Chapter 1: introduction to accounting and finance

Accounting is concerned with collecting, analyzing, and communicating financial information.

Finance is concerned with the ways in which funds for a business are raised and invested.

Main users of accounting:

- Customers
- Competitors
- Employees and their representatives
- Government
- Community representatives
- Investment analysts
- Suppliers
- Lenders
- Managers
- Owners

The release of financial statements affects share price

Figure 1.3: the qualities that influence the usefulness of accounting information

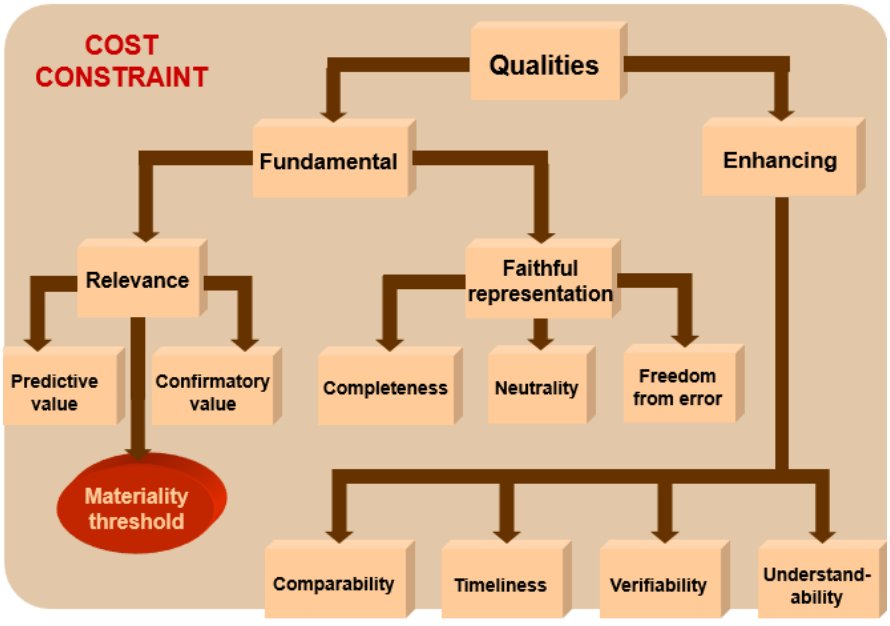


Figure 1.2: relationship between costs and the value of providing additional accounting information

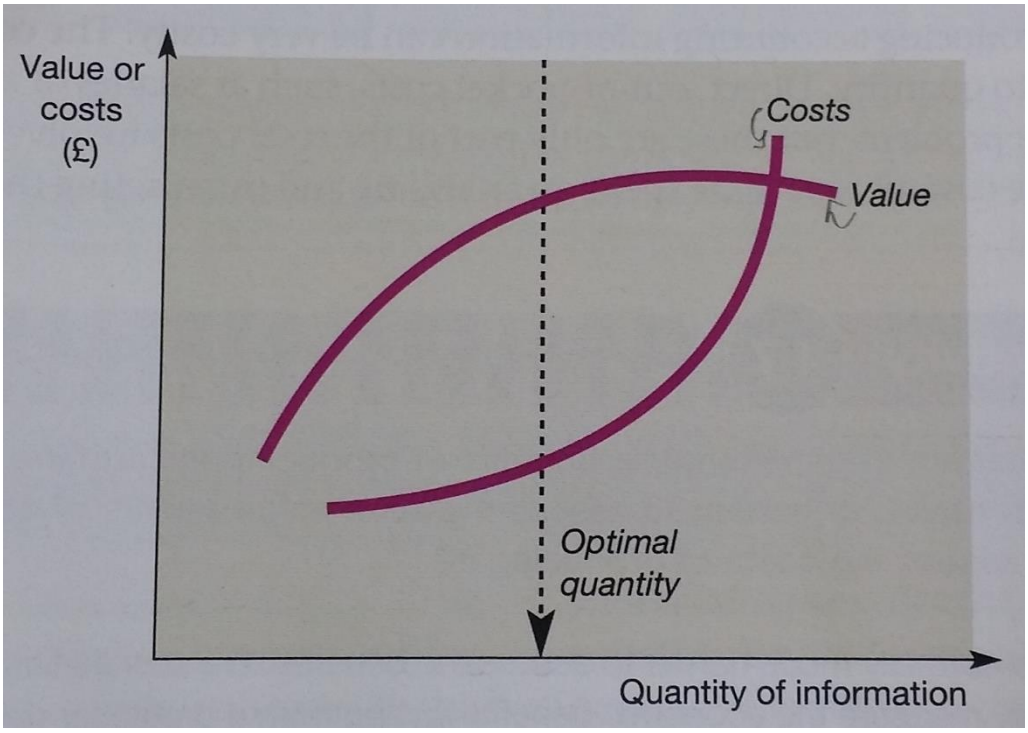


Figure 1.5: management and financial accounting compared

	Management accounting	Financial accounting
Nature of the reports produced	Tend to be specific purpose	Tend to be general purpose
Level of detail	Often very detailed	Usually broad overview
Regulations	Unregulated	Usually subject to accounting regulation
Reporting interval	As short as required by managers	Usually annual or bi-annual
Time orientation	Often based on projected future information as well as past information	Almost always historical
Range and quality of information	Tend to contain financial and non-financial information, often use information that cannot be verified	Focus on financial information, great emphasis on objective, verifiable evidence

The purpose of a business is to create and keep customers (i.e., create wealth for the owners)

Types of business ownership:

1. Sole proprietorship
2. Partnership
    a. A limited liability partnership (LLP) is also available
3. Limited company

Chapter 2: measuring and reporting financial position

The 4 major financial statements:

1. Income statement
2. Statement of cash flows
3. Statement of financial position
4. Statement of owner's equity

Cash =/= profit

An asset should have the following characteristics (all answers must be yes):

1. Is there a probable future economic benefit?
2. Does the benefit arise from a past transaction or event?
3. Is there a right to control the resource?
4. Can the resource be reliably measured in financial terms?

Types of assets:

1. Tangible
2. Intangible

Classification of assets:

1. Current assets, they must meet any of the following conditions
    a. They are held for sale or consumption during the business's normal operating cycle
    b. They are expected to be sold within a year after the date of the relevant statement of financial position
    c. They are held principally for trading
    d. They are cash or cash equivalent
2. Non-current assets

Classification of liabilities:

1. Current liabilities, they must meet any of the following conditions
    a. They are expected to be settled within the business's normal operating cycle
    b. They exist principally as a result of trading
    c. They are due to be settled within a year after the date of relevant statement of financial position
    d. There is no right to defer settlement beyond a year after the date of the relevant statement of financial position
2. Non-current liabilities

Accounting conventions:

1. Business entity convention
2. Historic cost
3. Prudence convention
4. Going concern
5. Dual aspect

Money measurement issues:

1. Goodwill and brands
2. Human resources
3. Monetary stability

Valuing assets:

1. Carrying amount (net book value / written-down value)
2. Fair value
3. Impairment (impairment loss)
4. Inventories (net realizable value)

Benefits of the statement of financial position:

1. It provides insight about how the business is financed and how its funds are deployed
2. It can provide a basis for assessing the value of the business
3. Relationships between assets and claims can be assessed
4. Performance can be assessed

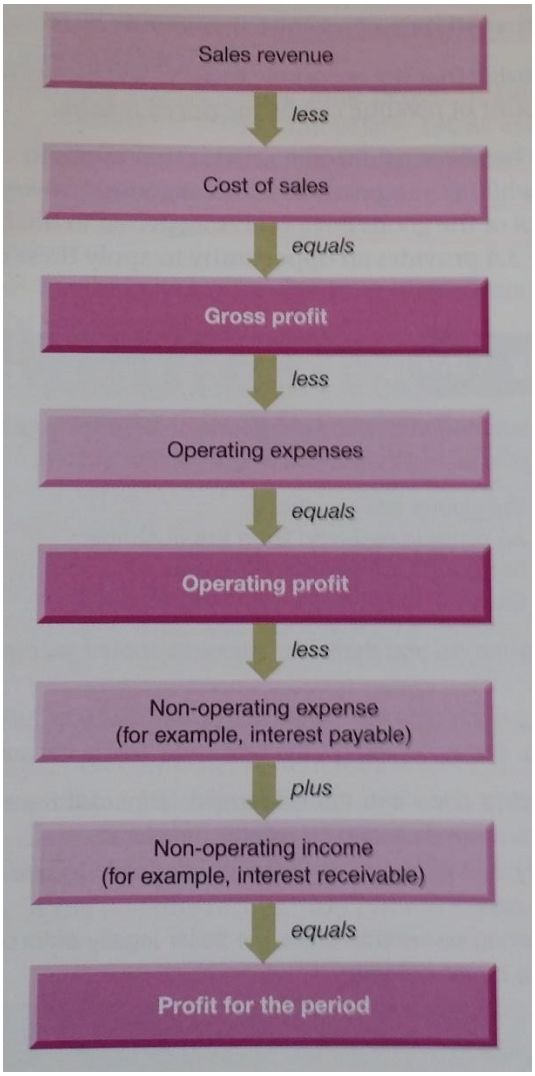
Chapter 3: measuring and reporting financial position

The income statement links the statement of financial position at the beginning and the end of a reporting period.

Measures of profit:

1. Gross profit
2. Operating profit
3. Profit for the period (i.e., net income)

Figure 3.2: the layout of the income statement



Recognizing revenue

1. Criteria for recognizing revenue
    a. It is probable that the economic benefits will be received
    b. The amount of revenue can be measured reliably
    c. Ownership and control of goods have been transferred to the buyer
2. For long term contracts
    a. It is possible to recognize revenue before the contract is completed by identifying different stages of completion.
    b. A proportion of the total contract price, based on the work done, can then be treated as revenue of the reporting period during which each particular stage is completed.
    c. This approach can be used where contract revenue and costs, as well as the stages of completion, can be measured reliably.
3. Continuous and non-continuous services
    a. Revenue is normally recognized after the service is completed
    b. Cash can be collected before revenue is recognized

Recognizing expenses → the matching convention: expenses should be matched to the revenue that they help generate.

Examples of expenses that cannot be linked directly to revenue:

- Electricity expense
- Rent payable
- Insurance
- Interest payable
- License fees payable

Profit is a measure of achievement, or productive effort, rather than a measure of cash generated.

Depreciation: an attempt to measure that portion of a cost of a fixed asset that has been depleted in generating the revenue recognized during a particular period.

➔ useful life == economic life =/= physical life

➔ residual value == salvage value == disposal value

Depreciation methods:

1. Straight line method (using a constant value, suitable for buildings)
2. Reducing-balance method (using a percentage, suitable for machinery)

➔ impairment =/= depreciation

➔ the total depreciation expense over the assets life will not be affected by estimation errors → the loss / profit on disposal of the fixed asset will put thing back into order

Costing inventories methods (should follow the consistency convention):

1. FIFO → allowed for financial statements
2. AVCO → allowed for financial statements
3. LIFO → not allowed for financial statements

Problems encountered with account / trade receivables:

1. Bad debt

   → increase 'bad debts written off'

   → decrease 'account / trade' receivables

2. Doubtful debt
   a. Step 1

      → increase 'allowance for trade receivable'

   b. Step 2 (if recoverable)

      → increase 'revenue'

      → decrease 'allowance for trade receivable'

Benefits of the income statement:

1. How effective the business has been in generating wealth
2. How profit was derived

Chapter 4: accounting for limited companies (1)

A limited company is an artificial person created by law.

➔ legal separation between a business and its owners =/= the accounting business entity convention

➔ it leads to the following:

1. Perpetual life
2. Limited liability
3. Legal safeguards
4. Taxation

Issuing new shares above nominal value is fair to existing / old shareholders

Sources of long-term finance:

1. Share issues
2. Retained earnings
3. Long-term borrowings

Share issuance can be through:

1. Rights issues to existing shareholders
2. Public issues to the general public
3. Private issues to selected individuals

Capital reserves:

1. Issuing shares at above their nominal value
2. Revaluing (upwards) non-current assets

Retained earnings are not cash, they are claims on assets

Figure 4.4: availability for withdrawal of various parts of the shareholders' equity

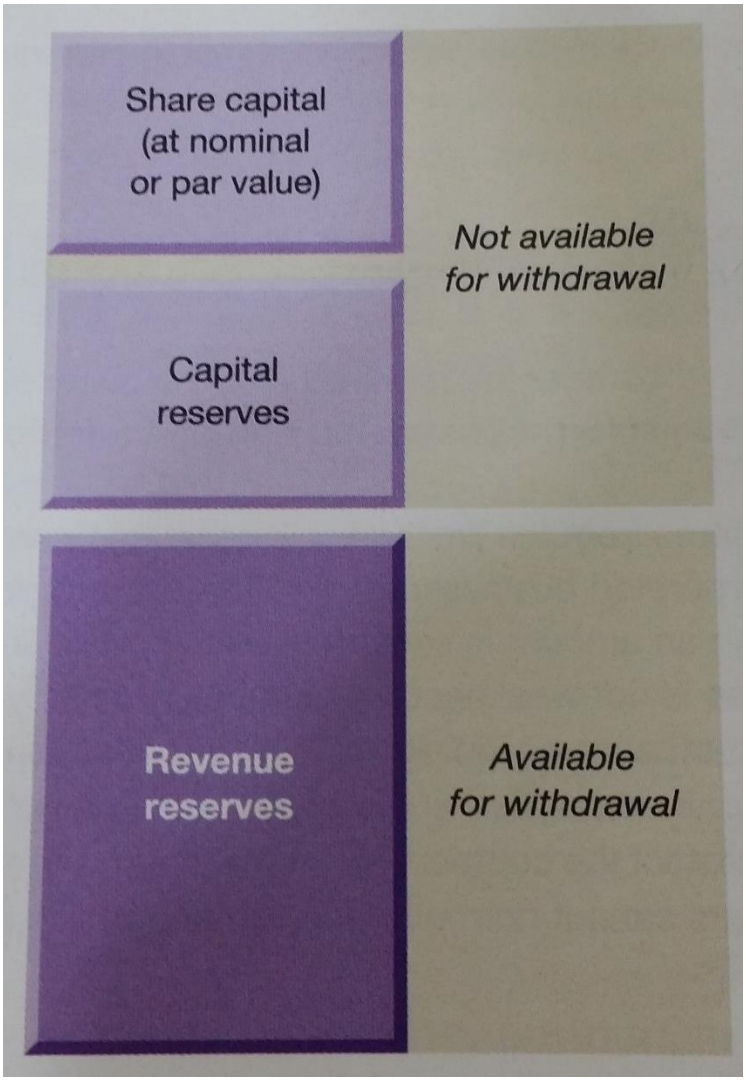
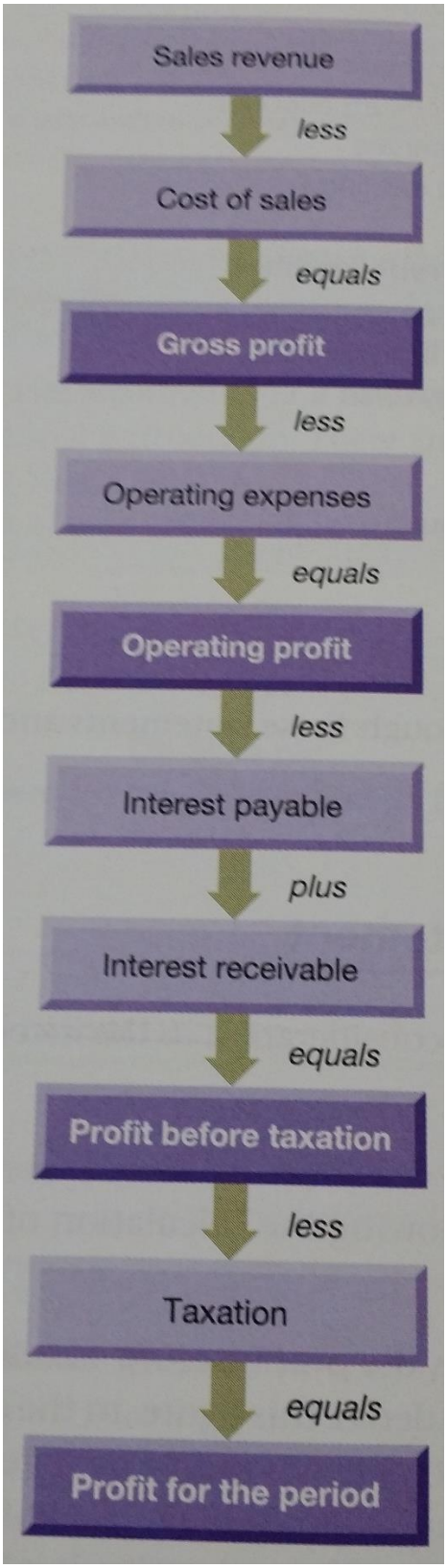


Figure 4.5: the layout of the income statement for a limited company



Goodwill:

1. Arises on consolidation of different companies
2. Equals the excess of what a company paid to purchase another company above the fair value
3. Comprised of the value of loyal workforce, customer base, etc.

Non-controlling interests:

1. One of the principles followed when preparing group financial statements is that all of the revenue, expenses, assets, liabilities and cash flows of each subsidiary are reflected to their full extent in the group financial statements.
2. This is true whether or not the parent owns all of the shares in each subsidiary, provided that the parent has control.
3. Control normally means owning more than 50 percent of the subsidiary's ordinary shares.
4. The interests, or claims, of outside shareholders are known as non-controlling interests.

Chapter 5: accounting for limited companies (2)

The core components of financial reports:

1. Financial statements
2. Corporate governance
3. Management commentary

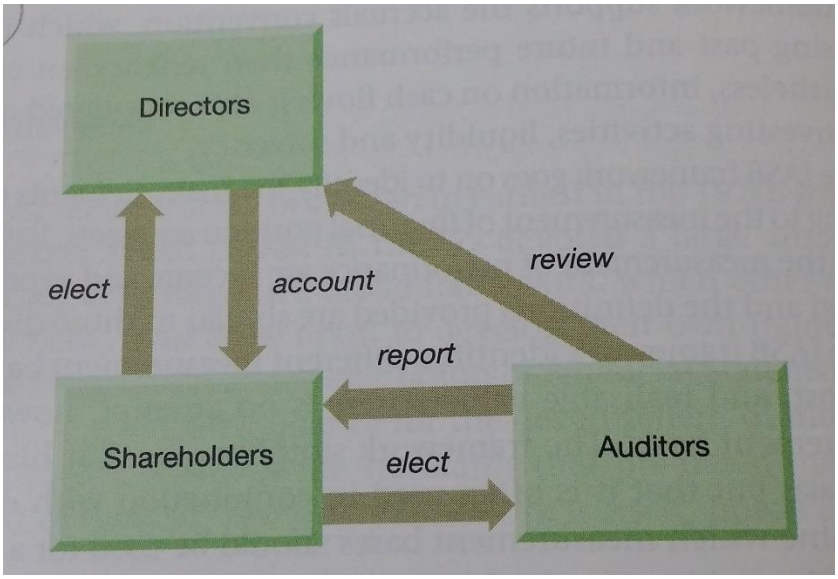
IAS / IFRS deal with key issues such as:

1. What information should be disclosed
2. How information should be presented
3. How assets should be valued
4. How profit should be measured

Financial statements required under IAS1:

1. Statement of financial position
2. Statement of cash flows
3. Statement of changes in equity
4. Statement of comprehensive income
5. Notes on accounting policies and other explanatory notes

Figure 5.4: the relationship between the shareholders, the directors, and the auditors



There are many types of revenue manipulation, including:

1. Early recognition of revenue
2. Passing goods to distributors
3. Artificial trading

The main methods of creative accounting:

1. Misstating revenue
2. Massaging expenses
3. Concealing bad news
4. Misstating assets
5. Inadequate disclosure

Signs indicating the health / increased confidence in the published financial statements:

1. The business is paying increased dividends
2. The directors are buying shares in the business

Chapter 6: measuring and reporting cash flows

The cash flows statement is a relatively late addition to the rest of the financial statements.

The importance of cash lies in the fact that people will only normally accept cash in settlement of their claims.

The statement of cash flows summarizes the inflows and outflows of cash (and cash equivalents) for a business over a period.

Definition of cash and cash equivalents:

1. Cash is notes and coins in hand and deposits in banks and similar institutions that are accessible to the business on demand.
2. Cash equivalents are short-term, highly liquid investments that can be readily convertible to known amounts of cash.
    a. Usually in less than or equal to 3 months, such as T-Bills

Deciding for cash equivalency (all answers must be yes):

1. Are the investments short-term?
2. Are they readily convertible to cash?
3. Is there an insignificant risk of changes in value?

The relationship between the different financial statements:

1. The statement of financial position shows the various assets and claims of the business at a particular point in time.
2. The statement of cash flows explains the changes over a period to cash.
3. The income statement explains the changes over a period to equity.

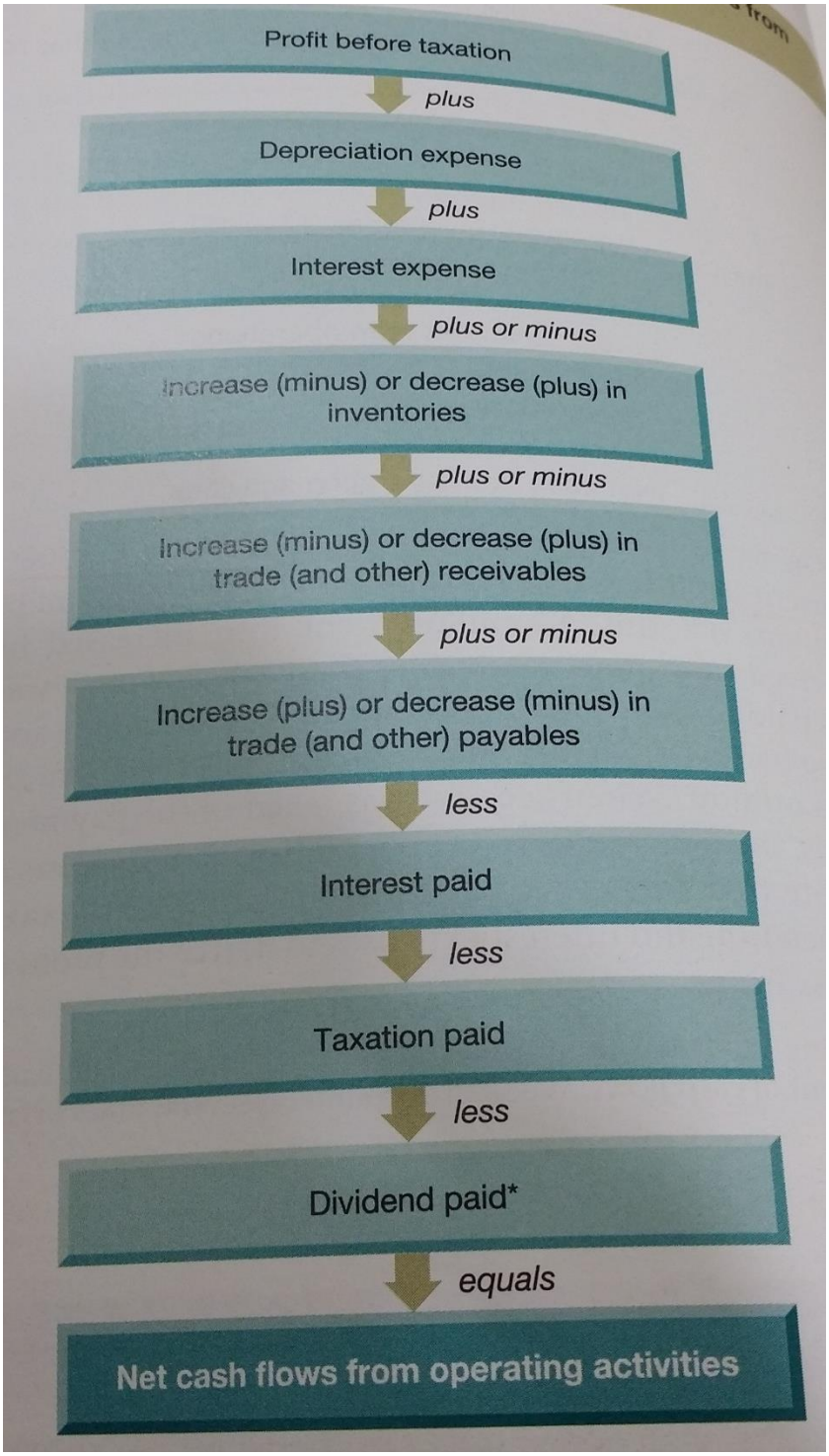
The statement of cash flows is separated into the following sections:

1. Operating activities
2. Investing activities
3. Financing activities

Methods of preparation:

1. The direct method
2. The indirect method

Figure 6.5: the indirect method of deducing the net cash flows from operating activities



Working capital = current assets – current liabilities

➔ IMPORTANT ←

LOOK INTO THE SLIDES FROM WHARTON (week 3) TO SUPPLIMENT THIS CHAPTER

Professor's Notes with regards to cash flows

Net sales revenue= **earned sales revenue** – sales returns and allowances – sales discounts

Sales Revenue earned in income statement = cash received – beginning AR + Ending AR + beginning unearned revenue – ending unearned revenue

Cost of goods sold = Beginning balance of inventory +**net cost of purchases**- Ending balance of inventory

Net cost of purchases = **purchases of inventory** + freight in (transportation in)- purchase returns and allowances – purchase discounts

Purchases of inventory = cash paid – beginning Accounts payable + ending accounts payable

Expense incurred in income statement = cash paid – expense payable at beginning of period + expense payable at end of period + prepaid expense at beginning of period – prepaid expense at end of period

Straight line depreciation expense =(cost of plant asset- residual value) * 1/useful life in years * X/12

Beginning balance of RE+ NI after tx – dividends = ending balance of RE

The depreciation expense will be recognized in the income statement while the accumulated depreciation will be added to any previous accumulated depreciation and will appear as a **contra asset account deducted from plant assets in the balance sheet.**

Cost of plant asset

- Accumulated deprecation

= carrying value or book value of plant asset

When a plant asset is sold

Cash sale price – book value (cost-AD) = gain or loss

Equations

Beginning balance of PPE book value (net)

+ PPE purchased during the year

- book value of sold PPE

- annual depreciation expense

= Ending book value of PPE

The above equation can be used to find the annual depreciation expense or the PPE purchased during the year

The Book value of PPE = Cost – Accumulated Depreciation

Gain or loss on selling PPE = Selling price of PPE – Book value of sold PPE

Gain if + Loss if –

Any Expense (as in I.S) = **Cash paid for expense** – beginning expense payable + ending expense payable + beginning prepaid expense – ending prepaid expense

This above equation (in orange) can be used to find the **Cash tax paid and the Cash interest paid**

Beginning RE+ NI after tax – **dividends declared** = Ending RE

Cash dividend paid = dividends declared + beginning dividends payable – ending dividends payable – stock dividends

To find the **cash interest revenue or dividend received**

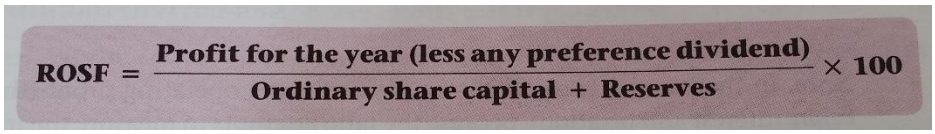
Interest revenue = **Cash received for interest** – beginning interest receivable + ending interest receivable

Dividend revenue = **Cash received for dividend** – beginning dividend receivable + ending dividend receivable

Chapter 7: Analysing and Interpreting Financial Statements

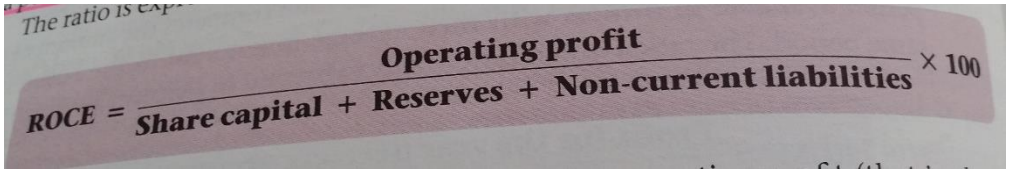
Financial ratio classification:

1. Profitability
    a. Return on ordinary shareholders' funds (ROSF) → high



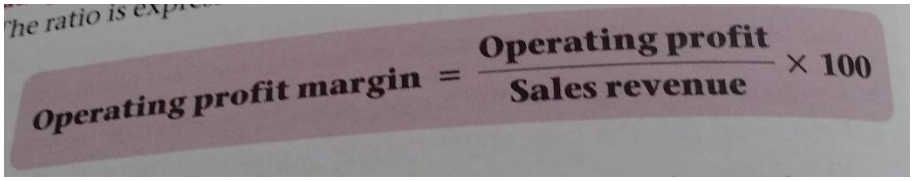
$$\text{ROSF} = \frac{\text{Profit for the year (less any preference dividend)}}{\text{Ordinary share capital + Reserves}} \times 100$$

    b. Return on capital employed (ROCE) → high



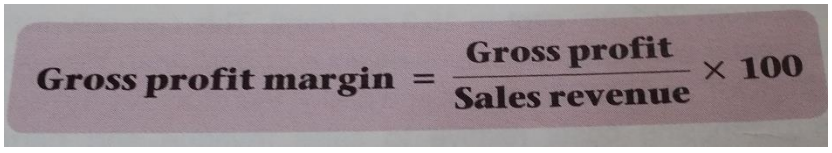
$$\text{ROCE} = \frac{\text{Operating profit}}{\text{Share capital + Reserves + Non-current liabilities}} \times 100$$

    c. Operating profit margin → high

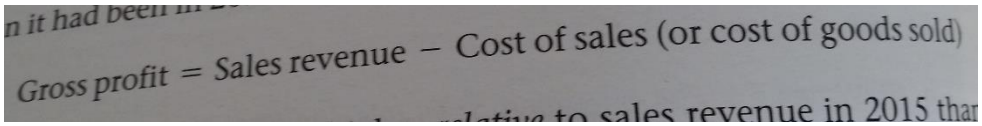


$$\text{Operating profit margin} = \frac{\text{Operating profit}}{\text{Sales revenue}} \times 100$$

    d. Gross profit margin → high

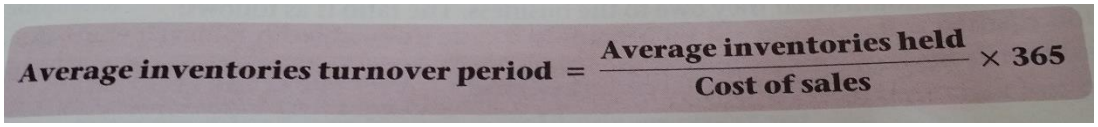


$$\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$$



$$\text{Gross profit} = \text{Sales revenue} - \text{Cost of sales (or cost of goods sold)}$$

2. Efficiency
    a. Average inventories turnover period → depends on previous and industry



$$\text{Average inventories turnover period} = \frac{\text{Average inventories held}}{\text{Cost of sales}} \times 365$$

    b. Average settlement period for trade receivables → depends, relative to the firm's credit terms

$$\text{Average settlement period for trade receivables} = \frac{\text{Average trade receivables}}{\text{Credit sales revenue}} \times 365$$

c. Average settlement period for trade payables → depends, relative to the financing firm's credit terms

$$\text{Average settlement period for trade payables} = \frac{\text{Average trade payables}}{\text{Credit purchases}} \times 365$$

d. Sales revenue to capital employed ratio → high

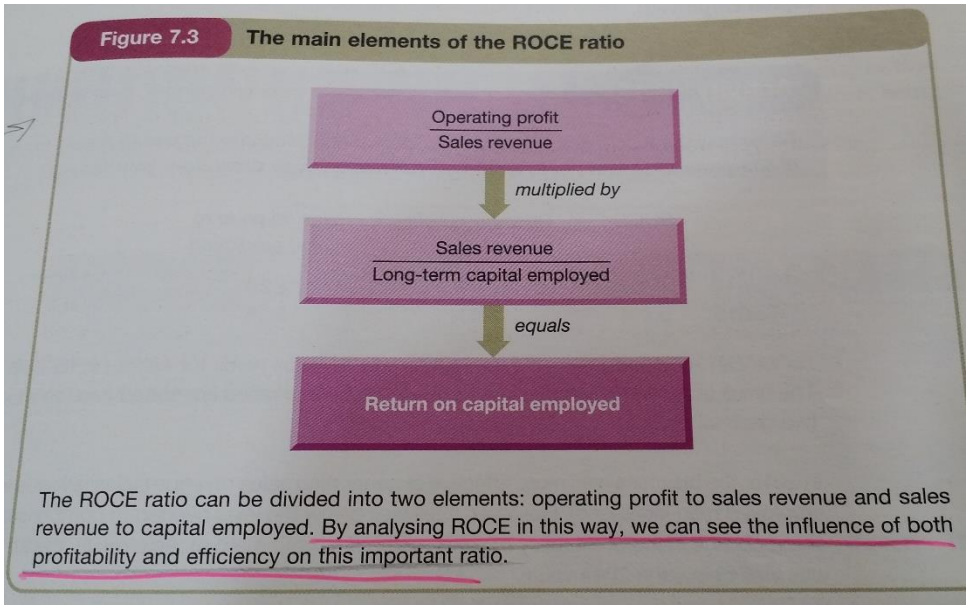
$$\text{Sales revenue to capital employed ratio} = \frac{\text{Sales revenue}}{\text{Share capital} + \text{Reserves} + \text{Non-current liabilities}}$$

e. Sales revenue per employee → high

$$\text{Sales revenue per employee} = \frac{\text{Sales revenue}}{\text{Number of employees}}$$

➔ Relationship between profitability and efficiency → similar to a Dupont analysis

$$\text{ROCE} = \frac{\text{Operating profit}}{\text{Long-term capital employed}} \times 100$$



3. Liquidity

a. Current ratio → high

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

b. Acid-test ratio → high

$$\text{Acid test ratio} = \frac{\text{Current assets (excluding inventories)}}{\text{Current liabilities}}$$

c. Cash generated from operations to maturing obligations rate → high

$$\text{Cash generated from operations to maturing obligations ratio} = \frac{\text{Cash generated from operations}}{\text{Current liabilities}}$$

4. Financial gearing
   a. Gearing ratio → depends, risky vs. convenient

$$\text{Gearing ratio} = \frac{\text{Long-term (non-current) liabilities}}{\text{Share capital + Reserves + Long-term (non-current) liabilities}} \times 100$$

   b. Interest cover ratio → high

$$\text{Interest cover ratio} = \frac{\text{Operating profit}}{\text{Interest payable}}$$

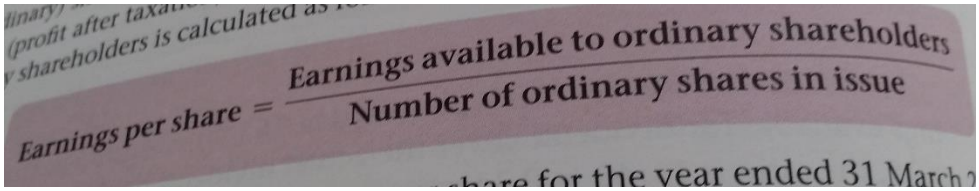
5. Investment
   a. Dividend pay-out ratio → depends, should not be too high

$$\text{Dividend payout ratio} = \frac{\text{Dividends announced for the year}}{\text{Earnings for the year available for dividends}} \times 100$$

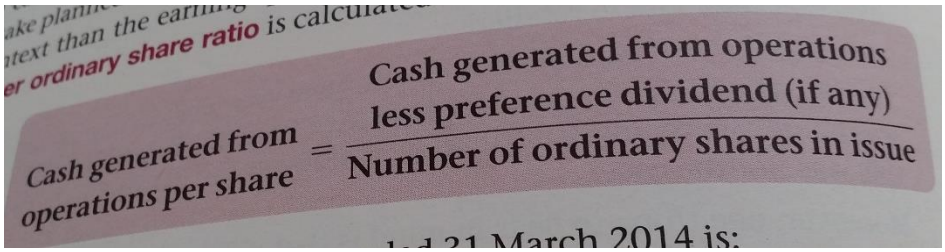
   b. Dividend yield ratio → the higher the better for investors

$$\text{Dividend yield} = \frac{\text{Dividend per share}/(1 - t)}{\text{Market value per share}} \times 100$$

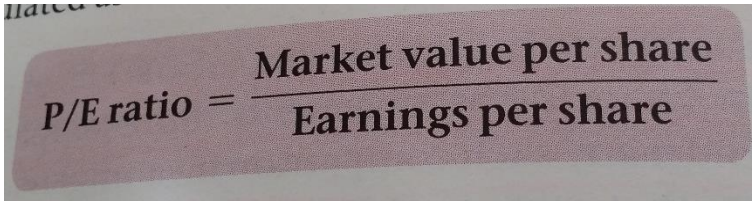
c. Earnings per share → high



d. Cash generated from operations per share → high



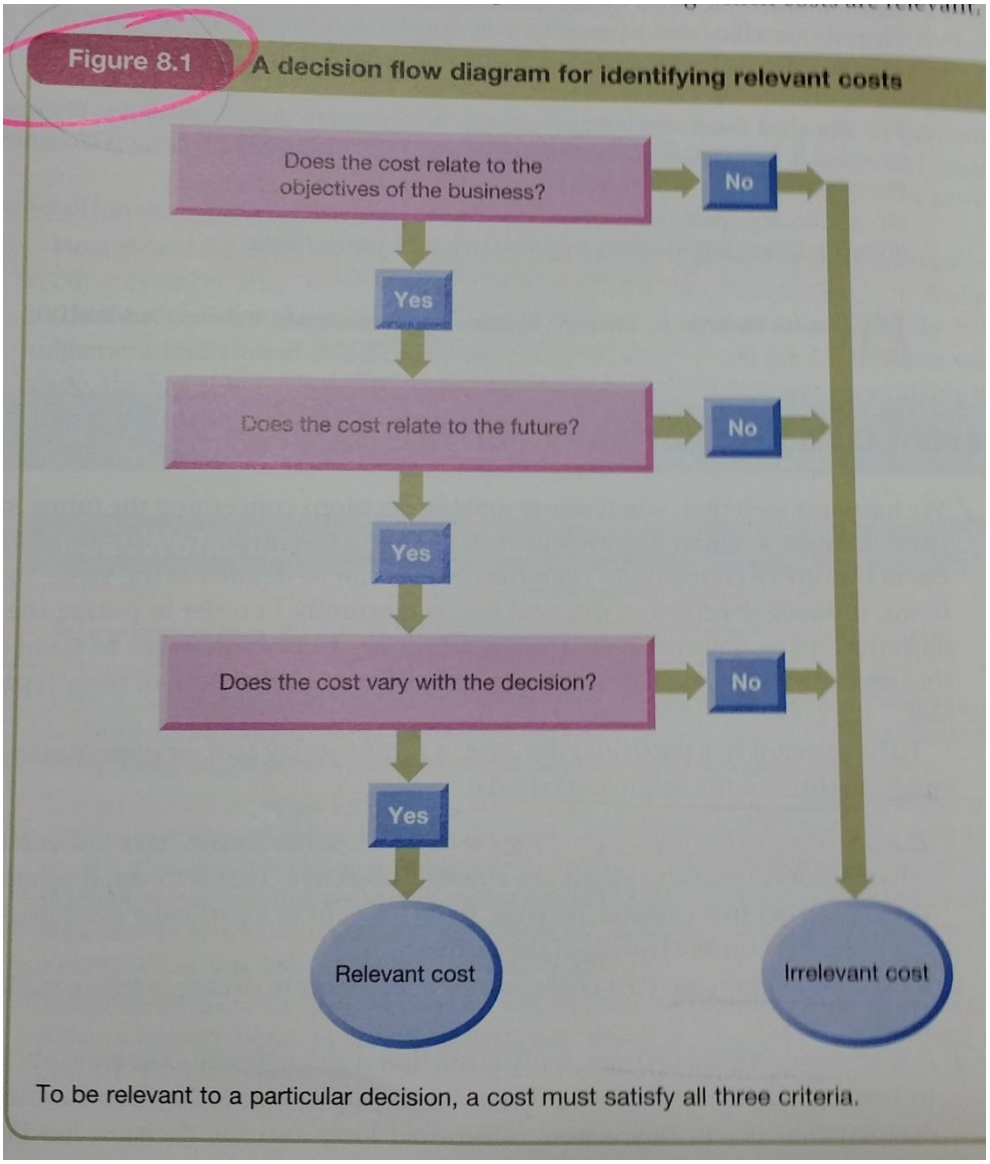
e. Price/earnings ratio → high means market has confidence in future prospects



➔ using ratios to predict financial failure → not required

Chapter 8: Making Management Decisions

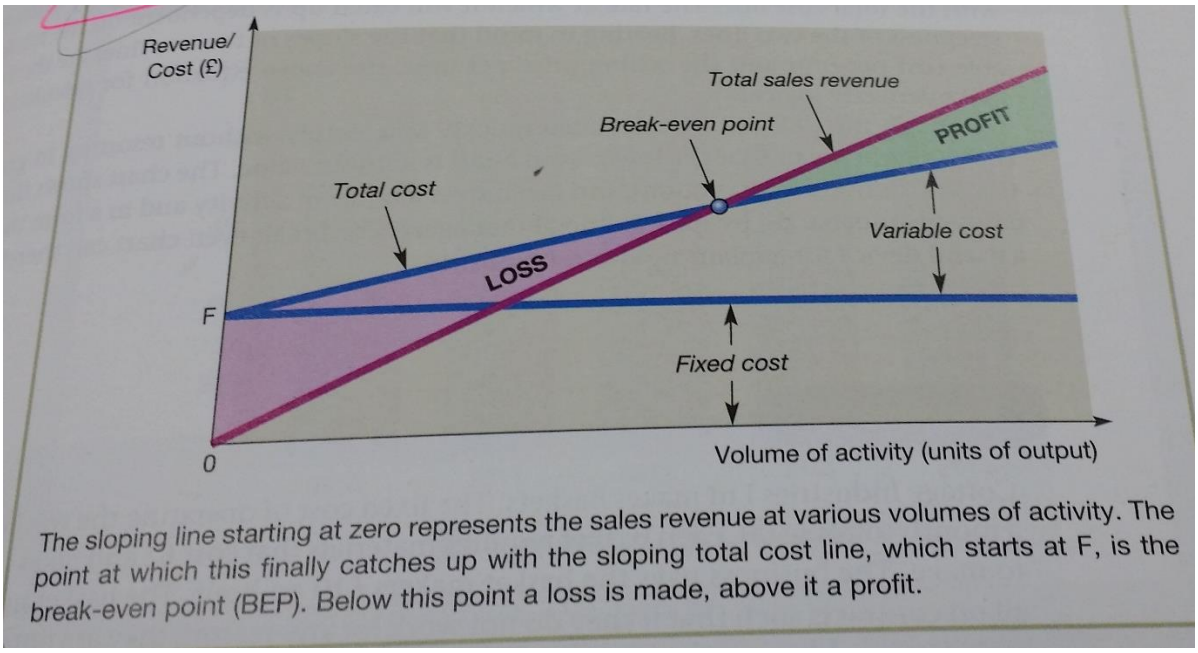
- Historical cost can never be relevant to a future decision
    - Irrelevant cost does not mean that the effects of having incurred that cost are always irrelevant
- Opportunity cost: the value in monetary terms of being deprived of the next best opportunity in order to pursue a particular objective.
- An outlay cost is an amount of money that will have to be spent to achieve that objective
- To be relevant to a decision (either a cost or benefit)



- Sunk cost == past cost == committed cost
- Risk == the difference between reality and predictions

Chapter 9: Cost-Volume-Profit Analysis

- Cost represents the resources sacrificed to achieve benefits
- Full cost = fixed cost + variable cost
- Can be measured using the high-low method
- More accurately, it can also be measured using linear regression (or other regression analysis)
- Break even chart



The sloping line starting at zero represents the sales revenue at various volumes of activity. The point at which this finally catches up with the sloping total cost line, which starts at F, is the break-even point (BEP). Below this point a loss is made, above it a profit.

- Contribution per unit == sales revenue – variable cost
  - It contributes to covering the fixed cost, if there is any excess, it contributes to profit
- Contribution margin ratio

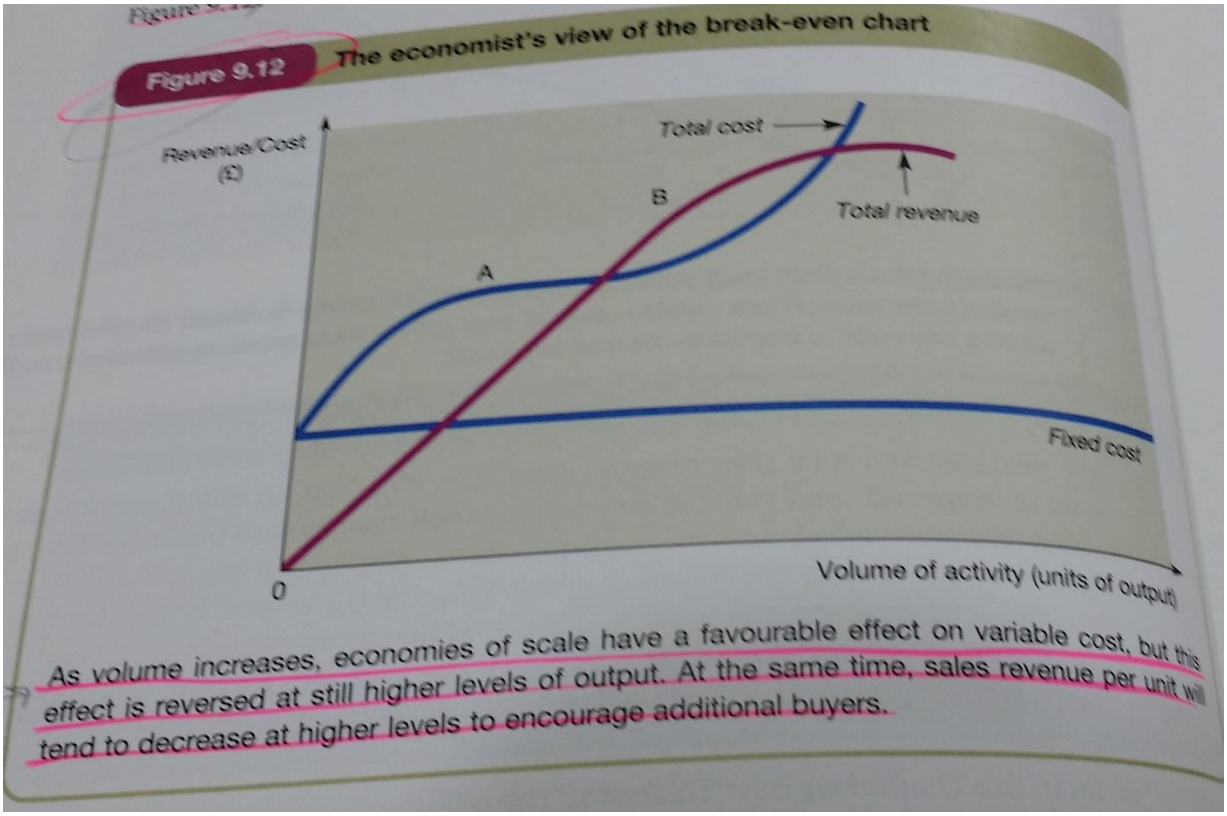
$$\text{Contribution margin ratio} = \frac{\text{Contribution}}{\text{Sales revenue}} \times 100\%$$

- Margin of safety == above breakeven point
- Total sales revenue = fixed cost + total variable cost + target profit

$$t = \frac{\text{Fixed cost} + \text{Target profit}}{\text{Sales revenue per unit} - \text{Variable cost per unit}}$$

- Operating gearing == high level of fixed cost compared to variable cost

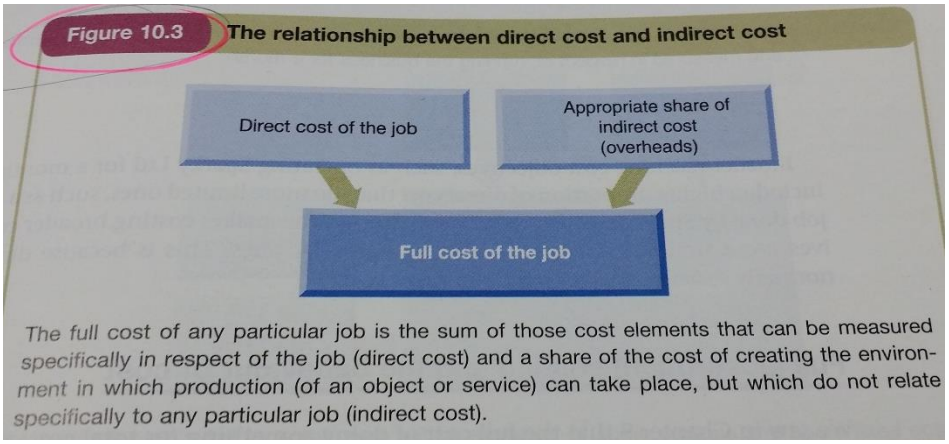
- Economist's view of the break-even chart



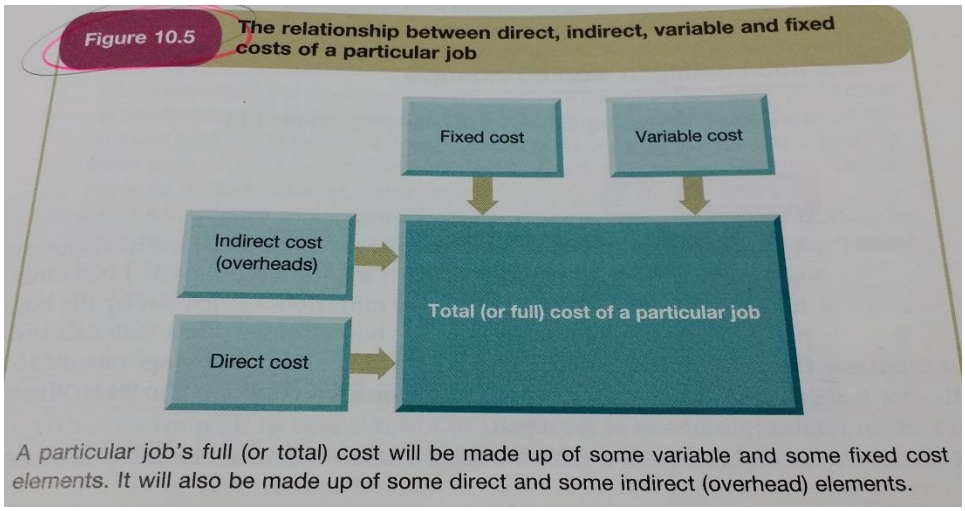
- Weaknesses of break-even analysis:
  - Non-linear relationship
    - Economies of scale with labour and buying goods or services
    - Lower sales prices at high levels of activity
  - Stepped fixed cost
  - Multi-product business
- Fixed cost is irrelevant
- Marginal analysis → considering revenues and costs that vary with different decisions
  - Pricing / assessing opportunities to enter contracts
  - Determining the most efficient use of scarce resources
  - Make-or-buy decisions
  - Closing or continuation decisions

Chapter 10: Full Costing

- Full cost = the total amount of resources, usually measured in monetary terms, sacrificed to achieve a given objective
    - To derive the full cost figure, we must accumulate the elements of cost incurred and then assign them to the product or service
    - A cost unit is one unit of whatever is having its cost determined
- Full cost can be useful in
    - Pricing and output decisions
    - Exercising control
    - Assessing relative efficiency
    - Assessing performance
- Single process business → process costing
- Multi-product business → job costing
- Types of cost
    - Direct cost
        - Direct material
        - Direct labour
    - Indirect cost / overhead
- In job costing, full costing is also known as absorption costing



- Page 369 → difference between (fixed, variable) and (direct, indirect) cost



  - The distinction between direct and indirect cost is only important in a job costing environment where units of output differ
- There is no single correct way of charging overhead
  - If a business is machine intensive, use machine hours as a metric
  - If a business is labour intensive, use labour hours as a metric
  - The method used of charging overhead should be the same between different jobs
- Batch costing → usually done in manufacturing
- Selling at full cost == break-even
- Full cost (cost-plus) pricing
  - Adding a profit to full cost
  - Price makers vs. price takers

Chapter 11: Costing and Performance Evaluation in a Competitive Environment

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- Costing and pricing
    - Traditional environment
        - Direct labour intensive and direct labour paced production
        - A low level of indirect cost relative to direct cost
        - A relatively uncompetitive market
    - Current environment
        - Capital intensive and machine paced production
        - A high level of indirect cost relative to direct cost
        - A highly competitive international market
- Activity based costing (ABC)
    - Used to directly trace the cost of all support activities to a particular product or service
    - Cost driver → has a cause and effect relationship with activity costs and so are used for attaching activity costs to a particular product or a service
- Other costing approaching in modern environment
    - The total life cycle of a product or a service → Page 422
    - Total quality management
    - Costing quality procedures → ensures that a product is manufactured according to a quality standard
    - Target costing
    - Kaizen costing → focuses in cost savings during the production phase (Kaizen == continuous change)
    - Value chain analysis
    - Benchmarking
- Non-financial measures of performance
    - Financial measures can be laggards
    - The balance score card
        - → page 436, page 437, page 439
    - Economic value added

Chapter 12: Budgeting

- Budget: a business plan for the short term and is expressed mainly in financial terms. Its role is to convert the strategic plans into actionable blueprints for the immediate future
- Relationship between the mission, vision strategic objectives, strategic plans and budgets:
    - The mission and vision set the overall direction and, once set, is likely to last for quite a long time – perhaps throughout the life of the business
    - The strategic objectives, which are also long term, will translate the vision and mission into specific, often quantifiable, targets
    - The strategic plans identify how each objective will be pursued
    - The budgets set out, in detail, the short-term plans and targets necessary to fulfil the strategic objectives
- how budgets help managers
    - page 462
- budget =/= forecast
- types of budgets
    - periodic
    - continual == rolling
- budget setting process
    - bottom up
    - top down
    - zero base budgeting
    - activity based budgeting

- the learning curve effect
    - page 526
- making budgetary control effective
    - a serious attitude taken to the system
    - clear demarcation between areas of managerial responsibility
    - budget targets that are challenging yet achievable
    - established data collection, analysis, and reporting routines
    - reports aimed at individual managers, rather than general purpose documents
    - fairly short reporting periods
    - timely variance reports
    - action being taken to get operations back under control if they are shown to be out of control
- relationship between the level of performance and the perceived degree of budget difficulty