercise of control or influence arising from or related to that interest. A holding of **20% or more** of the shares of an enterprise shall be presumed to be a participating interest unless the contrary is shown. This is an important definition – you must fully understand it.

An **interest in shares** includes an interest which is convertible into an interest in shares, and an option to acquire shares or any such interest.

An interest held on behalf of an enterprise or its subsidiaries will be treated as if held by it.

Exemption from Preparing Group Accounts

In some instances there would be little or no benefit to be gained from preparing group accounts. The **Companies Act** therefore exempts companies from preparing consolidated financial statements when:

- (a) The group is small or medium-sized and does not include a public company, a banking institution, an insurance company or an authorised person under the **Financial Services Act**. The parent company need not prepare group accounts if the group headed by the parent satisfies at least two of the following criteria:
 - Annual turnover of £13.44 million (£11.2 million net of consolidation adjustments such as inter-company trading)
 - Balance sheet assets of £6.72 million gross (£5.6 million net)
 - Average number of employees is 250

The criteria may be satisfied on either the gross or net figures.

- (b) The parent undertaking is a wholly or majority-owned subsidiary and its immediate parent undertaking is established in the EU. A parent undertaking is not exempt if any of its securities are listed in any EU stock exchanges.
- (c) All of the parent undertaking's subsidiary undertakings are permitted or required to be excluded from consolidation.

Exclusion of a Subsidiary Undertaking from Consolidation

Section 229 of the **Companies Act 1985** states that a subsidiary **may** be omitted from the consolidated accounts of a group if:

- In the opinion of the directors, its inclusion is not material for the purpose of giving a true and fair view; but two or more undertakings may be excluded only if they are not material taken together; or
- There are severe long-term restrictions in exercising the parent company's rights; or
- The holding is exclusively for resale; or
- The information cannot be obtained without disproportionate expense or undue delay.

A subsidiary undertaking **must** be excluded from consolidation if, in the opinion of the directors, the activities of the holding company and the subsidiary are so dissimilar that they could not reasonably be treated as a single undertaking.

When a subsidiary undertaking is excluded from consolidation the **Companies Act** requires the following disclosures. For each subsidiary undertaking not consolidated:

- (a) The aggregate amount of its capital and reserves as at the end of its relevant financial year.
- (b) Its profit or loss for that year.

(This information does not have to be given if the subsidiary undertaking is consolidated using the equity method, discussed later.)

- (c) Any qualifications contained in the auditors' reports on the accounts of the undertaking for the financial years ending with or during the financial year of the company.
- (d) Any note contained in the accounts that would properly have been referred to in such a qualification.

(This information does not have to be given if the qualification or note is covered by the consolidated accounts or is immaterial to the group.)

Associated Undertakings

There will be occasions when a company owns a substantial number of shares in another company, but insufficient to exercise control or a dominant influence. This situation is covered by the provisions relating to associated undertakings.

An undertaking is an associated undertaking if the parent undertaking owns a **participating interest** in that undertaking and exercises a **significant influence** over it. The **Companies Act** requires that associated undertakings are included in the consolidated accounts using the **equity method**. This will be further explained later in this study unit.

B. FRS 2: ACCOUNTING FOR SUBSIDIARY UNDERTAKINGS

The regulations relating to the consolidation of subsidiary companies were originally contained in SSAP 14. This was superseded, after the **1989 Companies Act** came into force, by FRS 2. This was necessary in order to include new legislation and to provide a more detailed explanation of some of the terms introduced for the first time, e.g.:

- What constitutes a dominant influence?
- When is an undertaking managed on a unified basis?

Definitions

FRS 2 broadly defines a subsidiary undertaking and a participating interest in the same way as the **Companies Act**. You need to know the standard's definitions of "dominant influence" and "management on a unified basis". These are:

(a) Dominant Influence

Influence that can be exercised to achieve the operating and financial policies desired by the holder of the influence, notwithstanding the rights or influence of any other party. This can be in two forms:

- (i) **The right to exercise a dominant influence**, where the holder has the right to give directions with respect to operating and financial policies of another undertaking with which its directors are obliged to comply, whether or not they are for the benefit of that undertaking.
- (ii) **The actual exercise of dominant influence** is the exercise of an influence that achieves the result that the operating and financial policies of the undertaking influenced are set in accordance with the wishes of the holder of the influence and for the holder's benefit, whether or not those wishes are explicit. The actual exercise of dominant influence is identified by its effect in practice rather than by the way in which it is exercised.

Note that the power of veto would constitute a dominant influence. However, commercial relationships such as that of supplier, customer or lender do not of themselves constitute dominant influence.

(b) Managed on a Unified Basis

Two or more undertakings are managed on a unified basis if the whole of the operations of the undertakings are integrated and they are managed as a single unit. Unified management does not arise solely because one undertaking manages another. For example, an overseas company may employ a UK company to manage its UK operations because of its local knowledge. The company would not be a subsidiary undertaking of the UK company.

Exclusion of a Subsidiary from Consolidation

The requirements in FRS 2 concerning the exclusion of a subsidiary from consolidation differ from the **Companies Act**. The ASB did not regard undue expense and delay as sufficient reason not to consolidate a subsidiary, nor did they think that exclusion should be optional in certain circumstances. Thus if the conditions in FRS 2 are met a subsidiary **must** be excluded from consolidation.

FRS 2 does not mention materiality. Accounting standards only apply to material items and therefore the standard is not concerned with subsidiaries whose exclusion is immaterial to the consolidated financial statements.

FRS 2 requires that a subsidiary undertaking should be excluded from consolidation in the following circumstances:

- (a) Severe long-term restrictions substantially hinder the exercise of the rights of the parent undertaking over the assets and liabilities of the subsidiary undertaking.
- (b) The interest in the subsidiary undertaking is held exclusively with a view to subsequent resale and the subsidiary undertaking has not previously been consolidated in the group accounts prepared by the parent undertaking.
- (c) The subsidiary undertaking's activities are so different from those of other undertakings to be included in the consolidation that its inclusion would be incompatible with the obligation to give a true and fair view.

In the past several groups have avoided consolidating poorly-performing subsidiaries on the grounds that the shares in the subsidiary were to be sold in the near future. In some instances companies have been carried as "temporary investments" for more than 10 years. Hence in FRS 2 a subsidiary can only be excluded from consolidation on the grounds that the interest is held **exclusively with a view to resale** if it has not previously been consolidated and either:

- A purchaser has been identified or is being sought (it must be reasonable to expect the sale of the shares within one year of their acquisition); or
- The interest was acquired as a result of an enforcement of a security that has not become part of the group's activities.

Accounting for a Subsidiary Excluded from Consolidation

FRS 2 requires the following accounting treatments for companies excluded from consolidation:

(a) Severe Long-term Restrictions

A subsidiary undertaking excluded on these grounds should be treated as a fixed asset investment. The investment should be carried at cost if the restrictions were in force when the investment was acquired. If the restrictions came into force after the investment was acquired then it should be carried for a fixed amount calculated using the equity method on the date the restrictions came into force. (Equity accounting is explained later in this study unit.)

No profits should be accrued for the subsidiary undertaking after the restrictions came into force unless the parent undertaking is still able to exercise a significant influence. If this is the case then it can be accounted for as an associated undertaking using the equity method.

The carrying amount of the investment should be regularly reviewed and written down for any permanent diminution in value.

When the restrictions cease, any profits/losses accrued during the period should be separately disclosed in the consolidated profit and loss account.

(b) Investment Held Exclusively with a View to Subsequent Resale

This should be included in the consolidated financial statements as a current asset at the lower of cost or net realisable value.

(c) Different Activities

A subsidiary undertaking excluded on these grounds should be accounted for using the equity method.

In addition to the **disclosures** required by the CA 85, the following information should be given in the consolidated financial statements for subsidiary undertakings not included in the consolidation:

- Particulars of the balances between the excluded subsidiary undertakings and the rest of the group.
- The nature and extent of transactions of the excluded subsidiary undertakings with the rest of the group.
- For an excluded subsidiary undertaking carried other than by the equity method, any amounts included in the consolidated financial statements in respect of:
 - (i) Dividends received and receivable from that undertaking; and
 - (ii) Any write-down in the period in respect of the investment in that undertaking or amounts due from that undertaking.
- For subsidiary undertakings excluded because of different activities, the separate financial statements of those undertakings. Summarised information may be provided for undertakings that individually, or in combination with those with similar operations, do not account for more than 20% of any one or more of operating profits, turnover or net assets of the group. The group amounts should be measured by including all excluded subsidiary undertakings.

Disclosures for excluded subsidiary undertakings in general apply to individual excluded subsidiary undertakings. However, if the information about excluded subsidiary undertakings is more appropriately presented for a sub-unit of the group comprising more than one excluded subsidiary undertaking, the disclosures may be made on an aggregate basis.

At this stage it may be helpful to summarise the differences which exist between the **Companies Act** and FRS 2 regarding the exclusion of subsidiaries:

Summary Reason	Companies Act	FRS 2	Excluded subsidiary accounted for:
1. Different activities	Must exclude	Must exclude (but in exceptional circumstances)	By using equity accounting
2. Severe long-term restrictions over exercise of rights by parent	May exclude	Must exclude	At cost or by using equity accounting depending on date of restriction
3. Subsidiary immaterial	May exclude	FRS does not apply to immaterial items so does not cover this exclusion	
4. Disproportionate expense or delay	May exclude	Exclusion not permitted under FRS 2	
5. Subsidiary held as a temporary investment	May exclude	Must exclude if not previously consolidated	As a current asset (lower of cost or NRV)

The overriding requirement is for a true and fair view, so FRS 2 applies.

Other Accounting Requirements

FRS 2 also requires that group companies adopt co-terminal accounting periods and uniform accounting policies. Where this is not possible adjustments should be made when preparing the consolidated accounts, or if this is not possible that fact and the reason for it should be disclosed.

The standard also contains provisions relating to the elimination of intra-group balances and unrealised profits. These will be discussed later.

C. FRS 9: ACCOUNTING FOR ASSOCIATED UNDERTAKINGS AND JOINT VENTURES

Standard Accounting Practice for Associated Companies

An **associate** is an entity (other than a subsidiary) in which the investor has a **participating interest** and over whose operational and financial policies the investor exercises **significant influence**.

FRS 9 requires that associate undertakings are included in the consolidated accounts as follows (this approach is referred to as the **equity method**):

(a) Consolidated Profit and Loss Account

The investing group should include the aggregate of its share of before-tax profits less losses of associated undertakings. The group share of the associated undertakings' taxation should be included and separately disclosed.

(b) Consolidated Balance Sheet

The investment should be carried at the total of:

- (i) The investing group's share of the net assets other than goodwill of the associated undertakings, stated, where possible, after attributing fair values to the net assets at the time of acquisition of the interest in the associated undertakings; and
- (ii) The investing group's share of any goodwill in the associated undertaking's own financial statements; together with
- (iii) The premium paid (or discount) on the acquisition of the interests in the associated undertakings insofar that it has not already been written off or amortised.

Item (i) should be disclosed separately but items (ii) and (iii) can be shown as one aggregate amount.

(c) Notes

Additional disclosures in the notes to the accounts are required for associated undertakings in which more than 15% or 25% of shares are held. These disclosures include shares of:

- gross assets
- gross liabilities
- turnover
- operating results.

(d) Where the Investing Company Does Not Have Any Subsidiaries

If the investing company does not have any subsidiaries it will not prepare consolidated accounts. The holding company's own accounts would recognise the dividends receivable and carry the investment at cost.

This does not reveal the underlying profitability of the investment. However, if it were to recognise its share of the undistributed profits it would be in breach of the Companies Act by recognising unrealised profits. Hence FRS 9 requires that an investing company that does not prepare consolidated financial statements should prepare a separate profit and loss account revealing its share of the associate's:

- Profit before tax
- Taxation
- Extraordinary items (if there are any)
- Net profit retained by the associate
- Any other material items, e.g. overall size of the associate's turnover

A **separate balance sheet** should also be prepared **or supplementary information** be given that would disclose the figures that would otherwise have appeared in the consolidated accounts.

Standard Accounting Practice for Joint Ventures

A joint venture is an entity in which the venturers hold interests on a long-term basis, with the entity being **jointly controlled** by the venturers under a contractual arrangement. Joint control means that none of the entities can alone control the joint-venture entity, but all acting together can do so.

Decisions on policies essential to the activities, performance and financial position of the venture require each venturer's consent.

All joint ventures need to show:

- The names of the principal joint venturers.
- The proportion of issued shares in each class held by the investing group.
- The accounting period or date if this differs from the investing group.
- The nature of the joint-venture business.

Any notes relating to the financial statements of the joint venture or matters of importance that should have been noted, had the investor's accounting policies been applied. (This applies in particular to contingent liabilities and capital commitments disclosed.)

If a joint venture exhibits the following characteristics, the required accounting is to use the "gross equity" method in the consolidated accounts, as explained below.

- **Characteristics:**
 - (i) The nature of a joint venture is usually one where an investor holds a long-term interest in, and shares the control of, an entity under a contractual arrangement.
 - (ii) There will be an agreement which may override normal ownership interests.
 - (iii) Acting together, venturers can control the joint venture and there are procedures for joint action.
 - (iv) Each venturer will have a veto over strategic policy decisions.
 - (v) There is usually a procedure to settle disputes between venturers and/or a termination procedure.

- **Gross equity method**

Disclose on the profit and loss account:

- (i) Share of JV operating profit
- (ii) Share of JV interest payable
- (iii) Share of JV tax
- (iv) Share of JV turnover

Disclose on the balance sheet:

- (i) Share of JV gross assets
- (ii) Share of JV liabilities

In the venturers' **own** accounts, the investment in the joint venture should be treated as a fixed asset investment at cost or valuation (less amounts written off).

(a) Joint Ventures which are not Entities

The nature of these arrangements will be that the venturers participate in an arrangement to carry out part of their own trades or businesses. Such joint arrangements do not constitute an entity **unless** a separate trade or business is carried out.

The required accounting is that each party will account for its own share of the assets, liabilities and cash flows in the joint arrangement, measured according to the terms of that arrangement, e.g. pro rata to their respective interests.

(b) Additional Disclosures

Where venturers conduct the major part of their business through joint venture trading entities, the following additional disclosures should be made:

- If the investor's share of a joint venture exceeds **15%** of **any** of gross assets, liabilities, turnover or three-year average operating result, disclose the **share** of:
 - (i) fixed assets
 - (ii) current assets
 - (iii) liabilities due within one year
 - (iv) liabilities due after one year.
- If the investor's share of a joint venture exceeds **25%** of **any** of gross assets, liabilities, turnover or three-year average operating result, disclose the **share** of:
 - (i) turnover
 - (ii) pre-tax profit
 - (iii) tax
 - (iv) after-tax profit
 - (v) fixed assets
 - (vi) current assets
 - (vii) liabilities due within one year
 - (vii) liabilities due after one year.

Example of Normal Presentation Under FRS 9

The following example provides an illustration of the normal presentation under FRS 9.

Note that the format shown for the consolidated profit and loss account is illustrative only. The amounts shown for "Associates" and "Joint Ventures" are subdivisions of the item for which the statutory prescribed heading is "Income from interests in associated undertakings". The subdivisions may be shown in a note rather than on the face of the profit and loss account.

Consolidated Profit and Loss Account

	£m	£m
Turnover: group and share of joint ventures	320	
less Share of joint ventures' turnover	<u>(120)</u>	
Group turnover		200
Cost of sales		<u>(120)</u>
Gross profit		80
Administrative expenses		<u>(40)</u>
Group operating profit		40
Share of operating profit in		
Joint ventures	30	
Associates	<u>24</u>	<u>54</u>
		94
Interest receivable (group)		6
Interest payable		
Group	(26)	
Joint ventures	(10)	
Associates	<u>(12)</u>	<u>(48)</u>
Profit on ordinary activities before tax		52
Tax on profit on ordinary activities *		<u>(12)</u>
Profit on ordinary activities after tax		40
Minority interests		<u>(6)</u>
Profit on ordinary activities after taxation and minority interest		34
Equity dividends		<u>(10)</u>
Retained profit for group and its share of associates and joint ventures		24

* Tax relates to the following:

Parent and subsidiaries	(5)
Joint ventures	(5)
Associates	(2)

Consolidated Balance Sheet

	£m	£m	£m
Fixed assets			
Tangible assets		480	
Investments			
Investments in joint ventures:			
Share of gross assets	130		
Share of gross liabilities	(80)	50	
Investments in associates		20	
			550
Current assets			
Stock		15	
Debtors		75	
Cash at bank and in hand		10	
		100	
Creditors (due within one year)		(50)	
Net current assets			50
Total assets less current liabilities			600
Creditors (due after more than one year)			(250)
Provisions for liabilities and charges			(10)
Equity minority interest			(40)
			(300)
Capital and reserves			
Called up share capital			50
Share premium account			150
Profit and loss account			100
Shareholders' funds (all equity)			300

Notes

In the example, there is no individual associate or joint venture that accounts for more than 25% of any of the following for the investor group (excluding any amount for associates and joint ventures):

- gross assets
- gross liabilities
- turnover
- operating results (on a three-year average).

Additional disclosures for joint ventures (which in aggregate exceed the 15% threshold)

	£m	£m
Share of assets		
Share of fixed assets	100	
Share of current assets	30	
Share of liabilities		
Liabilities due within one year or less	(10)	
Liabilities due after more than one year	(70)	
Share of net assets		50

Additional disclosures for associates (which in aggregate exceed the 15% threshold)

	£m	£m
Share of turnover of associates		90
Share of assets		
Share of fixed assets	4	
Share of current assets	28	
Share of liabilities		
Liabilities due within one year or less	(3)	
Liabilities due after more than one year	(9)	
Share of net assets		20

D. FRS 7: FAIR VALUES IN ACQUISITION ACCOUNTING

The objective of FRS 7 is to ensure that when a business is acquired by another, all the assets and liabilities at the time of the acquisition are recorded at their fair values. All subsequent gains and losses should be reported as post-acquisition results of the new group.

This means that post-acquisition reorganisation costs have to be charged in the post-acquisition group profit and loss account, rather than setting up a provision for such expenses. The reasoning behind this is that such costs are not considered to be an identifiable liability of the acquired business, but a subsequent commitment entered into by the acquirer.

Fair value is the amount at which an asset or liability could be exchanged in an arm's length transaction between informed and willing parties, other than in a forced or liquidation sale. FRS 7 develops this as follows:

- The fair values of monetary items should take into account amounts expected to be paid or received. The fair value of non-monetary items will usually be the replacement cost, unless the item concerned has a readily ascertainable market value. In any event fair values should not

exceed the recoverable amounts from use of the item concerned. This implies that the discounted value of future earnings from an asset could be used as a basis for establishing its fair value.

- The assets and liabilities recognised should be those which existed at the date of acquisition. The measurement of fair values should reflect the conditions at the acquisition date.
- Provisions for future operating losses should not be set up.
- Any costs associated with reorganising the acquired business are treated as post-acquisition items and are not dealt with as part of the fair value exercise at acquisition.

FRS 7 considers the fair value of certain specific assets and liabilities and how they should be valued as follows:

- **Tangible fixed assets** should be based on market value or depreciated replacement price, but should not exceed the recoverable amount of the asset.
- **Intangible assets** should be based on replacement cost, which is normally replacement value.
- **Stock and work in progress:** stocks traded on a market at which the acquired entity trades as both buyer and seller, e.g. commodity stocks, should be valued at market price. Other stocks should be valued at replacement cost or net realisable value, whichever is the lower.
- **Quoted investments** should be valued at market price.
- **Monetary assets and liabilities** should be valued by reference to market prices and may involve discounting.
- **Contingencies:** reasonable estimates of expected outcomes may be used.
- **Pensions and other post retirement benefits:** a deficiency should be recognised in full, but a surplus should only be recognised as an asset to the extent that it is reasonably expected to be realised.

The **cost of acquisition** is the cash paid and the fair value of any other purchase consideration given, together with the expense of acquisition.

Where the amount of the purchase consideration is dependent on future events, the cost of acquisition is to be based on a best-estimate basis. When the outcome is known, the cost of acquisition and goodwill should be adjusted.

Fees and other costs incurred in making an acquisition should be included in the cost of acquisition. The exceptions are those issue costs required by FRS 4 to be accounted for as a reduction in the proceeds of a capital instrument. Internal costs, and other expenses that cannot be directly attributed to the acquisition, should be charged to the profit and loss account.

E. ALTERNATIVE METHODS OF ACCOUNTING FOR GROUP COMPANIES

We've seen how group accounts are prepared when one company holds a controlling interest in another company. If a subsidiary is **wholly-owned** this should be relatively straightforward as all of the subsidiary's assets and liabilities belong to the group and these can simply be included in the group accounts.

However, a problem arises when the group only has a **partial interest** in another company, i.e. some of the shares in the subsidiary are held by parties outside the group. In this instance there are three possible methods of consolidating the company concerned:

- The acquisition method
- Proportional consolidation
- The equity method

We will now consider these in turn, using a simple set of financial statements for the investing and investee company. At this stage do not worry about the detailed accounting treatments involved, concentrate upon mastering the essential differences.

Acquisition Method

The acquisition method consolidates a subsidiary company as if, instead of acquiring the company's shares, the holding company acquired the subsidiary's net assets.

The **Companies Act 1989** defines acquisition accounting as follows:

- (a) In acquisition accounting the identifiable assets and liabilities of the undertaking acquired shall be included in the consolidated balance sheet at their **fair values at the date of acquisition**.
- (b) The income and expenditure of the undertaking acquired shall be brought into the group accounts **only as from the date of acquisition** (this means there is a clear distinction between pre- and post-acquisition profits).
- (c) The group interest in the capital and reserves as at acquisition (restated after fair-value adjustments) shall be deducted from the fair value of all consideration (including acquisition expenses) to establish **goodwill**.

The proportion of the subsidiary owned by parties outside the group (i.e. the minority interest) is shown either as a deduction from the group's net assets or as an addition to shareholders' funds.

Example

H plc acquired 75% of S Ltd's share capital on the date of S Ltd's incorporation. The two companies' balance sheets as at 31 December Year 3 were:

	H plc £000	S Ltd £000
Tangible fixed assets	1,200	500
Investment in S Ltd	75	
Net current assets	600	120
	<u>1,875</u>	<u>620</u>
Represented by:		
£1 Ordinary shares	500	100
Profit & loss account	<u>1,375</u>	<u>520 *</u>
	1,875	620

* This is all **post-acquisition** profit as S was incorporated at acquisition.

The acquisition method requires all of the assets under group control to be shown in the CBS:

H plc Consolidated Balance Sheet as at 31 December Year 3

	£000
Tangible fixed assets (1,200 + 500)	1,700
Net current assets (600 + 120)	720
	<u>2,420</u>

The consolidated accounts are prepared from the perspective of H plc's shareholders. Thus only H plc's equity is shown. The investment in S Ltd is cancelled against S Ltd's share capital. The share capital and reserves are therefore:

	£000	£000
£1 Ordinary shares – H plc only		500
Profit & loss account:		
H plc	1,375	
S Ltd (75% × 520)	<u>390</u>	<u>1,765</u>
		2,265
Minority interest (25% × 620) (a 25% share of S Ltd net assets)		<u>155</u>
		<u>2,420</u>

Proportional Consolidation

Proportional consolidation only includes **the group's share** of the subsidiary's assets and liabilities. Thus, if proportional consolidation was used in the above example the consolidated balance sheet would be:

H plc Consolidated Balance Sheet as at 31 December Year 3

	£000
Tangible fixed assets (1,200 + (75% × 500))	1,575
Net current assets (600 + (75% × 120))	<u>690</u>
	2,265
Represented by:	
£1 Ordinary shares	500
Profit & loss account – as above	<u>1,765</u>
	<u>2,265</u>

Note that a minority interest figure does not appear under proportional consolidation.

Equity Method

The equity method is also known as **one-line consolidation**. As this name suggests, the consolidated balance sheet only includes one item relating to the company being consolidated. Instead of carrying the investment in the company at cost, it is restated each year to account for any change in the net assets of the company concerned.

The consolidated balance sheet includes the investment as the **group's share** of the company's net assets plus any **unamortised goodwill** arising on acquisition (discussed later).

Applying the equity method to the above example, we would obtain the following consolidated balance sheet:

H plc Consolidated Balance Sheet as at 31 December Year 3

	£000
Tangible fixed assets	1,200
Investment in S Ltd (75% × 620)	465
Net current assets	600
	2,265
Represented by:	
£1 Ordinary shares	500
Profit & loss account – as above	1,765
	2,265

Note that under the equity accounting method, the composition of S Ltd net assets is not shown in the H plc consolidated balance sheet and is therefore “hidden” using this “one-line” technique.

The Different Methods in Practice

(a) Acquisition Method

The **Companies Act** requires that subsidiary undertakings are consolidated using the acquisition method.

After the **Companies Act 1989** was passed the ASC brought out ED 50 which proposed to replace SSAPs 1 and 14 with a single standard that would be consistent with current legislation. Previously there had been little guidance on how consolidated accounts should be prepared and this had led to wide variation in practice. In ED 50 the ASC proposed a conceptual basis for preparing consolidated accounts and then used this to establish mandatory accounting treatments for several areas where practice had varied. ED 50 gave three possible bases for preparing group accounts:

- **Entity Concept**

The entity concept views the accounts from the group's perspective, i.e. ignoring ownership. Thus the profit and loss account would include the total profit made for the period and the consolidated balance sheet would include all of the group's assets and liabilities. The minority interest would be treated as just another class of equity, i.e. it would remain unchanged from the date of acquisition. Thus, referring back to our

example, the minority interest would remain unchanged at £25,000 (25% of S Ltd ordinary share capital).

- **Proprietary Concept**

The proprietary concept views the accounts from the perspective of the **owners**. When looking at group accounts this will mean the holding company's shareholders. Thus the accounts will only include the assets and liabilities owned by the group. The use of proportional consolidation would be consistent with this concept.

- **Proprietary/Entity Concept**

This concept asks the question, what do the **users** of the consolidated accounts want to know? It answers this by arguing that the main users of the accounts will be the holding company's shareholders. They will want to know how well the group has performed over the previous financial period. In order to assess the performance of the group's management they will need to know what assets they had at their disposal and what they achieved with them. It is therefore necessary to include all of the assets under group control, i.e. the entity concept.

However, the holding company's shareholders will also want to know what proportion of those assets belongs to them (the proprietary concept). The minority interest must therefore be shown separately.

This last concept was chosen to be the conceptual basis for FRS 2. Thus when adjustments are made for intra-group items, unrealised profits/losses must be shared between the group and the minority when they relate to a partially-owned subsidiary. (This will be fully explained when we deal with techniques of consolidation.)

(b) Proportional Consolidation

Neither the **Companies Act** nor any accounting standards stipulate when proportional consolidation can or should be used. However, it is quite possible that two companies could set up a joint venture with both parties holding a 50% interest in the undertaking. ED 50 argued that an undertaking could not be a subsidiary to two different holding companies as it is not possible for both companies to exercise a dominant influence. This precise situation is not covered in the **Companies Act** or FRS 2 and such a joint venture could be accounted for using proportional consolidation.

(c) Equity Method

The equity method is used to consolidate associated undertakings and subsidiaries that have been excluded from consolidation under the acquisition method on the grounds of dissimilar activities.

F. MERGER ACCOUNTING

Where combining entities retain their legal status, then consolidated financial statements must be prepared. The two methods are:

- **Acquisition accounting**, used for most combinations; and
- **Merger accounting**, only available if the business combination involves an exchange of equity shares.

The major feature of consolidation procedures using acquisition accounting is that the profits are split between pre- and post-acquisition items. Pre-acquisition profits are taken to cost of control and are thus effectively frozen. This may mean that distributable profits are thus reduced as far as the group is concerned. Against this background, the techniques of merger accounting have arisen.

FRS 6, issued in 1994, sought to restrict the use of merger accounting techniques, but despite these restrictions, merger accounting remains an important topic and you should try to grasp the principles and especially how merger and acquisition principles compare.

Features of Merger Accounting

- (a) Net assets are not revalued to fair value as in acquisition accounting (to comply with FRS 7). So **post-merger profits may be higher** because depreciation and similar charges will be lower as a result.
- (b) Following from (a) above, merger accounting results will give **higher returns on capital**.
- (c) **No share premium account** is necessary if the conditions in S.131 of the **Companies Act** are fulfilled.
- (d) **No distinction is drawn between pre- and post-acquisition profits**; the business combination is accounted for as if the companies had always been together. A practical example of this is where a merger takes place part-way through an accounting period – the results of the combining entities are shown in the consolidated accounts in full for the year of combination.
- (e) The accounting policies of the companies combining are adjusted so they are uniform.
- (f) If there is a difference between the nominal value of shares issued plus the fair value of any other consideration, compared with the nominal value of shares acquired, this difference is treated as a movement on reserves or as a merger reserve. (This will be further explained in a numerical example.) There is therefore **no goodwill on consolidation** as may arise under acquisition accounting.

In summary, a merger is a very rare type of business combination where two or more parties combine for mutual trading advantages in what is effectively an equal “partnership”. None of the parties involved can be portrayed as the acquirer, and the newly merged company is regarded as an entirely new entity, not the continuation of one of the combined entities.

Companies Act Provisions

The **Companies Act 1989** amended the **Companies Act 1985** by setting out conditions, all of which must be met before merger accounting may be used. Note that the “offeror” refers to the prospective parent company of the new group, and the “offeree” is the prospective subsidiary.

- **Rule 1**

The offeror obtains at least 90% of the equity shares of the offeree as a result of the combination. This then allows the offeror company to avoid the necessity to create a share premium account in the new shares issued in exchange for shares in the offeree company. Shares are issued at nominal value. (These are the “merger relief” provisions in S130/131 of the Companies Act.)

- **Rule 2**

The holding of shares in the offeree company by the offeror arose as a result of an arrangement providing for the issue of ordinary shares by the offeror.

- **Rule 3**

The fair value of the total consideration given other than by the issue of equity shares does not exceed 10% of the nominal value of the equity shares issued.

- **Rule 4**

The adoption of merger accounting accords with generally accepted accounting principles (i.e. complies with FRS 6 and other relevant accounting standards).

The **Companies Act** allows merger accounting to be used if the conditions are met – which allowed companies to choose either acquisition or merger accounting. Under FRS 6, however, if a business combination does satisfy its more stringent rules, it **must** be accounted for as a merger.

FRS 6 Merger Accounting Provisions

The objective of FRS 6: Acquisitions and Mergers is to ensure that merger accounting is only used for genuine mergers, which it defines very tightly. All other business combinations are considered to be acquisitions, where acquisition accounting is applicable. There are special rules to cover group reconstructions or combinations using a new parent company.

A **merger** is a business combination which meets:

- (a) The conditions in Schedule 4A to the **Companies Act**.
- (b) Five additional criteria which are set out in FRS 6, namely:
 - (i) No party is portrayed as an acquirer or acquiree.
 - (ii) All parties participate in establishing the management structure of the combined entity.
 - (iii) The relative sizes of the two entities must be similar.
 - (iv) Equity shareholders in each combining party should be paid primarily in equity shares rather than cash. Cash consideration should be an immaterial proportion of the total consideration.
 - (v) No equity shareholder should retain any material interest in only part of the combined entity.

All other business combinations that do not meet the criteria of a merger are acquisitions.

Merger expenses should be charged to the profit and loss account rather than deducting them from reserves. This is consistent with paragraph 20 of FRS 3.

Preparation of Financial Statements using Merger Accounting Principles

In order to understand the techniques of merger accounting, we will now work through a consolidation example using acquisition accounting **and** merger accounting methods.

(Note that, for now, concentrate on the differences between the approaches – we shall examine the principles of consolidation in detail in the next unit.)

The balance sheets of A plc and B plc are as follows:

	A plc	B plc
	<i>£000</i>	<i>£000</i>
Net assets	600	360
£1 ordinary shares	480	180
Profit and loss account	120	180
	600	360

(a) Acquisition Accounting

Immediately after preparing its accounts, A plc issued 240,000 ordinary shares at £2 each to acquire all of the shares in B plc. The assets of B plc are stated at fair value. The accounting policy of A plc is to eliminate any goodwill immediately following acquisition of subsidiaries. Goodwill is calculated as:

	<i>£000</i>
Purchase consideration 240,000 shares at £2	480
100% ordinary shares and reserves	360
Goodwill	120

The consolidated balance sheet is:

	<i>£000</i>
Net assets (600 + 360)	960
Share capital (480 + 240) *	720
Share premium *	240
Reserves (120) – Goodwill (120) †	–
	960

* Increase in A plc's share capital following acquisition of B plc.

† Remember that goodwill is written off to the profit and loss account. Here it is simply deducted from the "reserves" in the balance sheet in total to comply with the accounting policies of A plc.

(b) Merger Accounting

Using the same data, the 240,000 ordinary shares would be accounted for at nominal value, no share premium account would be created. No goodwill account would arise. The nominal value of the new shares issued (£240,000) exceeds the nominal value of the shares acquired (£180,000) by £60,000 which is deducted from reserves.

The consolidated balance sheet is:

	<i>£000</i>
Net assets	960
£1 ordinary shares (480 + 240)	<u>720</u>
Reserves (120 + 180 – 60)	<u>240</u>
	960

Finally, suppose that only 170,000 ordinary shares were issued to acquire 100% of B. The nominal value of shares issued (£170,000) is less than the nominal value of shares acquired (£180,000) and this creates a non-distributable capital (merger) reserve (£10,000). The consolidated balance sheet then becomes:

	<i>£000</i>
Net assets	960
Ordinary shares 480 + 170	<u>650</u>
Reserves 120 + 180	300
Merger reserve	<u>10</u>
	960

Study Unit 12

Group Accounts 2: The Consolidated Accounts

<i>Contents</i>	<i>Page</i>
Introduction	270
A. The Consolidated Balance Sheet	270
Basic Consolidation Procedures	270
Cost of Control (Goodwill)	273
Partly-owned Subsidiaries	275
Preference Shares and Debenture Stock	277
Revaluation of Subsidiary's Assets on Acquisition	278
Adjusting for Unrealised Intra-Group Profits/Losses	279
Intra-Group Dividends and Investments	281
B. The Consolidated Profit And Loss Account	286
Standard Form of the Account	286
Principles of Consolidation	287
Preparation of a Consolidated Profit and Loss Account	289
C. Group Accounts – Example	296
Answers to Questions for Practice	301

INTRODUCTION

In this last unit of the course, we shall examine the preparation of consolidated balance sheets and consolidated profit and loss accounts.

A balance sheet of a business shows its state of affairs at a point in time. It is a summary of the assets and liabilities of the business and how those net assets are financed. In the case of a group of companies, the consolidated balance sheet shows the statement of affairs of the **group** and will be comprised of the balance sheet of the parent company, the net assets of the subsidiaries and also investments in associated companies.

However, companies within the group are likely to be debtors and creditors of each other and the (majority) shareholder in subsidiary companies is the holding company, so that dividends proposed by subsidiary companies are only liabilities to the group to the extent that they relate to minority shareholders. Furthermore, it is unusual for the price paid for the shares in a subsidiary company to equate to the net value of assets and liabilities acquired; usually a premium is paid – goodwill on acquisition.

Companies within a group which trade with each other are likely to have stocks purchased from another company within the group, charged at normal selling price. This means that, as far as the group is concerned, there is an element of unrealised profit in stocks which must be eliminated.

There are also adjustments to consider in respect of the preparation of a group profit statement – the consolidated profit and loss account – but not as many as in the consolidated balance sheet.

A. THE CONSOLIDATED BALANCE SHEET

Basic Consolidation Procedures

We will generally use the double-entry method and open a memorandum ledger to record the consolidating entries; no adjustments are made in the books of the individual companies. Such accounts will be opened for:

- Every element of shareholders' funds
- Cost of control (i.e. goodwill) for each subsidiary (often referred to as "adjustment account")
- Minority interests
- Assets containing inter-company profits (e.g. stock)
- Assets revalued by the group at the date of balance sheet, if no adjustment has been made in the individual companies' books.

After writing up these accounts, the closing balance will be transferred to the consolidated balance sheet and the assets and liabilities on the individual balance sheet, to which no alteration has been made, will be added together and shown on the consolidated balance sheet (CBS).

Example

Before we study in detail the points which cause complications, we will look at a simple example concerning a subsidiary which, at the date of the balance sheet, had no undistributed profits and in which all the shares are held by the holding company. We work as follows:

- (a) Combine the assets in the various balance sheets, e.g. plant, stocks. Show the aggregate figure in the CBS.
- (b) Similarly, combine all outside liabilities, e.g. creditors, debentures.
- (c) In the holding company balance sheet, we have “Shares in subsidiary company”. If this is equal to the combined share capitals of the subsidiaries, both cancel out.

From the following balance sheets of Company X and Company Y, prepare the CBS. All the shares in X were acquired by Y at the date of the balance sheets.

Balance Sheets at 31 December

	X	Y
	<i>£000</i>	<i>£000</i>
Premises	35	24
Plant	19	10
Shares in subsidiary	–	60
Stocks	13	18
Debtors	9	16
Cash	1	2
Creditors	(12)	(19)
Overdraft	(5)	(11)
Net assets	60	100
Share capital	60	80
Undistributed profits	–	20
	60	100

Apply the rules:

- (a) Combine the assets:

	<i>£000</i>
Premises (35 + 24)	59
Plant (19 + 10)	29
Stock (13 + 18)	31
Debtors (9 + 16)	25
Cash (1 + 2)	3
	<u>147</u>

(b) Combine the liabilities:

	£000
Creditors (12 + 19)	31
Overdraft (5 + 11)	16
	<u>47</u>

(c) Cancel out “Shares in subsidiary” in Y’s balance sheet against share capital of X.

The result is as follows:

Consolidated Balance Sheet of Y and its Subsidiary X at 31 December

	£000	£000	£000
Fixed Assets			
Premises			59
Plant			<u>29</u>
			88
Current Assets			
Stock		31	
Debtors		25	
Cash		<u>3</u>	
		59	
Creditors: Amounts falling due within one year			
Bank overdraft	16		
Creditors	<u>31</u>	<u>47</u>	
Net current assets			<u>12</u>
Total assets less current liabilities			<u>100</u>
Capital and Reserves			
Called-up share capital			80
Profit and loss account			<u>20</u>
			100

Note that the only share capital shown in the CBS is that of the holding company. This is **always** the case, no matter how involved the affairs of the group.

We will now work through a simple consolidation example which will lay the foundations for your future studies of group accounts. Make sure you fully understand the example before proceeding to the next stage.

Cost of Control (Goodwill)

In our earlier example, the item “Shares in subsidiary” in the holding company’s balance sheet was replaced in the CBS by the actual assets and liabilities represented by this investment. This was so since the net value of assets acquired was equal to the price paid for the shares. However, if the price paid for the shares exceeds the book value of the net assets of the subsidiary, the excess represents a premium, called the cost of control or goodwill on acquisition of the subsidiary.

Since the value of the net assets of a subsidiary is represented in its balance sheet by the amount of its paid-up capital plus reserves, the cost of control is the difference between the cost of the investment to the holding company and the total of the nominal value of shares issued and paid up, and all undistributed profits and reserves at the date of acquisition.

Example

From the balance sheets of Company A and Company B immediately after A had acquired **all** the shares in B, which were as follows, prepare the CBS. (**Note** this example assumes that B is a wholly-owned subsidiary, i.e. there is no minority interest.)

	A	B
	<i>£000</i>	<i>£000</i>
Fixed assets	22	14
Current assets	12	8
10,000 shares in B	20	–
	54	22
Less current liabilities	8	6
Net assets	46	16
Share capital (£1 shares)	24	10
Reserves	10	4
Undistributed profits	12	2
	46	16

(All assets and liabilities are stated at fair values).

Consolidation Workings

Open memorandum ledger accounts for the share capital, reserves and undistributed profits of the subsidiary and then apply the following double-entry procedure to ascertain the amount of goodwill:

(a) For the nominal value of 100% of shares acquired

Cr: Cost of control

Dr: Share capital

(b) For the balances existing on date of acquisition

Cr: Cost of control

Dr: Reserves

Dr: Undistributed profits

(c) For the cost of shares acquired

Cr: A – investment in B

Dr: Cost of control

The memorandum accounts are as follows:

B – SHARE CAPITAL			
	£000		£000
Cost of control	10	Balance b/d	10
B – RESERVES			
	£000		£000
Cost of control	4	Balance b/d	4
B – UNDISTRIBUTED PROFITS			
	£000		£000
Cost of control	2	Balance b/d	2
A – INVESTMENT IN B			
	£000		£000
Balance b/d	20	Cost of control	20
COST OF CONTROL			
	£000		£000
Cost of 10,000 shares in B (A – Investment in B)	20	Share capital – B	10
		Reserves – B	4
		Undistributed profits – B	2
		Balance = Goodwill	4
	<u>20</u>		<u>20</u>

Note carefully that the balances on B reserves and undistributed profits are **all** transferred to the cost of control account because they reflect pre-acquisition profits and reserves.

Answer

Consolidated Balance Sheet of A and its Subsidiary B as at

	£000	£000
Fixed assets		
Intangible asset: goodwill		4
Tangible assets (22 + 14)		36
Current assets (12 + 8)	20	
Creditors: Amounts falling due within one year (8 + 6)	14	
Net current assets		6
Total assets less current liabilities		46
Called-up share capital (A only)		24
Reserves (see footnote)		10
Profit and loss account		12
		46

Footnote

None of the reserves of B appear because they all relate to pre-acquisition profits. Goodwill is amortised through the profit and loss account over its assumed life.

Note that it is quite possible for the cost of shares in a subsidiary to be **less** than the net value of assets acquired. In this case goodwill will be negative, i.e. a credit balance. Negative goodwill will then appear on the consolidated balance sheet.

Partly-owned Subsidiaries

Where the holding company does not own the whole of the share capital of the subsidiary, it is clear that if the total value of net assets of the subsidiary is included in the CBS, some part of those assets is owned by an outside body, and this part should be shown as a liability in the CBS under “Minority interests”.

Example

Use the information given in the previous example for company A and B, but suppose that A's holding in B consists of only 8,000 shares at a cost of £20,000. Since A only owns 4/5ths of the shares of B, only 4/5ths of the reserves and undistributed profits are attributable to the group.

Consolidation Workings

B – SHARE CAPITAL			
	£000		£000
Cost of control (4/5)	8	Balance b/d	10
Minority interest (1/5)	<u>2</u>		<u> </u>
	10		10

B – RESERVES			
	£000		£000
Cost of control (4/5)	3.2	Balance b/d	4.0
Minority interest (1/5)	<u>0.8</u>		<u> </u>
	4.0		4.0

B – UNDISTRIBUTED PROFITS			
	£000		£000
Cost of control (4/5)	1.6	Balance b/d	2.0
Minority interest (1/5)	<u>0.4</u>		<u> </u>
	2.0		2.0

A – INVESTMENT IN B			
	£000		£000
Balance b/d	20	Cost of control	20

COST OF CONTROL			
	£000		£000
Cost of 8,000 shares in B	20.0	B – Share capital (4/5)	8.0
		Reserves (4/5)	3.2
		Undistributed profits (4/5)	1.6
	<u> </u>	Balance, being goodwill	<u>7.2</u>
	20.0		20.0

MINORITY INTEREST			
	£000		£000
Balance c/d	3.2	B – Share capital (1/5)	2.0
		Reserves (1/5)	0.8
		Undistributed profits (1/5)	0.4
	<u>3.2</u>		<u>3.2</u>

Consolidated Balance Sheet of A and its Subsidiary B as at

	£000	£000
Fixed assets		
Intangible assets: goodwill		7.2
Tangible assets (22 + 14)		36.0
Current assets (12 + 8)	20.0	
Creditors: Amounts falling due within one year (8 + 6)	<u>14.0</u>	
Net current assets		<u>6.0</u>
Total assets less current liabilities		<u>49.2</u>
Called-up share capital (A only)		24.0
Reserves		10.0
Profit and loss account		<u>12.0</u>
		46.0
Minority interest		<u>3.2</u>
		<u>49.2</u>

Note:

- (a) Please watch for instructions in questions regarding the treatment of goodwill.
- (b) The minority interest represents the minority share (1/5) of the net assets (share capital and reserves) of the subsidiary. FRS 4 requires that this is analysed between equity and non-equity interests. In this case it is entirely equity.

Preference Shares and Debenture Stock

It is quite possible that a subsidiary company will also have some preference shares and debenture stock in issue. When the preference shares and debenture stock are owned by the group, their nominal value should be cancelled against the investment made by the holding company in those securities. If this gives rise to a premium or discount on acquisition, this should be written off against group reserves.

Preference shares held by parties outside the group should be included in minority interest.

Debentures are a form of loan creditor and debenture stock held outside the group should be shown as a long-term creditor in the consolidated balance sheet.

Revaluation of Subsidiary's Assets on Acquisition

Goodwill under FRS 10 is the difference between the cost of an acquired entity and the aggregate of the fair value of the entity's identifiable assets and liabilities. The book value of the subsidiary's assets on the date of the acquisition may not be the same as their fair value. The assets should therefore be revalued and the revaluation surplus/deficit split between the group and any minority interest (in proportion to the respective holdings in the subsidiary.)

Example

The following is an example of the treatment of revaluation. The facts are as in the previous example with the exception that the fixed assets of the subsidiary have a fair value of £18,000 at the date of acquisition of the interest by A in B. The balance sheet of B following the revaluation adjustment will be as follows:

	£000
Fixed assets at valuation	18
Current assets	8
	26
less Current liabilities	6
	20
Share capital	10
Revaluation reserve	4
Reserves	4
Undistributed profits	2
	20

Consolidation workings

COST OF CONTROL			
	£000		£000
Cost of 8,000 shares in B	20.0	B – Share capital (4/5)	8.0
		Revaluation reserve (4/5)	3.2
		Reserves (4/5)	3.2
		Undistributed profits (4/5)	1.6
		Goodwill	4.0
	20.0		20.0

MINORITY INTEREST			
	£000		£000
Balance c/d	4.0	B – Share capital (1/5)	2.0
		Revaluation reserve (1/5)	0.8
		Reserves	0.8
		Undistributed profits (1/5)	0.4
	<u>4.0</u>		<u>4.0</u>

Consolidated Balance Sheet of A and its Subsidiary as at

	£000	£000
Fixed assets		
Intangible asset: goodwill		4.0
Tangible assets (22 + 18)		40.0
Current assets (12 + 8)	20.0	
Creditors: Amounts falling due within one year (8 + 6)	<u>14.0</u>	<u>6.0</u>
Total assets less current liabilities		<u>50.0</u>
Called up share capital		24.0
Reserves		10.0
Profit and loss account		<u>12.0</u>
		46.0
Minority interest		<u>4.0</u>
		50.0

Notes

- (a) The workings of the reserves and profit and loss account are as shown in the previous example.
- (b) The minority interest now includes the minority interest share (1.5) of the revaluation surplus.

Adjusting for Unrealised Intra-Group Profits/Losses

Group companies will often trade with each other and will make profits in the individual company accounts on the transactions that take place. For example, assume we have a group consisting of H and S who trade with a company outside the group, Z.

H has a subsidiary company S and S has a customer Z. Assume H sold goods (cost £100,000, selling price £125,000) to S. S then sold part of these goods to Z (cost to S £80,000, selling price £120,000).

The following situation exists:

	£
Sale by H to S: profit is	25,000
Sale by S to Z: profit is	<u>40,000</u>
Apparent group profit	<u>65,000</u>

However, S still has goods which cost it £45,000 in stock. As the original **mark-up** was 25% on the sale from H to S, then there is an unrealised profit of $20\% \times £45,000$ as far as the group is concerned.

	£
Therefore, the apparent total profit of	65,000
is reduced by the unrealised profit still in S stock	<u>(9,000)</u>
So the group realised profit is	<u>56,000</u>

(a) Eliminating Intra-group Profits/Losses

In line with the proprietary/entity concept, FRS 2 requires that the elimination of profits or losses relating to intra-group transactions should be set against the interests held by the group and the minority interest in respective proportions to their holdings in the undertaking whose individual financial statements recorded the eliminated profits or losses.

Thus the profit should be eliminated from the company which made the sale. If the holding company sold the goods to a partially-owned subsidiary then all of the unrealised profit must be debited against group reserves. However, if a partially-owned subsidiary made the sale then part of the unrealised profit must be eliminated against the minority interest.

Similar adjustments must also be made when a group company sells a fixed asset at a profit to another group company. In this instance an adjustment must also be made for the excess depreciation charged by the company due to the unrealised profit included in the cost of the asset.

For example, if a 75%-owned subsidiary sold an asset (cost £6,000) for £10,000 to the holding company, making a profit of £4,000, the profit would be eliminated as follows:

	Debit £	Credit £
Group reserves (75% × 4,000)	3,000	
Minority interest (25% × 4,000)	1,000	
Asset (reduction to cost)		4,000

If the asset is depreciated by £1,000 per annum then at the end of the first year the following adjustment must be made for the excess depreciation charged:

	Debit £	Credit £
Asset – depreciation (1,000 – 600)	400	
Group reserves (75% × 400)		300
Minority interest (25% × 400)		100

(b) Eliminating Inter-company Debts

If group members trade between themselves, then consolidation adjustments will be needed to eliminate any inter-company balances prior to the preparation of the group accounts. Similarly any cash in transit as yet unrecorded by the recipient company will need to be adjusted for before the consolidated accounts are prepared.

Intra-Group Dividends and Investments

The holding company will usually receive dividend payments from its subsidiaries and will account for them on an accruals basis as they are declared. When preparing the consolidated accounts, the dividend payable by the subsidiary to the holding company will be **cancelled** against the dividend receivable shown in the holding company's accounts. **Only** the dividend payments due to the **holding company's shareholders** and the **minority** appear in the consolidated balance sheet.

(a) Dividends Paid Out of Pre-acquisition Reserves

The holding company usually credits the dividend income from its subsidiaries to its own profit and loss account. However, sometimes the dividend payment will be out of pre-acquisition reserves.

Example

A plc acquired all of the ordinary share capital (with a nominal value of £10,000) of B Ltd on 30 December, paying £100,000. On that date B Ltd's reserves were £80,000. On 31 December B Ltd paid a dividend of £10,000 to its ordinary shareholders. After paying the dividend B Ltd's balance sheet was as follows:

	£000
Net assets	80
Ordinary shares	10
Profit & loss account	70
	80

The net assets of B have thus fallen from £90,000 at the date of acquisition to £80,000 after payment of the dividend.

The goodwill on the date of acquisition would be found by doing the following cost of control calculation:

	£000	£000
Cost of investment		100
less: Ordinary shares	10	
Profit & loss account	80	
		<u>90</u>
Goodwill		<u>10</u>

Obviously the goodwill cannot change, but B Ltd only has net assets amounting to £80,000 on 31 December. A plc could really treat the dividend received as profit, as it was paid out of the assets acquired. The dividend must therefore be credited to the cost of the investment. Thus we obtain:

	£000	£000
Cost of investment		100
less: Dividend paid out of pre-acquisition profits		<u>(10)</u>
		90
less: Ordinary shares	10	
Profit & loss account	70	
		<u>80</u>
Goodwill		<u>10</u>

The consolidation adjustment to reflect dividends paid out of pre-acquisition profits is:

Debit: Group reserves working

Credit: Cost of control account (to reflect reduction in the cost of investment)

Dividends paid out of pre-acquisition profits must not be included in group reserves on the unconsolidated balance sheet.

(b) Apportioning Dividends When a Subsidiary is Acquired During the Year

When a subsidiary is acquired during the year it is often not clear whether or not a dividend has been paid out of pre- or post-acquisition profits. There are no strict rules as to how this should be determined and in practice several different methods are used.

For the purpose of your examination you should assume, unless directed otherwise, that the dividends paid relating to the year of acquisition accrued evenly during the year. For example, if a subsidiary was acquired halfway through the year and proposed a dividend of £12,000 you should assume that £6,000 relates to pre-acquisition profits and the remaining £6,000 to post-acquisition profits (assuming sufficient profits were earned).

Example

C plc acquired 60% of the ordinary share capital of D Ltd at 31 December for £900,000. C plc's year ends 31 March.

An interim dividend of £60,000 was paid by D Ltd on 1 October and it proposed a final dividend of £90,000 on 31 March.

- Total dividends paid/proposed in the year: £150,000
- Dividends paid out of pre-acquisition profits ($£150,000 \times 9/12$): £112,500
- Pre-acquisition element of **final** dividend ($£90,000 - (£112,500 - £60,000)$): £37,500

The consolidation adjustments will be to:

- Reduce group reserves (Dr) by $60\% \times £37,500$: £22,500
- Reduce cost of control a/c (Cr) by $60\% \times £37,500$: £22,500

In C plc's own accounts the effect of these adjustments will be to reduce the carrying value of the investment in D by £22,500.

Questions for Practice *(Answers at the end of the unit)*

1. H plc acquired 80% of S Ltd's ordinary share capital on 1 January Year 4 for £700,000. S Ltd's reserves were £600,000 on that date and the fair value of some land owned by S Ltd on that date was £200,000 in excess of book value. S Ltd has not subsequently revalued the land.

The balance sheets of the two companies as at 31 December Year 9 were as follows:

	H plc £000	S Ltd £000
Tangible fixed assets	1,000	1,400
Investments	700	—
Net current assets	500	400
	<u>2,200</u>	<u>1,800</u>
Represented by:		
£1 Ordinary shares	100	100
10% Preference shares (issued 1 June Year 1)	—	50
Profit & loss account	2,100	1,650
	<u>2,200</u>	<u>1,800</u>

Prepare the consolidated balance sheet of H plc at 31 December Year 9.

2. H plc acquired 75% of S Ltd's ordinary share capital on 18 July Year 8 when S Ltd's reserves were £300,000. The balance sheets of the two companies as at 31 December Year 9 were:

	H plc £000	S Ltd £000
Tangible fixed assets	800	900
Investment in S Ltd	420	
Inter-company a/cs	120	(100)
Other current assets	520	360
	<u>1,860</u>	<u>1,160</u>
Represented by:		
£1 Ordinary shares	100	200
Profit & loss account	<u>1,760</u>	<u>960</u>
	1,860	1,160

There was cash in transit from S Ltd to H plc amounting to £20,000 at the year-end.

Goodwill is amortised over 20 years beginning in the year of purchase of S Ltd.

Prepare H plc's consolidated balance sheet as at 31 December Year 9.

3. On 1 January Year 3 X plc acquired 60% of Y Ltd's ordinary share capital and £10,000 of Y Ltd's debenture stock. Y Ltd's reserves as at 1 January Year 3 stood at £240,000. The two companies had the following balance sheets as at 31 December Year 9:

	X plc £000	Y Ltd £000
Tangible fixed assets	1,200.0	700
Investment in Y Ltd (<i>see footnote</i>)	260.5	
Net current assets	260.0	350
Debenture stock	—	(50)
	<u>1,720.5</u>	<u>1,000</u>
Represented by:		
£1 Ordinary shares	100.0	100
Preference shares	—	100
Share premium	100.0	80
Profit & loss account	<u>1,520.5</u>	<u>720</u>
	1,720.5	1,000

Footnote

		<i>£000</i>
The investment in Y comprises:	Ordinary shares	250
	Debentures	<u>10.5</u>
		<u>260.5</u>

Prepare X plc's consolidated balance sheet as at 31 December Year 9. Adopt a prudent treatment of goodwill arising.

4. Hold plc owns 60% of the ordinary share capital of Sub Ltd. The two companies produced the following balance sheets as at 30 June Year 8:

	Hold plc	Sub Ltd
	<i>£000</i>	<i>£000</i>
Plant & machinery – NBV	3,200	960
Investment in Sub Ltd	1,200	
Stock	1,120	480
Debtors	960	600
Bank	200	50
Creditors	<u>(900)</u>	<u>(530)</u>
	5,780	1,560
Represented by:		
£1 Ordinary shares	2,000	200
Profit & loss account	<u>3,780</u>	<u>1,360</u>
	5,780	1,560

Hold acquired the investment in Sub on 1 July Year 5. Sub's reserves at that date were £1,040,000.

On 30 June Year 8 Hold had goods in stock of £30,000 which had been purchased from Sub. Sub sold these goods to Hold with a mark-up of 50%.

On 1 July Year 7 Hold sold Sub some machinery, which had cost £240,000 to manufacture, for £300,000. Both companies depreciate machinery at 10% of cost per annum and the asset has been incorporated in Sub's books at cost less depreciation.

Prepare the consolidated balance sheet as at 30 June Year 8, assuming goodwill is amortised over a 20-year period as required by FRS 10.

B. THE CONSOLIDATED PROFIT AND LOSS ACCOUNT

The object of a consolidated profit and loss account (CPLA) is to present information obtained from the separate P & L accounts of the companies in the group in such a way as to show the amount of undistributed group profit at the end of the period.

Standard Form of the Account

The actual layout of a CPLA should accord with **Companies Act** requirements in a format such as follows:

- Turnover
- Cost of sales
- Gross profit or loss
- Distribution costs
- Administrative expenses
- Other operating income
- Income from shares in group undertakings
- Income from interests in associated undertakings
- Income from other participating interests
- Income from other fixed asset investments
- Other interest receivable and similar income
- Amounts written off investments
- Interest payable and similar charges
- Profit on ordinary activities before taxation
- Tax on profit or loss on ordinary activities
- Profit or loss on ordinary activities after taxation
- Minority interest
- Extraordinary income
- Extraordinary charges
- Extraordinary profit or loss
- Tax on extraordinary profit or loss
- Minority interests (*see below*)
- Other taxes not shown under the above items
- Profit or loss for the financial year
- Dividends paid or proposed

This second entry for “minority interests” is for dealing with the amount of any profit or loss on extraordinary activities attributable to shares in subsidiary undertakings included in the consolidation

held by or on behalf of parties other than the parent and its subsidiary undertakings. Note that since the introduction of FRS 3, it is extremely unlikely that companies will report any extraordinary items.

Principles of Consolidation

You will appreciate that the principles involved here are the same as we met in preparing a CBS. The following matters in particular must not be overlooked:

- Pre-acquisition profits or losses of subsidiary companies
- Minority interests, both as regards current preference dividends paid and undistributed profits of subsidiary companies
- Inter-company dividends
- Inter-company profits or losses
- Elimination of goodwill now amortised through the CPLA.

With these in mind, we will consider the steps to be taken in preparing our CPLA. You are usually given the separate profit and loss accounts of the holding company and the various subsidiary companies. Additional information is given and you are then required to draw up the CPLA.

The best way to get to grips with the CPLA is to work through a simple example and then consider the further complications of what can appear at first glance to be a fairly demanding study topic.

Example

(You should work through the question and suggested answer to familiarise yourself with the basic approach before proceeding further with this study unit.)

W plc acquired 80% of the £1 ordinary share capital of S Ltd some years ago when the profit and loss account balance of S Ltd was £20,000. The following draft profit and loss accounts for the two companies for the year to 31 December have been prepared:

	W plc	S Ltd
	<i>£000</i>	<i>£000</i>
Sales	1,000	400
Cost of sales	<u>(600)</u>	<u>(200)</u>
Gross profit	400	200
Distribution costs	(80)	(30)
Administration expenses	<u>(70)</u>	<u>(50)</u>
Operating profit pre-tax	250	120
Tax	<u>(80)</u>	<u>(40)</u>
Profit after tax	170	80
Dividend proposed	<u>(100)</u>	<u>(50)</u>
Retained profit of year	70	30
Retained profit b/f	<u>260</u>	<u>100</u>
Retained profit c/f	<u>330</u>	<u>130</u>

- (a) W plc sold goods £100,000 to S charging cost + 25%. There were £10,000 of these goods in the stock of S Ltd at 31 December.
- (b) W plc has not yet taken the dividend from S Ltd into its records.
- (c) There was no goodwill at acquisition.

Consolidated Profit and Loss Account

<i>Note</i>	<i>£000</i>
(1) Turnover (1,000 + 400 – 100)	1,300
(2) Cost of sales (600 + 200 – 100 + 2)	702
Gross profit	598
Distribution costs (80 + 30)	(110)
Administrative expenses (70 + 50)	(120)
Profit on ordinary activities before taxation	368
Taxation on profit on ordinary activities (80 + 40)	120
Profit on ordinary activities after taxation	248
(3) Minority interest: (20% × £80,000 (after tax profits of S Ltd))	(16)
	232
Dividend proposed (W only)	(100)
Retained profit for year	132
Retained profit b/f:	<i>£000</i>
W plc	260
Group share of S Ltd i.e. 80% of post-acquisition retained profit b/f = 80% × (100 – 20)	64
	324
Retained profit c/f	456

As W plc had not accounted for dividends received from S Ltd, no adjustment was necessary to eliminate these prior to the preparation of the CPLA for the group. Remember, the pre-acquisition profits of S Ltd are effectively frozen by being taken to cost of control account and are excluded from the retained profit brought forward figures.

Notes

- (1) The £100,000 sales from W to S are eliminated as inter-company trading.
- (2) The purchase price of goods to S from W is the same adjustment £100,000. In addition cost of sales is increased by the unrealised profit included in the stock, thus reducing group profits.
- (3) The dividends attributable to the minority interest in S Ltd will eventually appear as a current liability in the consolidated balance sheet. The profit for the year attributable to the minority

interest is split between the proposed dividend and the net addition to the minority interest figure in the consolidated balance sheet, i.e.:

	£000
Profit attributable to minority interest	16
Proposed dividend payable to minority interest (£50,000 × 20%)	10
Minority interest share of S Ltd retained profit for year (£30,000 × 20%)	6
	<u>16</u>

Preparation of a Consolidated Profit and Loss Account

The procedure for the preparation of a consolidated profit and loss account involves working through the following points, in this order:

(a) Balances Brought Forward

- (i) Eliminate the proportion attributable to minority interests. This amount can now be disregarded for CPLA purposes, forming part of the minority interest figure for the CBS.
- (ii) Eliminate pre-acquisition profits and losses of subsidiaries attributable to the group. This amount can also now be disregarded for CPLA purposes, although it forms part of cost of control workings.

These two adjustments will have the effect of eliminating all pre-acquisition profits, and the outside shareholders' proportion of post-acquisition profits, from balances brought forward. However, we still need to consider the effects on the CPLA if the subsidiary was acquired during the year, and we also need to deduct minority interests from the profits for the year.

(b) Pre-acquisition Profits and Losses

We have already learnt that pre-acquisition profits are not free for distribution and are taken to cost of control account. Similarly, if shares in the subsidiary were acquired during the year, the profits for the year must be apportioned to the date of acquisition, and the pre-acquisition profits transferred to cost of control.

Illustration

	£
Profits on ordinary activities after tax	X
less Pre-acquisition profits	<u>(X)</u>
	X
less Minority interests	<u>(X)</u>
Profits applicable to group shareholders	X
Deduct proposed dividends	<u>(X)</u>
Unappropriated profits applicable to group shareholders	<u>X</u>

(c) Inter-company Unrealised Profits

Deduct from the profits shown in the separate profit and loss accounts the group's proportion of any unrealised profits on stocks, i.e. due to trading within the group at a profit. (This is a point we have already considered for CBS purposes.) Remember that the profit of a selling

company is adjusted. In the CBS, of course, a second adjustment is made to the stock of the purchasing company. The trading profits can now be combined. Remember to eliminate inter-company sales from turnover and cost of sales as well, if the question demands it as in the previous example.

(d) *Inter-company Dividends*

Note particularly that all ordinary dividends paid by subsidiaries should be eliminated, irrespective of minority holdings. The liability to minorities is calculated on the balance brought forward and the trading profit for the period. Therefore, dividends paid to them are merely cash payments on account of that liability for CPLA purposes, and then may be eliminated with other ordinary dividends. (There would not, of course, be any objection to allocating to them first their due proportion of dividends and then the balance of their profits.)

The inter-company dividends are deleted from “Income from shares in group undertakings” on the credit side of the recipient company’s profit and loss account, and this amount is deducted from the balance of profit carried forward. In the profit and loss account of the paying company, the whole of the ordinary dividends paid, whether to members of the group or to minority interests, is deleted from the debit side of the account. The group’s proportion is added back to the balance of profit carried forward, for purposes of the CPLA, and the outside shareholders’ proportion is automatically allowed for in the calculation of their interests, as we have seen.

Different considerations apply to preference dividends. Here, the group proportion must be eliminated as described above, but the outside shareholders’ proportion must be left as a debit or included with the debit of the proportion of profit attributable to minority interests, since the liability is not otherwise provided for.

You must remember to show dividends paid by the holding company in the CPLA.

Eliminate dividends from pre-acquisition profits as described above. Remember that, for CBS purposes, the amount received by the holding company (or subsidiary, if one holds shares in another) should be credited to shares in subsidiary’s account, since it acts as a reduction in the price paid for the shares and, consequently, the amount attributable to goodwill.

(e) *Transfers to Reserve*

Eliminate the proportion attributable to minority interests and combine the balance of these items.

(f) *Minority Interests*

Dividends, except preference dividends, paid to outside shareholders and their proportion of the balance brought forward, have all been eliminated. It only remains to calculate from the individual profit and loss accounts of subsidiaries the true net profits (excluding transfers to reserve and similar appropriations). The outside shareholders’ proportions of such net profits can then be ascertained and the consolidated total entered as a debit in the CPLA.

Example 1

The summarised profit and loss accounts of R Ltd and its subsidiary S Ltd for the year ended 31 December are as follows:

	R Ltd	S Ltd
	<i>£000</i>	<i>£000</i>
Trading profit	25,000	30,000
Dividends received (net)	3,750	—
Profit before tax	28,750	30,000
Taxation	14,000	14,000
Profit after tax	14,750	16,000
Dividends: paid	—	5,000
proposed	10,000	5,000
Retained profit for year	4,750	6,000
Balance brought forward	35,000	40,000
Balance carried forward	39,750	46,000

Prepare the consolidated profit and loss account from the above and the following supplementary information:

- (a) R Ltd acquired 75% of the shares of S Ltd two years previously when the balance on S Ltd's profit and loss account stood at £16m.
- (b) Stocks of R Ltd at 31 December include goods to the value of £400,000 invoiced by S Ltd at cost plus 33 $\frac{1}{3}$ %.

Answer

***Consolidated P & L Account of R Ltd and its Subsidiary
for the Year ended 31 December***

	<i>£000</i>	<i>£000</i>
Group profit on ordinary activities before taxation (<i>working (b)</i>)		54,925
Taxation on profit on ordinary activities		28,000
Group profit on ordinary activities after tax		26,925
Minority interest		3,975
Profit for year attributable to holding company		22,950
Dividends: paid		—
proposed	10,000	10,000
Retained profit for year		12,950

Statement of Group Retained Profits

	£000
Balance at 1 January	53,000
Retained for the year	<u>12,950</u>
Balance at 31 December	<u>65,950</u>

Workings**(a) Unrealised profit**

Unrealised profit in stock (£400,000 × 25%): £100,000

This is split between:

The group (75%):	£75,000
The minority interest (25%):	£25,000

(b) Trading Profit

	R £000	S £000	Combined £000
As stated	25,000	30,000	55,000
Unrealised profit	<u>—</u>	<u>(75)</u>	<u>(75)</u>
As restated	25,000	29,925	54,925

(c) Minority Interest

	£000
S Ltd Trading profit after tax	<u>16,000</u>
25% thereof	4,000
less Unrealised profit	<u>25</u>
	<u>3,975</u>

(d) Dividends

Note that only the dividends proposed by the holding company are shown in the consolidated P & L account.

(e) Retained Profit for Year

	R	S	Combined
	<i>£000</i>	<i>£000</i>	<i>£000</i>
As individual P & L	4,750	6,000	10,750
Inter-company dividend	(3,750)	–	(3,750)
Dividends paid and proposed	–	10,000	10,000
	1,000	16,000	17,000
Minority interest (<i>as per working (c)</i>)	–	3,975	3,975
	1,000	12,025	13,025
Unrealised profit	–	(75)	(75)
	1,000	11,950	12,950

(f) Balance Brought Forward

	R	S	Combined
	<i>£000</i>	<i>£000</i>	<i>£000</i>
As stated	35,000	40,000	75,000
Minority interest 25%	–	(10,000)	(10,000)
	35,000	30,000	65,000
Pre-acquisition profit (75% × £16m)	–	(12,000)	(12,000)
	35,000	18,000	53,000

Note that as no information was given regarding the cost of R investment in S, goodwill cannot be ascertained and is ignored.

Example 2

X plc bought 60% of Z Ltd many years ago when the reserves of Z Ltd stood at £100,000. X plc also bought 20% of Z Ltd preference shares at the same date. The summarised profit and loss accounts for the year ended 31 December were as follows:

	X plc		Z Ltd	
	£000	£000	£000	£000
Gross profit		2,000		500
Expenses		1,300		200
Net profit		700		300
Investment income		52		—
Profit before tax		752		300
Taxation		210		90
Profit after tax		542		210
Dividends paid: Ordinary	100		20	
Preference	10		10	
Dividends proposed: Ordinary	120		60	
Preference	10	240	10	100
Retained		302		110
Reserves b/f		500		200
Reserves c/f		802		310

X plc sold goods to Z Ltd at invoice price £300,000 (invoiced at cost + 50%). Z Ltd has still to sell half of these goods at the year end.

Prepare a consolidated profit and loss account for X plc and its subsidiary for the year ended 31 December.

Workings**(a) Unrealised profit in stock:**

$$\frac{50}{150} \times £300,000 \times \frac{1}{2} = £50,000$$

This is eliminated in full against the group results as the sale was from the holding company to the subsidiary.

(b) Dividends received by X plc from Z Ltd:

	£000
Preference (20% × (£10,000 + £10,000))	4
Ordinary (60% × (£20,000 + £60,000))	48
	<u>52</u>

(c) Minority interest:

	£000		£000
Z Ltd profit after tax	210		
less Preference dividend	(20)	Minority Share 80%	16
Attributable to ordinary shareholders	190	Minority Share 40%	76
		Total	92

(d) Reserves b/f:

	£000
X plc	302
Z Ltd $60\% \times (110 - 100)$	6
	<u>308</u>

Answer

X plc and Subsidiary
Consolidated Profit and Loss Account for Year ended 31 Dec

	£000
Gross profit (2,000 + 500 – 50)	2,450
Expenses (1,300 + 200)	<u>1,500</u>
Profit on ordinary activities before taxation	950
Taxation (210 + 90)	<u>300</u>
Profit on ordinary activities after taxation	650
Minority interest (<i>as per working (c)</i>)	<u>92</u>
	558
Dividends paid and proposed	<u>240</u>
Retained profit for the year	318
Reserves b/f (<i>as per working (d)</i>)	<u>308</u>
Reserves c/f	<u>626</u>

C. GROUP ACCOUNTS – EXAMPLE

This example is aimed at consolidating your knowledge of group accounts acquired over this and the previous unit. You may wish to attempt it without looking at the answer – allow 30 minutes to complete it.

H plc acquired an 80% ordinary shareholding in S Ltd for £600,000 when the balances on S Ltd share capital and reserves were £400,000 and £100,000 respectively on 1 January Year 1. At the same date H plc had acquired 25% of the ordinary shares in A Ltd and had secured board representation with a view to long-term and significant involvement with A Ltd. The cost of the investment in A Ltd was £140,000 and the balances in A Ltd accounts for share capital and reserves were £200,000 and £80,000 respectively.

The summarised financial statements of H plc, S Ltd and A Ltd at 31 December Year 3 are shown below and you are to prepare a consolidated balance sheet at that date and a consolidated profit and loss account for the year to 31 December Year 3.

The fixed assets of S Ltd were considered to have a fair value of £1,200,000 at 1 January Year 1 and this has not yet been incorporated in the financial statements.

Assume that any goodwill or premium on acquisition is written off to profit and loss over 20 years. There are no inter-company items needing adjustment.

The disclosure notes for A Ltd required by FRS 9 are not required.

Profit and Loss Accounts

	H plc	S Ltd	A Ltd
	<i>£000</i>	<i>£000</i>	<i>£000</i>
Pre-tax profit	1,320	260	180
Tax	<u>(400)</u>	<u>(60)</u>	<u>(40)</u>
Profit after tax	920	200	140
Dividends	<u>(200)</u>	<u>–</u>	<u>–</u>
Retained profit	720	200	140

Balance Sheets

	H plc	S Ltd	A Ltd
	<i>£000</i>	<i>£000</i>	<i>£000</i>
Fixed assets	2,000	1,000	400
Investment in: Subsidiary	600	–	–
Associate	140	–	–
Net current assets	660	240	200
	<u>3,400</u>	<u>1,240</u>	<u>600</u>
Creditors: amounts falling due after more than 1 year	(400)	(40)	(120)
	<u>3,000</u>	<u>1,200</u>	<u>480</u>
Share capital	800	400	200
Reserves	<u>2,200</u>	<u>800</u>	<u>280</u>
	<u>3,000</u>	<u>1,200</u>	<u>480</u>

Suggested approach:

- Calculate the goodwill or premium for each acquisition and the annual amortisation
- Calculate minority interest in S Ltd
- Calculate investment in associate for A Ltd
- Calculate group reserves at 31 December Year 3
- Prepare accounts

Workings**(a) Goodwill calculations**

	<i>£000</i>	<i>£000</i>
S Ltd – purchase consideration		600
80% ordinary share capital	320	
80% pre-acquisition reserves	80	
80% revaluation reserve (fair value) $(1,200 - 1,000) \times 80\%$	<u>160</u>	<u>560</u>
Goodwill on acquisition		<u>40</u>
= £2,000 pa (i.e. £6,000 by end of Year 3)		
A Ltd purchase consideration		140
25% of ordinary share capital	50	
25% pre-acquisition reserves	<u>20</u>	<u>70</u>
Premium on acquisition		<u>70</u>
= £3,500 pa		

(b) Minority interest in S Ltd

	£000
20% ordinary shares	80
20% reserves	160
20% revaluation	40
	<u>280</u>

(c) Investment in associated company

	£000
Cost of investment	140.0
Group share of post-acquisition retained profits ($25\% \times (280 - 80)$)	<u>50.0</u>
	190.0
less Amortisation of premium ($3 \times £3,500$)	<u>(10.5)</u>
	179.5
Equals: 25% of A Ltd net assets at 31.12.Year 3, i.e. $480 \times 25\%$	120.0
plus Premium unamortised ($70 - 10.5$)	<u>59.5</u>
	<u>179.5</u>

(d) Group reserves (using a "T" account)

GROUP RESERVES			
	£000		£000
S Ltd pre-acquisition reserve	80.0	H Ltd	2,200.0
Minority interests	160.0	S Ltd	800.0
Premium/Goodwill written off S/A Year 3	5.5	A Ltd (share)	50.0
Premium/Goodwill written off S/A Year 1/2	11.0		
Balance c/d	<u>2,793.5</u>		
	3,050.0		<u>3,050.0</u>

Group Profit and Loss Account for the Year ended 31 December Year 3

	£000
Profit before tax $(1,320 + 260 + (180 \times 25\%))$	1,625.0
Taxation $(400 + 60 + (40 \times 25\%))$	<u>(470.0)</u>
Profit after tax	1,155.0
Elimination of goodwill/premium	(5.5)
S Minority interest $(20\% \times 200)$	<u>(40.0)</u>
Profit after tax and minority interest	1,109.5
Dividend	<u>(100.0)</u>
Group retained profit for the year	<u>1,009.5</u>

Group Balance Sheet as at 31 December Year 3

	£000
Fixed assets	
Intangible $(40 - 6)$	34.0
Tangible (including revaluation)	3,200.0
Investment in associated undertaking	179.5
Net current assets	<u>900.0</u>
	4,313.5
Creditors: amounts falling due after more than 1 year	<u>(440.0)</u>
	<u>3,873.5</u>
Share capital	800.0
Reserves	2,793.5
Minority interest	<u>280.0</u>
	<u>3,873.5</u>

Note that only the unamortised goodwill in relation to S appears under intangibles.

Questions for Practice (*Answers at the end of the unit*)

5. Bold plc purchased 75% of the ordinary share capital of Surf Ltd several years ago when Surf Ltd's retained earnings were £200,000. Bold plc has also owned 25% of Tide Ltd since 31 December Year 0. At that date Tide Ltd's reserves were £40,000.

The profit and loss accounts for the three companies for the year ended 31 December Year 7 were as follows:

	Bold plc £000	Surf Ltd £000	Tide Ltd £000
Sales	1,000	800	500
Cost of sales	600	450	200
Gross profit	400	350	300
Expenses	200	200	100
Operating profit	200	150	200
Dividends receivable	60	—	—
Profit before tax	260	150	200
Taxation	70	48	60
Profit after tax	190	102	140
Dividends proposed	100	60	60
Retained profit for year	90	42	80
Retained profit b/f	1,200	800	400
Retained profit c/f	1,290	842	480

Prepare a consolidated profit and loss account and analysis of retained profits for the year ended 31 December Year 7 for the Bold group. Show also how these profits would be reflected in reserve movements.

ANSWERS TO QUESTIONS FOR PRACTICE

1. *H plc Consolidated Balance Sheet as at 31 December Year 9*

	£000
Intangible fixed asset: negative goodwill	(20)
Tangible fixed assets (1,000 + 1,400 + 200) (i.e. including revaluation)	2,600
Net current assets (500 + 400)	900
	<u>3,480</u>
Represented by:	
£1 Ordinary shares	100
Profit & loss account	2,940
	<u>3,040</u>
Minority interest	440
	<u>3,480</u>

Note that “negative goodwill” appears under intangibles on the CBS in accordance with FRS 10.

Workings

COST OF CONTROL			
	£000		£000
Investment in S Ltd	700	Shares (80%)	80
Negative goodwill (bal. fig.)	20	Pre-acquisition profit and loss (80% × 600)	480
		Revaluation (80% × 200)	160
	<u>720</u>		<u>720</u>
GROUP RESERVES			
	£000		£000
Minority interest (20% × 1,650)	330	H plc	2,100
Pre-acquisition profit and loss	480	S Ltd	1,650
CBS (balancing figure)	2,940		
	<u>3,750</u>		<u>3,750</u>

MINORITY INTEREST			
	£000		£000
CBS (balancing figure)	440	Shares (20%)	20
		Preference shares (100%)	50
		Revaluation (20%)	40
		Profit and loss (20%)	330
	<u>440</u>		<u>440</u>

The figure for “profit and loss” included in the minority interest working at £330,000 represents 20% of the **total** profit and loss a/c of S Ltd. There is no distinction drawn between the **pre-** and **post-** acquisition profits as far as the minority interest is concerned, whereas the cost of control account includes only the **group share of the pre-acquisition profits**. This is a common area for mistakes and you must be sure that you fully understand it. To clarify:

	£000
S profit and loss account	<u>1,650</u>
This has been disposed of as follows:	
• Taken to cost of control: 80% of pre-acquisition profit ($80\% \times 600$)	480
• Taken to group profit and loss: 80% of post- acquisition profit i.e. $80\% \times (1,650 - 600)$	840
• Taken to minority interest: ($20\% \times 1,650$)	<u>330</u>
	<u>1,650</u>

2. ***H plc Consolidated Balance Sheet as at 31 December Year 9***

	£000
Intangible fixed asset: goodwill	42.75
Tangible fixed assets ($800 + 900$)	1,700.00
Net current assets ($520 + 360 + 20$)	<u>900.00</u>
	<u>2,642.75</u>
Represented by:	
£1 Ordinary shares	100.00
Profit & loss account	<u>2,252.75</u>
	2,352.75
Minority interest	<u>290.00</u>
	<u>2,642.75</u>

Workings

COST OF CONTROL			
	£000		£000
Investment	420.00	Shares (75%)	150.00
		Pre-acquisition reserves (75% × 300)	225.00
		Goodwill	45.00
	<u>420.00</u>		<u>420.00</u>

Goodwill is amortised by $£2,250 \times 1/20$ in the first year and subsequently.

GROUP RESERVES			
	£000		£000
Minority interest (25% × 960)	240.00	H plc	1,760.00
Pre-acquisition reserves	225.00	S Ltd	960.00
Goodwill written off	2.25		
CBS (balancing figure)	<u>2,252.75</u>		
	2,720.00		<u>2,720.00</u>

MINORITY INTEREST			
	£000		£000
CBS (balancing figure)	290.00	Shares (25%)	50.00
		Reserves (25% × 960)	240.00
	<u>290.00</u>		<u>290.00</u>

Notes

- The minority interest could also have been calculated by taking 25% of S Ltd's net assets, i.e. $25\% \times 1,160 = 290$.
- The inter-company accounts cancel on consolidation and an adjustment of £20,000 is made to net current assets to include the cash in transit at year-end, which increases recorded group liquid assets.

3. *X plc Consolidated Balance Sheet as at 31 December Year 9*

	£000
Intangible fixed asset: negative goodwill	(2)
Tangible fixed assets (1,200 + 700)	1,900
Net current assets (260 + 350)	610
Debenture stock (50 – 10)	(40)
	<u>2,468</u>
Represented by:	
£1 Ordinary shares	100
Share premium	100
Profit & loss account	<u>1,808</u>
	2,008
Minority interest	<u>460</u>
	<u>2,468</u>

Workings

COST OF CONTROL			
	£000		£000
Investment	250	Shares (60%)	60
Negative goodwill	2	Share premium (60% × 80)	48
		Pre-acquisition reserves (60% × 240)	<u>144</u>
	<u>252</u>		252
COST OF DEBENTURES			
	£000		£000
Cost of investment	10.5	Nominal value of stock	10.0
		Premium on acquisition	<u>0.5</u>
	<u>10.5</u>		10.5

GROUP RESERVES			
	£000		£000
Minority interest (40% × 720)	288.0	X plc	1,520.5
Pre-acquisition reserves	144.0	Y Ltd	720.0
Premium on acquisition of debentures	0.5		
CBS (balancing figure)	1,808.0		
	<u>2,240.5</u>		<u>2,240.5</u>

MINORITY INTEREST			
	£000		£000
CBS	460	Shares (40%)	40
		Preference shares (100%)	100
		Share premium (40%)	32
		Reserves (40%)	288
	<u>460</u>		<u>460</u>

Note that in the absence of information to the contrary, negative goodwill is not released to the profit and loss account but carried as a negative figure on the CBS.

4.

Consolidated Balance Sheet as at 30 June Year 8

	£000
Intangible asset (goodwill)	387.6
Plant & machinery	4,106.0
Stock (1,120 + 480 – 10)	1,590.0
Debtors	1,560.0
Bank	250.0
Creditors	<u>(1,430.0)</u>
	<u>6,463.6</u>
Represented by:	
£1 Ordinary shares	2,000.0
Reserves	<u>3,843.6</u>
	5,843.6
Minority interest	<u>620.0</u>
	<u>6,463.6</u>

Workings**(a) Plant & Machinery and Stock Unrealised Profits**

(i)	£000	£000
Hold plc		3,200
Sub Ltd	960	
less Profit on sale	(60)	
plus Excess depreciation	<u>6</u>	<u>906</u>
		<u>4,106</u>

The excess depreciation is calculated as follows: £

10% Depreciation on the asset transferred (cost £300,000) in Sub's books	30,000
10% Depreciation on the cost of the asset to the group	<u>24,000</u>
Thus increase in group reserves	<u>6,000</u>

- (ii) Stock from Sub in Hold's books: £30,000
 Unrealised profit element (mark-up 50%): £10,000
 Apportionment:
 to group (60%): £6,000
 to minority interest (as sale is from Sub to Hold): £4,000.

(b) Goodwill

This calculation is merely the normal cost of control a/c done using a memorandum format:

	£000	£000
Investment in Sub Ltd		1,200
Shares (60% × 200)	120	
Pre-acquisition reserves (60% × 1,040)	<u>624</u>	<u>744</u>
Goodwill		<u>456</u>

Annual amortisation over 20 years: £22,800

(c) Minority Interest

	£000
40% ordinary shares in Sub	80
40% Sub profit and loss	544
Unrealised profit in stock (40%)	<u>(4)</u>
	<u>620</u>

(d) Consolidated reserves

Again, done using a memorandum format instead of a "T" account:

	£000	£000
Hold		3,780.0
Unrealised profit in machinery cost		(60.0)
Sub	1,360.0	
Unrealised profit in stock	(6.0)	
Excess depreciation	<u>6.0</u>	
	1,360.0	
Pre-acquisition profits $60\% \times 1,040$	(624.0)	
Minority interest $40\% \times 1,360$	<u>(544.0)</u>	
Group share of Sub post-acquisition profits		<u>192.0</u>
		3,912.0
Less goodwill (3 years at £22,800 pa)		<u>68.4</u>
Balance to CBS		<u>3,843.6</u>

5. Tide is treated as an associated company and is consolidated using the equity method.

Bold plc**Group Consolidated Profit and Loss Account for the Year ended 31 December Year 7**

	£000	£000
Sales (1,000 + 800)		1,800.0
Cost of sales (600 + 450)		<u>1,050.0</u>
Gross profit		750.0
Expenses (200 + 200)		<u>400.0</u>
		350.0
Share of associated company profit before tax ($200 \times 25\%$)		<u>50.0</u>
		400.0
Taxation: Group (70 + 48)	118.0	
Associate ($25\% \times 60$)	<u>15.0</u>	<u>133.0</u>
Profit after tax		267.0
Minority interest ($25\% \times 102$)		<u>25.5</u>
Profit after tax attributable to the group		241.5
Dividend		<u>100.0</u>
Retained profit for year		141.5

