



# Personal and Business Finance 3

## Getting to know your unit

### Assessment

*This unit is externally assessed using an unseen paper-based examination, and marked by Pearson.*

The ability to manage money is crucial to keep both yourself, as an individual, out of future difficulties and also to keep businesses out of difficulties. If you are not able to manage your money effectively, then all sorts of problems may lie ahead. Managing your money will help you achieve future objectives and dreams. Similarly, if a business cannot manage its money it is not likely to survive.

### How you will be assessed

This unit is externally assessed by an unseen paper-based examination. The examination is set and marked by Pearson. Throughout this unit you will find practice activities that will help you prepare for the examination. At the end of the unit, you will also find help and advice on how to prepare for and approach the examination. The examination must be taken under examination conditions so it is important that you are fully prepared and confident with key terminology and accounting techniques. You will also need to learn key formulas and be confident with carrying out calculations accurately. A calculator will be essential.

The examination is 2 hours and the paper is made up of questions that require short answers, calculations and extended writing. You will need a calculator in the examination and throughout your study of this unit.

#### Assessment criteria

This table outlines the content that you must cover as part of this unit.

**Content area A** Understand the importance of managing personal finance

**Content area B** Explore the personal finance sector

**Content area C** Understand the purpose of accounting

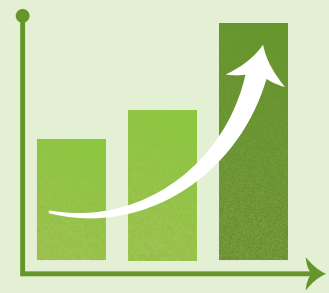
**Content area D** Select and evaluate different sources of business finance

**Content area E** Break-even and cash flow forecasts

**Content area F** Complete statements of comprehensive income and financial position and evaluate a business's performance

### Getting started

Personal finance involves understanding why money is important and how managing your money can help prevent future financial difficulties. Write down a list of future medium- and long-term wants. Discuss why you will need to be able to manage your money to achieve these goals.



## Understand the importance of managing

### **A** personal finance

You will make important financial decisions throughout your life. The choices you make will not be without some risk and need to be taken very carefully. This unit will help you understand how to manage your personal finances and make informed decisions to help prevent future financial difficulties.

### Functions and role of money

Money flows in two directions, into your ownership and out. Money comes in from various sources including wages, gifts and savings. Money goes out to pay for necessities and wants. The same is true in business – money comes in from sources, including sales and bank loans, and goes out to pay day-to-day expenses and fund expansion. Therefore the ability to handle money received, and to control money paid, is a fundamental requirement for personal and business success. The starting point is to understand what ‘money’ is.



► What do you think are the three biggest financial decisions you will ever make in your life?

#### Discussion

What is money? Can you write a definition? What forms can money take? In small groups, discuss what you think money is. Write a definition of money and produce a spider diagram showing the different forms that money can take. Feed back to the rest of the class and discuss your results. Can you all agree on the best definition of money?

### The functions of money

The functions of money are the jobs that it performs. These are outlined below.

- Unit of account
  - It allows us to place a monetary value on goods and services.
  - The price of goods and services show the unit of account, for example a chocolate bar is 60p or a new car is £30,000.
- Means of exchange
  - It allows us to trade.
  - Businesses and customers can buy and sell goods and services using money, for example when you purchased your lunch yesterday or paid to go to the cinema.
- Store of value
  - It allows us to use it in the future as it keeps its value.
  - You might have money saved in a bank account or ‘piggy bank’ which you can then use to buy goods and services in the future.

- ▶ Legal tender:
  - It is a legally recognised form of payment.
  - Money is widely recognised and used for all sorts of transactions from buying an ice cream or getting a haircut to paying a deposit on a house and receiving your wages.

### Research

Did you know that the Royal Mint sets rules on what is legal tender? If you owed £100 and wanted to pay off your debt in 2p pieces would this be legal tender? Take a look at the guidelines on the Royal Mint website. Why do you think these guidelines exist.

## Role of money

Different people will have different attitudes to money. An individual may also change their attitude to money based on the situation they find themselves in. The role of money is affected by a wide number of factors, including those outlined below.

### ▶ Personal attitudes

Individuals will vary in their attitude to risk and reward as well as saving and borrowing. You may be risk averse so you will try to avoid risk, or you may be willing to take more risks and may even enjoy risk taking as you are incentivised by the potential rewards. Equally, you may be more or less likely than others to save your money rather than spend it. This can, in part, depend on your family's attitude to money, for example whether you were brought up being told savings were good and encouraged to save for a rainy day. You will also be influenced by your attitude to borrowing. You might like to live within your own means and only buy what you can afford. Alternatively, you might be happy to buy goods and services on credit or to borrow money in order to get what you want sooner rather than later.

### ▶ Life stages

As you grow up from childhood to adulthood, your financial needs change. Each stage of your life has different implications that will affect not just your needs but also your attitude to money, as discussed above. Table 3.1 shows the common financial needs and implications of each stage.

### ▶ Culture

Different cultures, affected by tradition, religion and ethical beliefs, will have different attitudes to money. The older generation of Chinese people, for example, have a culture of saving. However, as the country becomes wealthier young people are more willing to spend and even buy on credit.

### ▶ Life events

Events throughout your life will impact on your attitude to money. These events may be within your control, for example going to university, travelling abroad, getting married or starting a family, or may be outside your control, for example illness, financial gains or losses.

### ▶ External influences

Factors outside your control, including the state of the economy, will have an impact. For example, the state of the economy will impact on wages, availability of jobs and the prices of goods and services. Decisions by the government will affect the amount of tax you pay or the amount you receive in benefits. These all directly affect your ability to spend and save.

### ▶ Interest rates

When **interest rates** are low you may be more willing to borrow money or spend on credit. When interest rates are high there is more of an incentive to save.

### Key term

**Interest rate** – the cost of borrowing money or the reward for saving money.

**Table 3.1:** Financial needs and implications at different life stages

Life stage	Financial needs	Implications
Childhood	<ul style="list-style-type: none"> <li>Limited needs</li> <li>Mainly reliant on parents</li> <li>May want to buy sweets or toys</li> </ul>	<p>Money received from presents may be spent as attitude will be that this is to buy things you want</p> <p>May be encouraged to save or parents or grandparents may set up a savings account for you into which they make regular payments</p> <p>May rely on pocket money</p>
Adolescence	<ul style="list-style-type: none"> <li>Want to be more independent</li> <li>Slightly less reliant on parents as want to socialise away from family</li> </ul>	<p>May look for a part-time job</p> <p>Still partially reliant on pocket money</p> <p>More likely to receive cash as gifts and may be willing to save up smaller amounts in order to make bigger purchases</p>
Young adult (This is a very big stage which can encompass a wide range of different scenarios depending upon life choices)	<ul style="list-style-type: none"> <li>University or starting a career</li> <li>Looking to be more independent</li> <li>Buying a car and buying or renting a flat or house</li> <li>Looking to settle down and maybe get married or start a family</li> </ul>	<p>May take a student loan if going to university</p> <p>Borrow money to pay for a car or purchase one on a finance deal</p> <p>May be looking at taking out a mortgage</p> <p>Need to earn money to support self and others</p> <p>Eligible for credit and debit cards</p>
Middle age	<ul style="list-style-type: none"> <li>Support family</li> <li>Start saving for children's futures, e.g. university, weddings, etc.</li> <li>Look to improve own lifestyle, e.g. new car or move house</li> <li>Enjoy having access to additional money to spend on luxuries such as foreign holidays</li> </ul>	<p>Savings accounts for specific purposes</p> <p>Paying a mortgage</p> <p>Planning for own future through pensions and retirement plans</p> <p>Likely to be the stage of life when income peaks but matched with high expenditure</p>
Old age	<ul style="list-style-type: none"> <li>Fewer dependents</li> <li>May downsize, e.g. move from family home to a smaller retirement home</li> <li>Fewer financial needs for assets but may be higher for services such as health care</li> </ul>	<p>Mortgage payments stop or become lower</p> <p>Less income as reliant on a pension rather than a salary</p>

## Planning expenditure

When planning expenditure, that is, money paid out, it is important to consider a number of common principles. These are important to ensure that you avoid over spending which will put you at risk of financial difficulties both now and in the future. You should look to control costs in order to avoid getting into **debt** in the future. If your spending is too high, this may mean more money is going out than coming in which will lead to the build-up of debt. Debt is expensive as interest will be charged on money owed. If debts are not paid or not paid on time, this will affect your **credit rating**. A poor credit rating will affect your ability to borrow in the future. In extreme cases, an individual may be declared **bankrupt** if their debts have spiralled out of control.

To remain **solvent**, you should set financial targets and goals. These should consider how much money you want to earn and place limits on how much you will spend. If you save some of your income, this can help generate future income as money saved will earn interest. Savings will also help provide a safety net for the future, for example to provide insurance against loss or injury. What would happen if you could not work in the future? Sometimes you will also want to save to fund future purchases, for example to buy a car or pay a deposit on a house.

Inflation is a general rise in prices. This leads to the value of money falling, that is, £10 today is worth less than £10 ten years ago. Expenditure now can help counter the effects

### Key terms

**Debt** – money owed.

**Credit rating** – a score given to individuals on how likely they are to repay debts based upon their previous actions.

**Bankrupt** – when an individual or organisation legally states its inability to repay debts.

**Solvent** – the ability to meet day-to-day expenditure and repay debts.

## Reflect

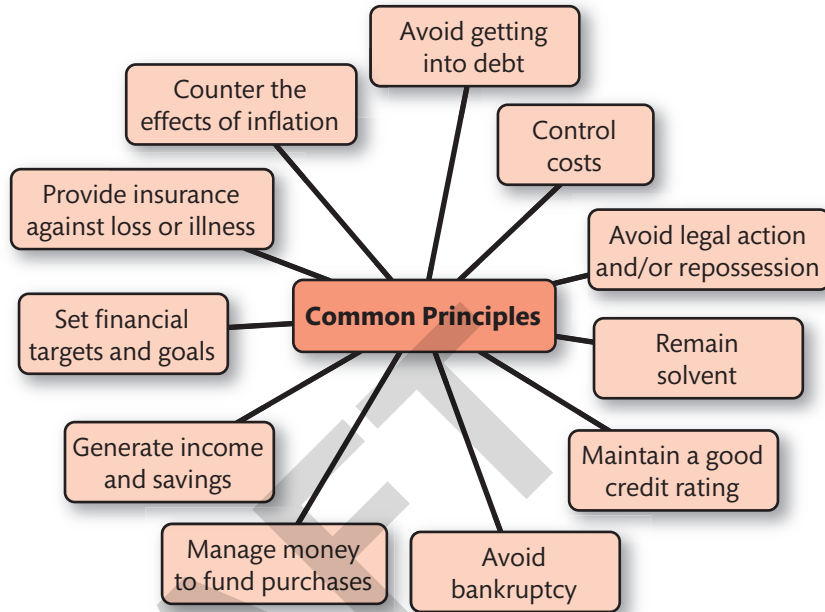
In pairs discuss:

- How would you rate your own attitude to money?
- Do you take risks?
- Can you think of a time when your attitude to money was irresponsible?
- How could you have behaved differently?
- What factors influence your attitude to risk?

As a group draw a spider diagram of factors influencing people's attitudes to risk.

of inflation. For example if you spent £150,000 buying a house today the value of the house would increase. If you left £150,000 in a savings account the amount would go up because of inflation but the spending power of your savings would go down.

The common principles to be considered in planning personal finance are summarised in Figure 3.1.



► **Figure 3.1:** How important are each of these principles in planning your own personal finances?

## II PAUSE POINT

Can you explain the functions and role of money?

### Hint

Close the book and draw a concept map about the factors affecting the role of money. Think about both personal factors and external factors.

### Extend

What do you think are the short- and long-term consequences of bankruptcy?

## Different ways to pay

One of the functions of money is as a means of exchange. This means you can use it to pay for things. There are, however, a number of ways of paying for things – not just with notes and coins. Therefore any method of payment is classed as money. Table 3.2 shows methods of payments.



► If you wanted to buy a car what are the different ways you could pay for it?

► **Table 3.2:** Methods of payment

Method of payment	Explanation/features	Advantages	Disadvantages
Cash	Notes and coins in a wide range of denominations	Most widely accepted form of exchange Physical not virtual Consumers feel confident when using Makes budgeting easier	Can be lost or stolen Threat of counterfeit Only really appropriate on purchases up to a certain amount Cannot be used online
Debit card	Issued by banks with payments for goods and services being deducted directly from a current account	No need to carry cash Secure method of payment with low risk of theft Widely accepted Offers a degree of protection on purchases Suitable for online transactions	Short time lapse between making the transaction and the money being withdrawn from the customer's account may result in overspending Not accepted or appropriate for small transactions
Credit card	Issued by financial institutions allowing customers to delay payments for goods and services	Allows a period of credit that is interest free, e.g. one month Most cards are widely accepted Loyalty schemes are often offered, e.g. collect points or cash back Offers a degree of protection on purchases Suitable for online transactions	Interest is charged on balances not paid off within a month Can encourage a customer to overspend and get into debt Interest is charged on cash withdrawals A limit will be set on the amount of credit allowed
Cheque	A written order to a bank to make a payment for a specific amount of money from one person's account to another account	Low risk form of payment as the cheque can only be cashed by the named payee Widely accepted for face-to-face and postal transactions No need to provide change as can be written for an exact amount	Expensive for the consumer if the bank refuses to clear the cheque, i.e. it 'bounces' The time delay between writing the cheque and it being cashed could cause a consumer to go overdrawn Viewed as old fashioned Easy for the consumer to make errors when writing the cheque which will create problems for both the consumer and the recipient
Electronic transfer	Payment is transferred directly from one bank account to another	Almost instantaneous Provides a record of payment No additional costs incurred Easy to use for one-off and more frequent transactions	Risk of loss if the transfer is incorrectly set up Not appropriate for face-to-face transactions
Direct debit	An agreement made with a bank allowing a third party to withdraw money from an account on a set day to pay for goods or services received, e.g. pay a gas bill	An easy way to make regular payments, e.g. utility bills Amount paid can vary to ensure the payment matches the amount required by the vendor Quick and easy to set up	If the payer makes a mistake and takes too much it is the payee's responsibility to claim back the money The payer determines the amount paid each time making it difficult for the payee to plan and budget
Standing order	An agreement made with a bank to transfer a fixed sum of money to a third party account on a set date on a regular basis, e.g. pay £30 for a phone contract each month	The same amount is paid each time making it easier for the payee to plan and budget Easy both to set up and to cancel No need to remember to make regular, standard payments	Payments are taken regardless of the customer's balance which could lead to the unplanned use of an overdraft facility Payments will continue to be made unless cancelled

► **Table 3.2:** – *continued*

Method of payment	Explanation/features	Advantages	Disadvantages
Pre-paid card	Money is uploaded onto a card with transactions then being withdrawn to reduce the balance	Can set a budget in advance to avoid overspending If lost or stolen the loss is limited to the remaining balance An effective way of controlling the amount spent by children and where money is spent, e.g. upload money for school lunches or transport	No protection if lost Sometimes requires an initial fee to purchase or set up the card, e.g. Oyster travelcards
Contactless card	Cards containing antennae allow money to be transferred when the card touches a contactless terminal	Gaining in popularity Secure method of making payments	Often only accepted for relatively small transactions Still not widely accepted as seen as new technology
Charge card	Issued by financial institutions allowing customers to delay payments for goods and services for a short period of time; the balance must be paid off in full when a statement is issued	Reduces risk of running up debts Allows a short period of credit Avoids the need to carry cash Often offers additional perks	Must be paid in full each month Often an annual fixed fee is applied
Store card	Issued by a retail outlet so that customers can delay payments for goods and services (similar to a credit card but only accepted by stores specified)	Allows a short period of credit that is interest free, e.g. one month Often offer loyalty schemes, discounts and special promotions or privileges	Only accepted in issuing store or linked associations Interest is paid on outstanding balances Can encourage overspending and result in a consumer getting into debt – particularly if they hold multiple cards
Mobile banking	The ability to carry out financial transactions using mobile devices such as phones or tablets	Convenient as can be used at any time and place Secure	Features are still limited and hence mobile banking does not offer all of the functionality of Internet banking
Banker's Automated Clearing Service (BACS) Faster Payment	A system that allows the transfer of payments directly from one bank account to another	Faster payment allows almost instant transfers that are guaranteed within 2 hours Can be accessed in a number of ways including in a branch, over the telephone and online No additional costs	Faster payment is not offered by all banks or branches and the customer may therefore have to default to BACS which can take three days to transfer payments A limit is set on the amount that can be transferred in any single transaction
Clearing House Automated Payment Systems (CHAPS)	A system that allows the transfer of payments directly from one bank account to another	Transfers can be made the same day assuming instructions are received prior to a set time, e.g. 2 pm at Barclays There is no limit on the amount that can be transferred in a single transaction	Normally, there is a fixed charge per transaction regardless of the amount transferred

### Discussion

In pairs discuss:

- Which of the payment methods in Table 3.2 do you use regularly or semi-regularly?
- Which of these methods do your parents use regularly or semi-regularly?
- Does your payment method depend upon the product you are buying?

As a class, draw a mind map to show when each method of payment is suitable. Justify your decisions.

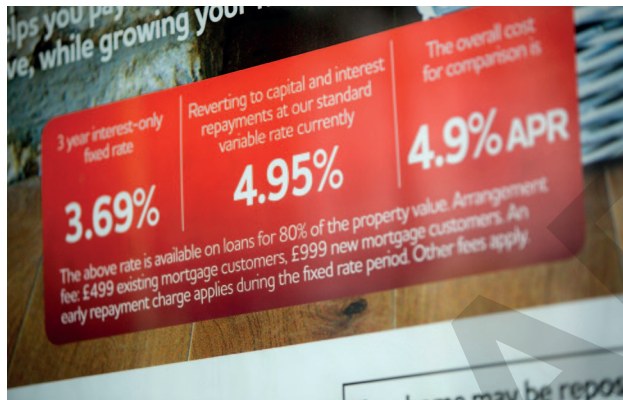


## Current accounts

A **current account** is an account with a bank or building society that is designed for frequent use. Money can be paid in and withdrawn on a daily basis without the need to give notice. Most people will use a current account to get wages paid into, to pay cheques into and out of, pay bills and other frequent expenses, and to withdraw cash.

In the same way as a business changes the features of its products to try and be competitive and attract customers, banks will try to attract customers by changing the features of their accounts. The features of a current account will include:

- ▶ rate of interest paid on any positive balance
- ▶ rate of interest charged on a negative balance
- ▶ **overdraft** limit
- ▶ charges on unauthorised overdrafts
- ▶ additional incentives.



- ▶ What would you look for when choosing a bank to open a current account with?

Types of current account are outlined below.

- ▶ **Standard**  
This is the normal account offered to customers with a reasonable credit rating. It includes standard features such as the ability to pay and withdraw money, cheque book, debit card, interest payments on positive balances and a pre-agreed overdraft limit.
- ▶ **Packaged, premium**  
This account offers additional features to a standard account, for example car and house insurance, credit card protection, breakdown cover and cash back on certain transactions. The bank may have additional charges for these accounts so it is important that you check whether you are being offered a good deal or not.
- ▶ **Basic**  
This account offers only limited features designed for those customers who may otherwise find it difficult to open a bank account due to poor credit ratings. A basic account will not offer an overdraft and will not pay interest on positive balances.
- ▶ **Student**  
This account is designed specifically to meet the needs of learners. Common features include an agreed overdraft limit and incentives to join the bank, for example free rail cards or cash. Banks are keen to attract learners because once a young person has joined a bank they tend to stay with that bank for life. However, this is less often the case now due to the availability of information on the Internet and the ease with which banks can be changed.

The advantages and drawbacks of different account types are summarised in Table 3.3.

### Key terms

**Current account** – an account with a bank or building society designed for frequent use, e.g. regular deposits and withdrawals.

**Overdraft** – the ability to withdraw money that you do not have from a current account.

► **Table 3.3:** Advantages and disadvantages of different types of current account

Type of current account	Advantages	Disadvantages
Standard	No charges on credit balances Offers the holder a wide range of facilities including a cheque book, debit/cash card and possibly an overdraft facility Convenient for receiving regular payments, e.g. wages and making regular withdrawals	Potentially high charges on the use of an overdraft facility Standard features only, i.e. no additional perks
Packaged, premium	No charges on credit balances Offers the holder a wide range of facilities including a cheque book, debit/cash card and possibly an overdraft facility Convenient for receiving regular payments, e.g. wages and making regular withdrawals Offers the holder additional perks at a packaged price cheaper than acquiring them individually (standard additional features include things such as holiday/travel insurance, break down cover and phone protection)	Additional monthly charge is frequently applied The package offered may not offer value for money or meet the needs of the individual account holder
Basic	Available to customers with a low credit rating Offers an easy first step for individuals to gain access to basic banking facilities, i.e. the ability to pay in and withdraw cash	Limited facilities, e.g. no debit card or overdraft facility
Student	Course fees and student loans can be easily handled Bonuses offered are designed to meet the needs of learners, e.g. discounts on travel or small lump sum cash payment	Overdraft facilities could encourage overspending Charges for overspending are high Limited facilities

### Research

Look at the student accounts currently being offered by banks. As well as visiting individual bank websites, you could also look at comparison websites. Which bank do you think is currently offering the best deal to learners?

### Case study

#### Which account?

Gabriella has just finished sixth form and is looking forward to starting at Birmingham University in October. During the summer, she starts to look at which student accounts are available. She is surprised to see that they vary so much between different high street banks. To help her decide which account is best, she summarises her findings in a table



Account name	Interest paid on credit (positive balances)	Interest free overdraft and additional overdraft	Charges for unauthorised overdraft	Conditions	Other
Student first	3% on balances between £500 and £3000	Up to £500 in first year increasing to up to £1500 in subsequent years (terms and conditions apply) No additional overdraft	£25 administration £5 daily charge	None	£100 Waterstones voucher Ability to apply for a student credit card
Varsity account	None	Up to £1000 in first 3 years Up to £3000 if studying for a fourth and fifth year	£10 a month penalty plus 8% on outstanding balance	Must pay £250 a month into account	Four year student rail card plus 10% discount on national coach travel
Student sense	1% up to £200 1.5% up to £1000 2% up to £3000	Up to £1500 per year	£35 administration £5 daily charge	Must register for online banking	Three year student rail card Debit card 10% discount on student insurance with same provider
Student ABC	0.5% no upper limit	Up to £1000 in year 1 and £3000 in year 2 and beyond		Must register for online banking Must pay £100 per month into account	£60 cash deposit

### Check your knowledge

- 1 Outline why you think Gabriella should open a student current account.
- 2 Can you identify which student account is best for Gabriella? Justify your answer.
- 3 What would be your priorities when choosing a student account?
- 4 What do you think are the benefits to the banks of offering student accounts?

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## Managing personal finance

Few businesses have just one product. They have a range of products to meet the needs of different customers. A car manufacturer, such as Ford, will have cars to match different incomes, lifestyles, family size and preferences. This is also true of banks, building societies and other providers of financial services. They will all offer a range of products to match the needs of different individuals. Financial services will include borrowing.

### Different types of borrowing

These are outlined below.

- ▶ **Overdraft**
  - This allows you to withdraw money that you do not have from a current account.
  - It may be suitable to meet short term needs, for example a shortage of cash just before payday.
- ▶ **Personal loan**
  - This gives you the ability to borrow a set amount of money, normally for a specific purpose, to be repaid in regular instalments with interest.
  - It may be suitable to fund the purchase of a high price item such as a car or to make home improvements.
- ▶ **Hire purchase**
  - This allows you to have use of an item immediately but pay for it in regular instalments. The item remains the property of the seller until all instalments have been made.
  - It may be suitable for one-off or infrequent purchases, for example a TV or fridge freezer.
- ▶ **Mortgage**
  - This is a long-term loan to fund the purchase of assets, normally paid back over a long time, for example 25 years. It is secured against an item, for example a house.
  - It is suitable for assets that will maintain value for a long time and cannot normally be paid for outright.
- ▶ **Credit card**
  - Goods are paid for by card and can be paid for either at the end of a set period, normally a month, when a statement is issued or over time with the card provider stating a minimum payment each month. The minimum payment will be a percentage of the balance on the credit card.
  - It may be suitable when buying high price goods or services, for example a holiday, or at times when expenses are higher than usual, for example Christmas, to spread the costs of spending.
  - It may also just be used for convenience and safety as an alternative to using cash.
- ▶ **Payday loan**
  - This is a short term source of finance used to bridge the gap between now and next receiving a wage. It will normally only available for relatively small amounts at very high rates.
  - It may be suitable in an emergency to meet cash shortages.

The advantages and drawbacks of the various types of borrowing are summarised in Table 3.4.

► **Table 3.4:** Advantages and disadvantages of different types of borrowing

Type of borrowing	Advantages	Disadvantages
Overdraft	Interest is charged only on the amount outstanding Can be paid off without penalties An overdraft facility can be prearranged and only used if needed Provides a short term solution to cash flow problems	When used, interest charges are often high Additional penalty charges for going over a pre-arranged limit are often very high Not the cheapest form of borrowing The ease with which these can be obtained could encourage overspending
Personal loans	Regular, pre-agreed payments make planning and budgeting easy As a general rule these would only be issued to individuals who can prove their ability to make the repayments Useful when looking to purchase a specific item of medium to high value, e.g. a car or home improvement	May have to be secured against an asset which means if payments are missed the asset may be taken to cover the outstanding debt Not really suitable for short term loans
Hire purchase	Spreads the cost of an expensive item over a period of time Credit is secured against a specific item Often allows a customer to afford something now that they could not otherwise afford, e.g. four years' interest free on furniture	Interest charges may be higher than other traditional loans Ownership of the asset may legally be kept by the seller until the final payment is made Agreements can be manipulated to make a purchase seem deceptively appealing
Mortgages	Allows the customer to spread the cost of expensive items over a long period of time, e.g. the purchase of a house is often spread over 25 years Interest rates, depending upon the mortgage deal, can sometimes be fixed or tracked against a standard rate of interest reducing the risk of fluctuations	Interest payments, although sometimes fixed for a short period of time, can vary – this seriously affects the borrower's ability to repay or meet other expenses Failure to meet repayments may lead to a loss of a home and seriously affect an individual's future credit rating Penalties may be applied to early repayment
Credit cards	The credit card holder can pay above the minimum rate if they wish and hence speed up the rate of repayment and reduce interest incurred Can be used for items of multiple sizes and value, to a limit, without the need to secure against an asset Provides some protection on purchases	Can encourage overspending, sometimes on unnecessary purchases, and can lead to debt problems Interest rates are often higher than on a personal loan
Payday loans	Help solve immediate short term cash flow problems Relatively easy to secure	Interest rates are very high and the cumulative amount to be repaid can quickly spiral out of control

### Different types of saving and investment

Managing personal finance can also include saving and investment. These options are open to you when you are earning or receiving more money than you need to cover your **expenditure**. Even when income and expenditure are the same or similar, it can be wise to take advantage of opportunities to save and invest to increase future wealth. Different types of expenditure are outlined below.

- Individual savings accounts (ISA)  
This is a type of saving account where the holder is not charged income tax on the interest received.
- Deposit and savings accounts  
These are accounts where interest is paid on the balance and normally the holder needs to give notice before withdrawing funds.



- In what ways might a new business pay for its office equipment?

## Key terms

**Expenditure** – the amount of money you need to cover all your expenses/outgoings, e.g. your mortgage and bills.

**Shareholder** – someone who has invested in a company in return for equity, i.e. a share of the business.

- ▶ Premium bonds:  
A government scheme that allows individuals to save up to a set amount by buying bonds. The bond holder does not receive interest on their savings but each bond is placed into a regular draw for cash prizes.
- ▶ Bonds and gilts  
These are fixed term securities where the lender (the individual) lends money to companies and governments in return for interest payments. The money is invested for a specified period of time.
- ▶ Shares  
Shares involve investment in a business in return for equity, i.e. the **shareholder** becomes a part owner of the business. The shareholder will receive dividends from the company's profits and will also want the value of the shares to increase.
- ▶ Pensions  
These are long-term savings plans where individuals make regular contributions, called premium payments, throughout their working life. This is then repaid as either a lump sum, regular payments or a combination of the two upon retirement. Pensions can be state, company or private.

The advantages and drawbacks of the different types of savings and investment are summarised in Table 3.5.

▶ **Table 3.5:** Advantages and disadvantages of different types of saving and investment

Type of saving and investment	Advantages	Disadvantages
Individual savings accounts (ISAs)	Tax is not charged on interest earned allowing the saver to keep all of the rewards for saving Interest rates are sometimes slightly higher than in alternative savings accounts	Notice is often required to make withdrawals and according to the agreement there may be a limit set on the number of withdrawals made If the saver makes more withdrawals than set out in the agreement then the penalty may cancel out the tax savings There is a limit set on the annual amount that can be placed in an ISA
Deposit and savings accounts	Interest is earned on positive balances Accounts sometimes require regular deposits of a set amount forcing the saver to follow a savings plan	Interest earned is taxed The percentage rate of interest paid on savings is likely to be lower than interest to be paid on borrowing, therefore the benefits of savings are lost if the customer is borrowing at the same time
Premium bonds	Chance of winning substantially more than could be earned in interest Can be easily withdrawn with no loss or penalty	No guaranteed return on investment Maximum amount reviewed annually by the government The amount invested, assuming zero or low returns, loses value due to inflation
Bonds and gilts	Regular fixed returns Spreads risk across a range of markets	Risk of losing some or all of the value of the investment if the bond or gilt value falls Interest payments may not be received if the issuer is unable to make payments
Shares	Share prices fluctuate offering a potential high reward Shareholders' returns can include dividend payments and an increase in share value As part owners in a business there may be additional benefits including discounts and special offers For some investors share ownership is more than just a way of saving – it is a pastime and creates interest	Share prices fluctuate offering a potential high risk There is no guarantee of any reward or return as all of an investment can be lost

► **Table 3.5:** – continued

Pensions	<p>Encourages individuals to save throughout their working life for retirement</p> <p>Depending upon the policy, an individual's savings may be boosted by an employer's contributions increasing the final value of the saving</p> <p>Regular payments are deducted, sometimes at source, meaning the individual is tied into making the regular contributions</p>	<p>Movement between jobs may mean that one policy stops and another starts, thus reducing the overall cumulative value of the savings</p> <p>Final outcome is difficult to predict</p> <p>If compulsory payments are deducted this may affect short-term living standards</p>
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**PAUSE POINT**

Can you explain the difference between saving and investment?

**Hint**

Draw a concept map about different methods of saving and investment. For each method, weigh up the risk versus the reward and award the method a mark out of with 10, 10 being highest risk and 1 lowest risk.

**Extend**

Which method of saving or investment do you think offers the lowest risk at the highest reward? Justify your answer.

**Risks and rewards of saving versus investment**

Saving and investment both involve forfeiting current spending in the hope of gaining greater wealth in the future. **Saving** involves placing any extra money in a secure place where it will hopefully grow as it gains interest. If you are saving your money, it is often with a view to buying a specific good in the future or to support a planned future lifestyle. Many parents will start to save when a child is born to pay future college fees or to support the child as he or she grows up. **Investment** involves making a commitment to a project in the hope that it is successful and a healthy return is made on the investment. This could involve investing in the shares of a business.

The risks and rewards of saving versus investment are summarised in Table 3.6.

► **Table 3.6:** Risks and rewards of saving versus investment

	Risks	Rewards
<b>Saving</b>	<ul style="list-style-type: none"> <li>• Low or zero risk as money saved is guaranteed to be available in the future</li> <li>• Inflation can reduce the spending power of money saved</li> </ul>	<ul style="list-style-type: none"> <li>• Interest payments</li> <li>• Financial security/peace of mind</li> </ul>
<b>Investment</b>	<ul style="list-style-type: none"> <li>• Investments can go wrong and all or some of the value may be lost</li> <li>• No guarantee of a return</li> </ul>	<ul style="list-style-type: none"> <li>• If successful, there is potential for a high financial return (significantly higher than could be earned in interest)</li> <li>• Can be exciting! Some people will invest in shares, antiques, art or foreign currencies, for example, in the hope of high returns</li> </ul>

**Key terms**

**Saving** – placing money in a secure place so that it grows in value and can be used in the future.

**Investment** – speculative commitment to a business venture in the hope that it generates a financial reward in the future.

**Research**

Work in pairs. You have £2500 and must invest or save it for at least five years.

- Mind map all the options – showing risk versus potential rewards.
- Identify your preferred saving method. Find an account that offers the highest return.

How much would your savings be worth in five years?

You read about a new form of investment called crowd funding. Visit one of these websites as part of your research.

- Choose one or more businesses to invest in. Calculate your expected return on your £2500 in five years' time.
- Present your saving and investment options to the rest of the class.
- As a class, try to reach an agreement on what would be the best use of the money.

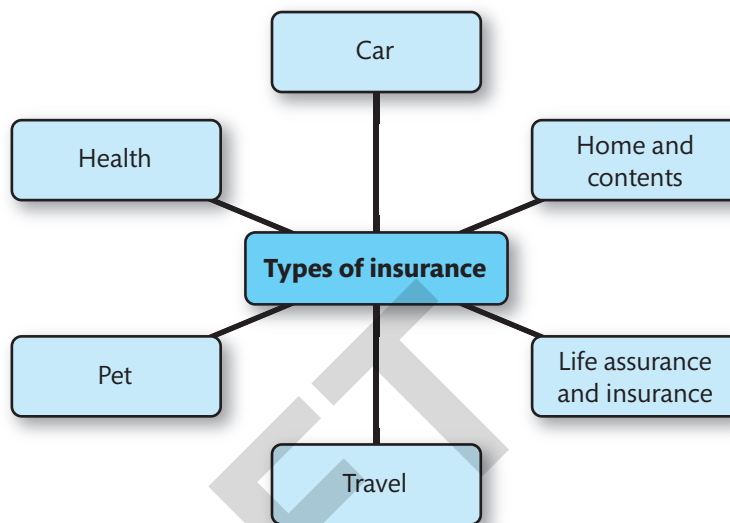
### Key terms

**Insurance** – an agreement with a third party to provide compensation against financial loss in line with the conditions laid down in the policy agreement.

**Premiums** – regular payments made by an individual or company to an insurance provider in return for protection.

## Different types of insurance products: their features, advantages and disadvantages

**Insurance** is a form of protection. Specific items as well as individuals and pets can be insured. Insurance policies cover the cost of loss, damage or illness up to prearranged levels in return for regular payments called **premiums**. Figure 3.2 illustrates some of the different types of insurance that are available.



► **Figure 3.2:** What items of worth do you have insured? Is your mobile phone insured?

Insurance can be taken out against anything deemed to have a worth or where there is a risk of financial loss. A common type of insurance now is against mobile devices such as your mobile phone. The premium paid will vary depending upon the amount of cover provided and the amount of risk as assessed by the insurance provider. Types of insurance are outlined below.

- **Car**
  - It is a legal requirement to insure any car that is on the road – this covers theft as well as accidents.
  - The degree of cover will vary depending upon whether the policy is third party or fully comprehensive.
  - It protects the driver, passengers and other road users.
- **Home and contents**
  - Home insurance covers the physical building, for example against fire.
  - Contents insurance covers the physical items in the house including electrical equipment, furniture and personal items. If there are individual items of high value, for example a diamond ring, then they may need to be specified on the policy.
  - Items can be insured when a person is using them away from home as well as when inside the house.
- **Life assurance and insurance**
  - Life assurance is an ongoing policy to pay a lump sum upon death.
  - Life insurance is a policy for a set period of time to pay a lump sum if you die within that time period.
  - Mortgage lenders often insist upon life insurance for the same period as the mortgage to secure repayment of the mortgage if the holder dies while monies are still owed.



- ▶ Travel
  - This protects individuals or groups while abroad. Policies can be purchased to cover a specific trip, multiple trips or for all trips within a year.
  - Cover will generally include loss or theft of property, illness, cancellation and emergencies up to predetermined limits.
  - Specific types of holiday or activities, for example skiing or extreme sports, will require additional cover due to the high level of risk associated.
- ▶ Pet
  - This protects the owners of pets against some or all of the expenses associated with treating ill or injured pets, i.e. vets' fees.
- ▶ Health
  - This covers individuals, families or employees against medical expenses including assessments, treatments and loss of earnings.
  - In the UK the National Health Service provides free medical care but individuals may wish to take out insurance to receive payments if, for example, time is spent in hospital, or to receive private treatment.
  - Health insurance can include payment plans to cover routine visits such as to the dentist or optician with a percentage of expenses paid.

The pros and cons of different types of insurance are summarised in Table 3.7.

▶ **Table 3.7:** Advantages and disadvantages of different types of insurance

Type of insurance	Advantages	Disadvantages
Car	Meets legal requirements Protects self against theft or damage Protects against damage caused to a third party	Premiums can be high depending upon assessed level of risk, e.g. expensive for young drivers Normally there is an excess that must be paid, e.g. first £500 of all damages is still the responsibility of the car owner
Home and contents	Protects against damage which may otherwise be too expensive to repair resulting in the loss of a home Contents are protected both when inside the house and outside	Premiums are an additional expense to home ownership Some items cannot be replaced due to a value beyond the financial worth, e.g. a painting or inherited piece of jewellery
Life assurance and insurance	Provides peace of mind to family following the bereavement of a homeowner	If the policy holder does not die within the period of life insurance no payment is made (could be seen as an advantage!)
Travel	Provides protection for personal belongings when away from home Covers medical costs when on holiday Protects against cancellation and sometimes delays	The person suffering the loss is likely to have to pay upfront to replace items or cover medical costs and then reclaim later An additional cost when travelling abroad
Pet	Avoids expensive vet fees If vet fees are too high, there may be no alternative to having the pet put down – insurance can avoid this	An additional monthly expense to protect against the unexpected
Health	Some compensation is provided when ill which can reduce the financial burden and stress allowing the patient to concentrate on recovery rather than financial worries If used to fund private care, this often results in quicker treatment and better facilities	Paying for something that you hope you will not use Premiums can be expensive depending upon the degree of cover required Will not cover pre-known conditions

## Case study

### Insurance is big business



Members of the general public are likely to protect their home, their home's contents, their car and maybe their health or pet. For celebrities, it seems they protect a whole lot more. Sporting stars can insure against damage to limbs which would ultimately lead to a huge loss of earnings. When Cristiano Ronaldo played for

Real Madrid the club obviously felt his legs were an asset worth protecting and insured his legs for £90 million in 2013.

The music business also sees professionals insuring their voice, hands or other body parts. Jennifer Lopez, for example, insured her bottom to the sum of £180 million while Mariah Carey insured her legs for £1 billion. Following his role as James Bond, Daniel Craig insured his body for £6 million; not to be outdone, Joey Essex insured his hair for £1 million.

#### Check your knowledge

- 1 Outline why the general public are likely to insure their homes and content.
- 2 Outline why celebrities are willing to take out insurance policies worth such high amounts.
- 3 What would be the benefit to Real Madrid of Christian Ronaldo being insured?
- 4 Explain why insurance companies would be willing to issue these types of insurance policies.

### Assessment practice 3.1

- 1 Identify **two** disadvantages of using a credit cards. (2 marks)
- 2 Describe **two** examples of a type of borrowing. (4 marks)
- 3 Describe the likely financial needs and implications of a person in the young adult stage of the life cycle. (6 marks)

Bethany and Mark have inherited some money from their grandfather. Bethany wants to save the money for future use so that she has something to rely on while Mark thinks that he will make the best use of his money if he invests it.

- 4 Assess the risks and rewards of saving versus investment. (12 marks)

## B Explore the personal finance sector

### Features of financial institutions

Financial institutions are organisations that offer financial services to individuals and/or businesses. These services include the ability to deposit or withdraw money, obtain credit and make investments, as well as offering advice on matters of personal and business finance.

Types of organisations and their advantages and disadvantages are outlined below.

- ▶ Bank of England:
  - This is the UK's central bank with responsibility for maintaining a healthy level of financial stability for the UK as a whole.
  - Responsibilities include issuing legal tender, setting interest rates and controlling the national debt.
- ▶ Banks
  - A bank is an organisation that handles financial transactions and stores money on behalf of its customers.
  - Services offered will include holding deposits, making payments when instructed to do so and supplying credit.
- ▶ Building societies
  - These are organisations that handle financial transactions and store money on behalf of their members.
  - The members, or account holders, are part owners of the building society and have a right to vote and receive information on the running of the society.
  - Unlike banks they do not have shareholders on a stock exchange which allows costs to be kept down.
- ▶ Credit unions
  - These are not-for-profit organisations that handle financial transactions and store money on behalf of their members.
  - Often there is a responsibility or desire to support a community made up of its members.
  - Members are the owners and have a voting right.
- ▶ National Savings and Investments
  - This is a government-backed organisation that offers a secure saving option.
  - It offers a range of options including ISAs, premium bonds and gilts and bonds.
- ▶ Insurance companies
  - These are businesses that protect against the risk of loss in return for a premium.
  - They are profit-making organisations.
- ▶ Pension companies
  - These are businesses that sell policies to individuals, either privately or through employers, to allow them to save now to fund retirement in the future.
  - Pension companies normally invest the money paid to them in contributions in order to increase its value. However this is not risk free.
- ▶ Pawnbrokers
  - These are businesses or individuals who loan money against the security of a personal asset, for example an item of jewellery or piece of electronic equipment.
  - If the item is not bought back from the pawnbroker within a specified period of time then it will be sold on.
- ▶ Payday loans
  - These are organisations that offer a short-term source of finance used to bridge the gap between now and next receiving a wage; they are normally only available for relatively small amounts at very high rates.
  - They may be suitable in an emergency to meet cash shortages.

The pros and cons of different financial institutions are summarised in Table 3.8.

► **Table 3.8:** Advantages and disadvantages of types of financial institution

Type of organisation	Advantages	Disadvantages
Bank of England	Responsible for protecting the financial stability of the economy as a whole Sets interest rates at a level designed to help achieve a stable economy Lends to banks	Not a bank for members of the general public Can raise interest rates making borrowing more expensive
Banks	Offer a range of services and account types Provide a secure place to store money Pay interest on credit balances on most types of accounts	Savings are only protected up to the value of £85,000, so if a bank goes bankrupt savings above this would be lost Profit-making organisations owned by shareholders, therefore costs to individuals may be higher than necessary in order to fulfil shareholder objectives
Building societies	Offer a range of services and account types Provide a secure place to store money Pay interest on credit balances on most types of accounts Owned by members and therefore costs can be kept down allowing for higher interest payments	Savings are only protected up to the value of £85,000, so if a building society goes bankrupt savings above this would be lost May lack the business drive of a commercial bank
Credit unions	Offer a range of services and account types Provide a secure place to store money Owned by members and therefore costs can be kept down allowing for higher interest payments Often offer additional benefits to the community or a good cause	Savings are only protected up to the value of £85,000, so if a credit union goes bankrupt savings above this would be lost May lack the business drive of a commercial bank
National Savings and Investment	Government-backed, therefore offering security on 100% of savings with no upper limit Offers additional services/methods of savings, e.g. premium bonds	Rates are variable Not as easy to access due to lack of a high street presence Often required to give notice on withdrawals
Insurance companies	Protect against unexpected losses or financial expenses Easy and regular monthly payments make planning easy Wide range of services and levels of cover to suit the needs of individuals	Premiums are assessed on the estimated degree of risk which may be seen to penalise some members or groups of society too harshly Profit-making organisations, therefore premiums will be charged to ensure shareholder needs are met
Pension companies	Provides a structure to help plan for financial security after retirement Deductions can be taken directly from pay and be fully or partially matched by an employer's contribution Experts are employed to make investment decisions	Poor investment decisions by the pension company may result in a disappointing return Money already invested in a pension cannot be released prior to the dates agreed in the policy
Pawnbrokers	A quick way of acquiring cash needed for a short period of time The asset can be brought back within a set period of time Interest is not charged	The amount given for the asset is often substantially lower than its actual worth If the money is not repaid within the agreed period, the asset will be sold on
Payday loans	A quick way of acquiring cash needed for a short period of time	Interest charges are likely to be very high Often results in paying back a final sum substantially higher than the initial amount borrowed



- ▶ A pawnbroker's business can thrive during times of financial hardship. How do you feel about this?

## Communicating with customers

Traditionally, banking was carried out face to face where there was a personal relationship between the bank manager and clerk and the customer. The bank manager was seen as a figure of authority in the community. Over time, this relationship has become less common and, as banking organisations have grown, the service has become less personal.

Changes in technology have also changed the way in which the banking industry operates.

### Discussion

In small groups, discuss how technology changes have affected how banking operates. As a whole group, discuss whether these changes have had a positive or negative impact on banking? Consider this from the point of view of employees, banks, customers (of different ages) and other businesses. Think about whether this has affected other industries or just banking. Think of examples.

Methods of interacting with customers include:

- ▶ branch:
  - physical places where the customer will visit to carry out transactions which can be face to face, for example over the counter transactions or using computerised facilities, such as 1 automatic teller machines (ATM)
  - offer additional facilities and services such as advice.
- ▶ online banking:
  - the use of the internet to carry out banking transactions.
- ▶ telephone banking:
  - when transactions are carried out over the telephone.
- ▶ mobile banking:
  - the use of mobile devices such as mobile phones and tablets to conduct financial transactions.
- ▶ postal banking:
  - the use of the postal service to carry out paper-based financial transactions.

The pros and cons of different ways of interacting with customers are summarised in Table 3.9.

► **Table 3.9:** The advantages and disadvantages of different methods of interacting with customers

Method	Advantages	Disadvantages
Branch	Opportunity to build a relationship developing trust and brand loyalty Transactions can be conducted there and then Additional services such as advice can be offered Gives the customer a high level of confidence	Need to travel to a branch which is likely to incur travel costs, e.g. parking or fares for public transport Restricted to bank opening hours May be long queues plus travel time, making the process time consuming
Online banking	Available 24/7 High degree of privacy Convenient	Takes time at the beginning to set up or apply for Not suitable for cash withdrawals Increased risk due to cyber crime If just an online account, the facilities may be limited
Telephone banking	Convenient, especially to access basic functions such as checking a balance No additional charges	Full access may be limited to set hours Call centres and automated telephone systems can frustrate customers Higher risk of fraud and identity theft
Mobile banking	Convenient Available 24/7 No additional charges	May need to download specific apps to access mobile banking for a particular bank Higher security risk due to increased risk of loss or theft of mobile devices Can be prone to hackers sending texts asking for bank details
Postal banking	Traditional method that many customers will feel comfortable with Does not require any additional technology or devices	Can be slow due to the postal system Post can get lost

## Consumer protection in relation to personal finance

There are laws and organisations responsible for protecting the rights of consumers. In relation to personal finance, they are there to help ensure that the consumer is not treated unfairly or exploited. The following organisations and laws are concerned with protecting consumer rights.

- Financial Conduct Authority (FCA)
  - The FCA is an independent organisation with a remit to regulate the actions of providers of financial services.
  - It is funded by membership fees charged to financial service providers.
  - The organisation's work focuses on three key areas:
    - authorisation – permitting financial service providers to trade
    - supervision – ensuring procedures and practices are in the interest of the consumer
    - enforcement – using powers to ensure standards are maintained.
- Financial Ombudsmen Service (FOS)
  - The FOS is an organisation appointed by the government to represent the interests of the consumer in disputes with financial service providers.
  - It is funded by compulsory fees charged to all regulated financial institutions plus additional fees when actions are taken against an institution.
  - The FOS becomes involved in disputes only if they cannot be satisfactorily sorted between the consumer and the financial institution prior to involving the FOS.

- ▶ Financial Services Compensation Scheme (FSCS)
  - The FSCS is the organisation in the UK that will pay compensation to a consumer of financial services if the service provider is unable to.
  - The FSCS, for example, protects all savers in banks and building societies up to £85,000, i.e. if the financial institution goes bankrupt the savings will be refunded by the FSCS.
- ▶ Office of Fair Trading (OFT)
  - The OFT is a government organisation that was established to regulate all markets, including financial markets.
  - The OFT's aim was to encourage fair practices and healthy competition between financial institutions.
  - Since 2014 responsibility for financial institutions has been passed to the FCA.
- ▶ Legislation: consumer credit
  - These are laws passed by the UK government to enforce the regulation of any firm offering credit to consumers.
  - Any firm offering credit, for example leasing, hire purchase agreements or credit cards, must be registered with the FCA.



- ▶ How confident are you that your savings are safe in the bank?

## Information guidance and advice

Personal finance is a complicated matter and it is important to all individuals. There are a number of government-funded and independent organisations which offer guidance and advice to individuals on personal finance. These are outlined below.

- ▶ Citizens Advice
  - This is an organisation, run by charities, that offers advice on a wide range of issues both financial and non-financial.
  - Advice is offered at physical centres as well as online and via email and telephones.
  - Financial advice covers areas including, debt, benefits, banking, pensions and insurance.

### Research

Visit the websites below to carry out research on the roles and responsibilities of these organisations and consumer credit laws.

[www.fca.org.uk/](http://www.fca.org.uk/)

[www.financial-ombudsman.org.uk/](http://www.financial-ombudsman.org.uk/)

[www.fscs.org.uk/](http://www.fscs.org.uk/)

[www.gov.uk/offering-credit-consumers-law](http://www.gov.uk/offering-credit-consumers-law)

Do you think that it is necessary for the government and other organisations to regulate financial institutions? Or should they be trusted to self-regulate?

- ▶ Independent financial advisor (IFA)
  - IFAs are professionals who offer independent advice to their clients on financial matters including savings, investments, mortgages and pensions.
- ▶ Price comparison websites
  - These websites collate prices for similar goods and services within an industry allowing consumers to make comparisons easily and find the best deals.
- ▶ Money advice service
  - This is a government organisation set up to offer free and impartial financial advice in the UK.
- ▶ Debt counsellors
  - This is a professional who offers independent advice on how best to manage debt.
- ▶ Individual Voluntary Arrangements (IVAs) bankruptcy:
  - This is a government organisation that allows an individual to declare themselves bankrupt while agreeing to pay all or part of the money they owe to creditors through an insolvency practitioner.
  - Regular payments are made to the insolvency practitioner who then spreads this across the creditors deciding how much to pay each one.

The pros and cons of different providers of financial information and guidance are summarised in Table 3.10.

▶ **Table 3.10:** Advantages and disadvantages of different providers of financial information and guidance

Provider	Advantages	Disadvantages
Citizens Advice	Free service Offers face to face as well as online and telephone advice Wide range of areas covered	Trained volunteers are not necessarily professionals in financial issues and therefore knowledge may be limited
Independent financial advisor (IFA)	Advice is offered by professionals in the field Services offered are regulated by the FCA and FOS Advisers will take time to understand an individual's full financial situation	Services will be charged for Advice offered is not guaranteed to be 100% up to date or unbiased
Price comparison websites	Easy to access 24/7 Free service	Not guaranteed to be 100% up to date, accurate or unbiased Do not always cover all of the available options Potential for bias
Money advice service	Government-funded therefore advice is free and impartial Covers a wide range of financial matters	Advice is only available online or over the telephone – no physical presence Can take time to find and understand the exact advice that is being searched for Advice can be generic rather than personal
Debt counsellors	Advice is offered by a professional who specialises in debt management Services offered are regulated by the FCA and FOS	Services will be charged for Advice will focus just on debt management rather than the whole package of financial concerns
Individual Voluntary Arrangements (IVAs) bankruptcy	Helps manage debt repayment with regular payments making budgeting easier Independent advice, without bias	Set up and handling fees are charged for the service Will affect future credit ratings



### Assessment practice 3.2

- 1 Describe the role of the Financial Conduct Authority. (2 marks)
- 2 Identify **two** disadvantages of online banking. (2 marks)
- 3 Explain **two** advantages of building societies. (4 marks)

Bethany is still not sure what to do with her inheritance money. She has tried researching online but is overwhelmed by the amount of information available.

- 4 Discuss the different sources of financial information and guidance that Bethany could use. (12 marks)

## C Understand the purpose of accounting

It is impossible to truly understand how a business operates without some knowledge of the accounting process. You may be familiar with the expression 'a picture paints a thousand words' – in business you can adapt this to 'numbers paint a thousand words'. Anyone who wants to understand how well a business is performing – such as the owner, an employee or a potential investor – is likely to turn straight to its accounts. However good a business idea might be, if the owner does not keep a careful eye on the business's accounts, it is almost certain to be doomed to failure.

### Purpose of accounting

Accounting involves the recording of **financial transactions**, planned or actual, and the use of these figures to produce financial information. In this first section, you will look at a number of reasons why accounting is important to business success.

### Record transactions

Keeping business records accurate and up to date is important for the smooth running of a business. The business owner or a bookkeeper must record all of the money coming into the business (from sales) and all of the money going out, such as expenses. If a business fails to do this it may find itself not chasing payments, forgetting to pay bills or, even more seriously, in trouble with **HM Revenue & Customs (HMRC)**. If the business does not record its transactions correctly, it cannot report its financial performance accurately and therefore tax payments may be wrong.

### Management of the business

A manager is responsible for the planning, monitoring and controlling of the resources for which they are responsible. A manager who clearly understands the business's accounts will be better able to make informed decisions and plan for the future. Management of a business involves careful coordination of resources including staff, materials, stock and money. The manager must ensure there are sufficient funds to pay wages, order new stock, pay bills and meet other demands for cash outflows by balancing this with the money coming in from sales.

### Compliance

Financial reporting is governed by laws and regulations. This is to ensure that any financial records give a fair and accurate picture of the business. It is important that businesses comply with these laws and regulations in order to ensure that investors

#### Key terms

**Financial transactions** – actions by a business that involve money either going into or out of a business – for example, making a sale or paying a bill.

**HM Revenue & Customs (HMRC)** – HM is an abbreviation for Her (or His) Majesty's, and the HMRC is a British government department responsible for the collection of all types of taxes.

### Key term

**Fraud** – when an individual acquires company money for personal gain, through illegal actions.

### Key terms

**Profit** – surplus achieved when total revenue (income) from sales is higher than the total costs of a business.

**Loss** – shortfall suffered when total revenue from sales is lower than the total costs of a business.

**Gross profit** – sales revenue minus cost of goods sold (the cost of the actual materials used to produce the quantity of goods sold).

**Sales revenue** – quantity sold multiplied by the selling price.

**Net profit** – gross profit minus other expenses, for example, rent and advertising.

and other stakeholders are not misinformed. Compliance will also help protect against fraud. **Fraud** is when company monies are used inappropriately or acquired by the wrong person for personal gain.

- ▶ What are the main purposes of these laws and regulations?
- ▶ How do the reporting requirements vary between organisations?
- ▶ Why do you think it is important for financial reporting to be regulated?

### Research

In pairs research the laws and regulations that govern financial reporting in the UK. Some useful websites to get you started are:

[www.gov.uk/guidance/audit-accounting-and-reporting-guidance-for-uk-companies](http://www.gov.uk/guidance/audit-accounting-and-reporting-guidance-for-uk-companies)

[www.frc.org.uk/](http://www.frc.org.uk/)

[www.icaew.com/en/technical/financial-reporting/other-reporting-issues/other-uk-regulation](http://www.icaew.com/en/technical/financial-reporting/other-reporting-issues/other-uk-regulation).

### Measuring performance

Without financial records it would be impossible to know if the business was making a **profit** or a **loss**, or whether or not the business was owed money or was in debt to others.

Throughout this unit, you will consider how a business can measure its financial performance and what actions it can take to improve its performance. Key indicators of financial performance include:

- ▶ **gross profit** – this is the amount of profit left after the cost of producing the good or service is deducted from the amount of **sales revenue**
- ▶ **net profit** – this is the smaller amount of profit made after all other expenses are deducted from the gross profit
- ▶ value owed to the business – this is the amount of money owed to the business from sales that have not yet been paid for
- ▶ value owed by the business – this is the amount of money the business owes to others for goods or services purchased but not yet paid for.



- ▶ Why is it important to keep a close eye on a business's financial affairs?

## Control

Accounting will control the flow of money into and out of the business by maintaining accurate records and monitoring performance. This should mean that any unusual activity is spotted, helping to prevent fraud. It will also, therefore, track the amount of money the business is owed, **trade receivables**, from the sale of goods and the amount the business owes, **trade payables**. This will help ensure that the business can meet its day-to-day expenses. If trade receivables and payables are not carefully controlled, there is a danger that the business may not be able to survive. This will also involve credit control which aims to ensure that all money owed to the business is paid on time.

## Types of income

Income is money coming into the business. There are two categories of income:

- ▶ capital income
- ▶ revenue income.

### Capital income

Capital income is the money invested by the owners or other investors that is used to set up a business or buy additional equipment. It tends to be used to buy things that will stay in the business for a medium-to-long period of time – for example, premises, vehicles or equipment. These are called **fixed assets**. When setting up a business, capital income might also be used to buy opening stock, but, as the business develops, stock should be paid for by sales income. The sources of capital income available to business owners are influenced by the type of business.

### Loans

A loan is an amount of money lent to the business or business owner(s) from a bank or other financial institution. It is a lump sum that then has to be paid back at a set amount per month over the period of the loan, often five years, although longer-term loans can be agreed. As well as the repayment of the loan, there will be a monthly interest repayment. This is the amount of money the bank is charging for the loan as a percentage of the amount borrowed. The interest rate can be fixed or it may vary with changes in the economy. It is the interest payable on top of the loan that makes a loan a relatively expensive source of capital income. Monthly payments have to be made even if the business is not making a profit.

Banks are not guaranteed to lend money to a business, so the business would have to justify how the money borrowed would be spent and, more importantly, how they can afford to repay it. Often bank loans have to be secured against an **asset** (for example, the entrepreneur's home or the company's vehicles) to convince the bank that the risk being taken is not too great. This means that if the business fails to meet payments, the bank can claim the asset.

### Mortgages

A mortgage is similar to a bank loan, but it tends to be for a larger sum of money and over a longer period of time (typically 25 years). Mortgages are always secured on an asset, normally a property. Individuals will take out a mortgage to buy a house. Businesses might take out a mortgage to buy their premises – for example, a factory, retail store or warehouse.

### Shares

A company is when a business is registered with Companies House and issues shares to its shareholders. The shareholders are the owners of the business and all contribute towards the capital income. Shareholders normally receive a voting right and the more

#### Key term

**Trade receivables** – money owed to the business from sales made but not yet paid for.

**Trade payable** – money the business owes from supplies purchased but not yet paid for.

#### Key term

**Fixed assets** – items of value owned by a business that are likely to stay in the business for more than one year – for example, machinery. Also known as non-current assets.

#### Key term

**Asset** – any item of value owned by an individual or firm.

shares they own, the greater their ability to influence decision making. Shareholders are rewarded for their investment by the payment of a dividend; this is a share of the profits.

### Owner's capital

Owner's capital is money invested in a business from the owner's personal savings. A sole trader is a person who owns a business on their own; they therefore have to find all of the capital income from their own sources or personal loans. Sole traders often invest their personal savings into the business or borrow from the bank using their personal assets, such as their house, to secure the loan. This investment is a big risk for a sole trader, as they are ultimately responsible for the debts of the business. Being a sole trader can also limit the amount of money available and can therefore restrict the size of the business. However, if successful, the sole trader can keep all of the profits for themselves.

A partnership is when two or more people join together to set up a business as partners. Each partner would be expected to contribute towards the capital income, so increasing the potential amount of money available. Partners also share decision making and the profit. In most partnerships, any loans taken out are still secured by the partners' own assets, so this is still quite a high-risk option.

### Debentures

Debentures are medium- to long-term sources of capital income. Large companies often use them to secure income. Interest is payable, normally at a fixed rate, and the debenture is repaid as a lump sum, normally on a pre-agreed date. Debentures can be secured against an asset.

### Revenue income

As you have already seen, capital income is the money invested in the business to set it up or later buy additional assets; it is a long-term investment. Revenue income is the money that comes into the business from performing its day-to-day function – selling goods or providing a service. The nature of the revenue income depends on the activities that the business does to bring in money.

### Sales

Sales, or sales turnover, is money coming in from the sales of goods or services. For example, a jeans shop has money coming in each time a customer buys a pair of jeans, or a hairdresser receives money each time a customer has a haircut. Sales turnover is therefore determined by the prices charged and the number of customers.

Sales can be either: cash sales (the customer pays there and then) or credit sales (the customer buys then but pays at a later date).

The significance of the difference between cash and credit sales will become clear later on when you learn about cash flow.

### Rent received

A business that owns property and charges others for use of all or part of that property will receive rent as their main source of income. If a business owns a house and rents out three rooms, then it will receive rent from each of these renters. Similarly, a business may own land or offices which it rents out to other businesses.

### Commission received

A business may sell products or services as an agent of another business. They sell another business's products on their behalf and, for each sale they make, they get paid a percentage on that sale. This percentage is called **commission**.

#### Key term

**Commission** – A commission is a fee paid to a salesperson in exchange for services in facilitating or completing a sales transaction. Commission could be a flat fee or a percentage of the revenue, gross margin or profit generated by the sale. It could also be charged by brokers to assist in the sale of security, properties etc.

If, for example, you were to buy tickets for a concert from [www.ticketmaster.co.uk](http://www.ticketmaster.co.uk), then Ticketmaster would receive a percentage payment for that ticket from whichever company was hosting the concert.

### Interest received

Interest received is money earned on savings or lending. If, for example, a business has a positive bank balance it will receive interest on this. This acts as revenue coming into the business. Equally a business may lend money to another person or business. Interest will be charged to the lender and the business lending the money will receive interest as a form of revenue.

### Discount received

Discount received is when a business is given a percentage off a sale, normally in return for quick payment or a bulk order. This reduces the costs to the business.

## II PAUSE POINT

Can you explain, with the use of examples, the difference between capital income and revenue income?

### Hint

Close the book and draw a concept map about the classifications of income. Think about how often income is coming into the business and what it is likely to be used for.

### Extend

Can you explain how capital income can lead to revenue income in a number of scenarios?

## Types of expenditure

Expenditure is money spent by a business and can be split into two categories: capital expenditure and revenue expenditure. You are going to start by looking at capital expenditure. This is used to buy **capital items**, which are assets that will stay in the business for a long period of time. Capital items are non-current assets and intangible assets, as explained below.

### Capital expenditure

#### Non-current assets

Non-current assets are items owned by a business that will remain in the business for a reasonable period of time. These are shown on a business's **statement of financial position** (or balance sheet) and include land and premises, machinery and equipment, vehicles, and fixtures and fittings. These are sometimes referred to as 'tangible assets' because they can be touched.

Most fixed assets lose value over time and for this reason they are depreciated. This means that each year their value on the balance sheet is reduced in order to give a fair value of the asset.

#### Intangibles

An intangible asset is something owned by the business that cannot be touched but adds value to the business. Here are four common intangibles that exist within businesses.

- ▶ Goodwill – when you buy an existing business, its name and reputation will already be known, and it may already have an established customer base or set of clients. This increases the value of the business and therefore increases the selling price of the business. A sum of money is added to the value of the business to reflect the value of this goodwill. However, goodwill is difficult to place a figure on – how much would you pay for a recognised brand business name?

### Key terms

**Capital items** – assets bought from capital expenditure such as machinery and vehicles that will stay in the business for more than a year.

**Statement of financial situation** – a financial document that shows the net worth of a business by balancing its assets against its liabilities. It is often called a balance sheet.

- ▶ Patents – a patent is the legal protection of an invention, such as a unique feature of a product or a new process. An entrepreneur or business may patent their idea to stop others from copying the idea. Having a patent allows the business to exploit this in the future by launching an innovative product at a premium (more expensive) selling price. The patent itself must, therefore, be worth something, but again it is difficult to know exactly how much value to place on it.
- ▶ Trademarks – a trademark is a symbol, logo, brand name, words or even colour that sets apart one business's goods or services from those of its competitors. Trademarks can be a key influence on consumer choice and build a strong brand loyalty. A trademark, therefore, is of value to a business and consequently recorded as an intangible asset.
- ▶ Brand name – a feature of a business that is recognised by customers and distinguishes the business from competitors. Customers will link the brand name to expectations based on previous experiences with the brand. It is sometimes said that a brand name is a promise of what to expect.

## Case study

### Colour wars



When Stelios Haji-loannou, founder of easyJet, launched easyMobile in 2004 he planned to launch the brand with their signature colour of orange. However, Orange, a competitor in the mobile phone market, had already trademarked the colour orange in relation to 'telecommunications products and services'.

Orange, the company, felt that two mobile phone companies using the same colour would cause confusion to customers and wanted to protect their

customers' best interests. Orange had trademarked a specific shade of orange, but Haji-loannou felt that Orange had no case and that easyMobile had the right to use any colour they wished.

The case eventually went to court, but easyMobile ended mobile phone service in 2006 and so it was never brought to a resolution.

The European Court of Justice confirmed in 2003 that colours could be trademarked but that they had to be identified by a colour code (such as Pantone), not just a sample of colour. Other colour trademarks include Heinz's distinctive turquoise cans and Cadbury Schweppes plc's famous shade of purple.

#### Check your knowledge

- 1 Should Orange be able to stop a competitor from using a specific colour? Justify your answer.
- 2 Why might it be important to show a value for these trademarks in a business's accounts?
- 3 How would you go about attaching a monetary value to these trademarks?

### Revenue expenditure

Revenue expenditure is spending on items on a day-to-day or regular basis. These are the expenses incurred by a business that are shown on the profit and loss account (also known as a statement of comprehensive income). The types of costs incurred vary from business to business.

### Inventory

Most businesses providing a good or service will require some sort of inventory, whether it is raw materials, finished goods to sell on or supplies to provide the service

– for example, shampoo and conditioner for a hairdresser. When a business is first set up, it is likely to have to buy inventory with cash as it will not have built a reputation as being trustworthy and able to pay. As a business becomes more established, it may be able to buy inventory on credit (such as receiving the inventory and paying 30 days later). Bigger and more established businesses may also be able to drive the cost of inventory down as they will buy in larger quantities. There are other costs related to inventory, such as insurance and storage costs.

### Rent

This is the cost of using premises not owned by the business. These are regular payments, usually monthly, for the use of premises.

### Rates

In the same way as private residents pay council tax to the local authority, businesses pay non-domestic rates. This is a sum of money paid to the local council to go towards services such as street lights and refuse collection. This is not a set amount, but is calculated by the council based on the size and location of the premises and the nature of the business.

### Heating and lighting

This covers payments for services such as gas and electricity. The business will receive regular bills, often quarterly (every three months) for the provision and use of these services.

### Water

This involves payment for the supply of water to premises and use of water. This can be a fixed rate or based upon usage if a water meter is fitted.

### Insurance

A business is legally required to take out a number of types of insurance to protect itself from the possibility of serious losses. These include:

- ▶ buildings insurance – to protect the physical building from damage that may be caused by events such as fire
- ▶ contents insurance – to protect what is inside the building in terms of machinery, fixtures and fittings and stock from damage that may be caused by events such as flooding
- ▶ public liability insurance – to protect people within the building who may be harmed or injured from an event such as an accident
- ▶ employers' liability insurance – this means that if the employee is injured at work, the business is protected against any claims for compensation or any legal costs incurred.

### Administration

Administration refers to the paperwork that goes on within a business either internally between employees or externally with suppliers and customers. Administrative costs include items such as postage, printing and stationery, which might include items such as business cards, headed paper and order books.

Telephone charges are also classed as an administrative cost and are slightly unusual from an accounting point of view. For a landline, these costs are split into two: there is the line rental cost, which is paid quarterly in advance and then the call charges, which are paid quarterly after use.

### Salaries

A salary is an annual figure paid to an employee divided into equal monthly payments. For example, a trainee accountant may have a salary of £18,000 per year, meaning their gross pay is £1500 per month. The employee will then have to pay National Insurance, tax and maybe pension contributions on this figure, so the amount they actually take home will be quite a bit less. For the business, however, the actual amount they have to pay (the real cost to the business) is higher. On a salary of £18,000 the business also has to pay employers' National Insurance of 12.8 per cent, (an additional £2304) plus any pension and other benefits.

### Wages

A wage is an hourly rate paid to an employee, meaning there is a direct link between the number of hours worked and the amount of money paid. Paying a wage rather than a salary allows greater flexibility for both the employer and the employee, but also creates greater uncertainty.

#### Research

Employers in the UK, by law, have to pay a minimum wage to all employees over 16. From April 2016 a National Living Wage will be introduced for workers over 25.

What is the current minimum wage in the UK?

Should business pay a National living wage? Debate the arguments for and against introducing the living wage.

#### Link

The minimum wage is covered in more detail in *Unit 8: Recruitment and Selection Process*.

### Marketing

This covers a whole range of costs associated with attracting the customer and convincing them to make a purchase. Possible marketing costs might include advertisements, promotional literature, promotional events, point of sale materials and so on.

### Bank charges

Unlike personal banking, which is generally free, banks charge businesses for each transaction that takes place, for example, every time a cheque is paid in or written, whenever cash is deposited, and so on. Banks might offer free banking to businesses for the first year as a marketing technique, but, once the first year is over, bank charges can soon start to add up to quite a large amount of money.

### Interest paid

If the business has a bank loan or a mortgage, then interest will be charged on this. Banks may offer big businesses preferential rates if they are confident that the money will be paid back and if they want to keep that particular business as a loyal customer. Big businesses will carry out a lot of transactions and pay high bank charges, so, for the bank, it may be worth offering lower interest rates to keep them happy.

### Depreciation

Assets lose value over time. Accountants use depreciation to spread out the cost of an asset over its useful life. **Depreciation** is a paper exercise to match the cost of an asset against the time it is used within a business. For example, if a machine is purchased at a cost of £50,000 this would not be shown as a one-off expense at the time of purchase

#### Key term

**Depreciation** – an accounting technique used to spread the cost of an asset over its useful life.



but in the accounts shown as an expense of £10,000 per year. You will learn about two types of depreciation in more detail later in this unit:

- ▶ straight-line depreciation: an asset is depreciated by a set amount each year
- ▶ reducing balance depreciation: an asset is depreciated by a set percentage of its remaining value each year.

### Discount allowed

Reductions offered to customers are an expense to a business as it reduces the amount of cash flowing into the business. Discounts may be allowed to attract customers, for bulk purchases or to gain a competitive advantage.



- ▶ When a business offers a discount on its products, are you encouraged to buy?

## II PAUSE POINT

Can you explain, with the use of examples, the difference between capital expenditure and revenue expenditure? Close the book and draw a concept map about the classifications of expenditure.

### Hint

Think about the frequency with which the expenditure is going out of the business and what it is being used for.

### Extend

Can you think of any examples where short-term capital expenditure may reduce long-term revenue expenditure?

### Assessment practice 3.3

- |                                                  |           |
|--------------------------------------------------|-----------|
| 1 Identify <b>one</b> intangible asset.          | (1 mark)  |
| 2 Identify <b>two</b> sources of revenue income. | (2 marks) |
| 3 Outline what is meant by 'depreciation'.       | (2 marks) |

## D Select and evaluate different sources of business finance

### Sources of finance

As discussed earlier, businesses need finance for a wide number of reasons, both to fund capital and revenue expenditure. The source of finance is where this money comes from. What the money will be used for will determine which source is the most suitable. For example, you might look for a long-term bank loan or mortgage to fund capital expenditure such as buying a factory, but this would not be appropriate for replenishing stock. Sources of finance can be short term which means they have to be paid back within one year or long term which means they are paid back in a period of time greater than one year.

**Internal sources of finance** are those available from within a business. These include:

- ▶ retained profit
  - profit (sales revenue minus total costs) kept in the business to fund future expenditure.
- ▶ net current assets
  - current assets minus current liabilities shows the money available in the business to fund day-to-day expenditure.
- ▶ sale of assets
  - selling an item of worth owned by a business in order to achieve an immediate cash injection.

### Key term

#### Internal sources of finance

– money available to fund expenditure from within the business.

The pros and cons of internal sources of finance are summarised in Table 3.11.

► **Table 3.11:** Advantages and disadvantages of internal sources of finance

Internal source of finance	Advantages	Disadvantages
Retained profit	No interest charges Available immediately Only available up to the amount already accumulated by the business and therefore avoids debt No loss of ownership (control)	Amount available may be limited Reduces payments to shareholders which may cause dissatisfaction Once used it is not available for alternative purposes
Net current assets	Encourages the business to manage cash flow effectively	Can put pressure on customers as shorter credit terms are offered and this negatively affects relationships with suppliers if longer credit terms are negotiated Lower stock holdings can affect the firm's ability to meet customer needs
Sale of assets	No interest charges Reduces <b>capital</b> tied up in assets, releasing it for other purposes Can mean disposing of an asset no longer of use to the business	It is likely that the amount received is not a true reflection of the value of the asset Can increase costs in the long run if an asset needs to be leased back

External sources of finance are those available from outside the business. They are outlined below.

External sources of finance – the places where finance can be raised from outside the business.

- Owner's capital
  - This is money invested in the business from the owner's personal savings.
- Loans
  - Loans are money borrowed from a financial institution normally for a set period of time and for a specific purpose.
  - Interest will be payable on the loan.
- Crowd-funding
  - This involves attracting investment from a large number of speculative investors many of whom may invest relatively small amounts. If cumulatively this matches the required amount then the investments are collected together.
  - Normally makes use of the internet to attract investors.
- Mortgages
  - These are long-term loans, normally around 25 years, that are secured against a specific asset, for example a building.
  - Interest will be payable on the mortgage.
- Venture capital
  - This is investment from an experienced entrepreneur in return for a stake (equity) in the business.
- Debt factoring
  - This involves the selling on of a business's debts to a third party in order to receive the cash quickly.
  - The factor company pays the business a percentage of the money owed and takes on the responsibility to chase the debts which need to be repaid.

- ▶ Hire purchase
  - This involves paying to use an asset in instalments to spread the cost over its useful life and hence provide a source of finance.
  - The asset will remain the property of the seller until the final instalment has been paid.
- ▶ Leasing
  - This involves paying to use an asset in instalments to spread the cost over its useful life and hence providing a source of finance.
  - Ownership of the asset stays with the supplier throughout the length of the lease agreement.
- ▶ Trade credit
  - This is a period of time offered by suppliers to allow the customer to purchase a good or service now and pay at a later date, for example 30 days after purchase.
- ▶ Grants
  - This is a lump sum provided to a business by the government or another organisation to be used for a specific purpose. For example, it could be used to provide employment in a deprived area or invest in the research and development of an environmentally friendly alternative to fossil fuels.
- ▶ Donations
  - These are sums of money given voluntarily to a charity or social enterprise.
- ▶ Peer-to-peer lending
  - This involves one business person lending money to another business person in return for interest payments.
- ▶ Invoice discounting
  - These are reductions offered to customers making a product or service cheaper, often applied as a percentage.



- ▶ If you had enough money, what would encourage you to invest in someone else's business?

The pros and cons of external sources of finance are summarised in Table 3.12.

▶ **Table 3.12:** Advantages and disadvantages of external sources of finance

	Advantages	Disadvantages
<b>Owner's capital</b>	No interest payments or need to repay High level of commitment from the owner	Amount available is likely to be limited If there is more than one owner this could cause friction if everyone is not able to contribute the same amount
<b>Loans</b>	Regular pre-agreed repayments make planning and budgeting relatively easy Ownership or control is not lost	Interest is charged on the amount borrowed Interest rates can fluctuate Often secured against an asset which can be seized if repayments are missed Interest has to be paid regardless of whether a profit is being made
<b>Crowd-funding</b>	Offers the ability to raise finance from a large number of investors No interest is paid as investors will only be rewarded if the business is successfully sold on at a later date	Partial loss of ownership No guarantee that the crowd fund will attract sufficient investment to meet the proposal
<b>Mortgages</b>	Large amounts of finance can be raised and repaid over a prolonged period of time Ownership or control is not lost	Interest is charged on the amount borrowed Interest rates can fluctuate Often secured against an asset which can be seized if repayments are missed Interest has to be paid regardless of whether a profit is being made Not suitable for small amounts or as a short-term source of finance

	Advantages	Disadvantages
<b>Venture capital</b>	Finance is provided by a business professional who will often offer advice and mentoring alongside the investment Venture capitalists are often risk takers and may see the potential in a high risk investment that other investors including banks may not be willing to invest in	Partial loss of ownership and control Conflict can arise between the entrepreneur and venture capitalist regarding the direction and day-to-day running of the business
<b>Debt factoring</b>	Speeds up the flow of cash into the business from debts The factor company takes on the risk of bad debt	Only receive a percentage of the amount owed, therefore reducing profits Can give the wrong impression or alienate customers
<b>Hire purchase</b>	Avoids the need to pay a lump sum for the use of an asset Regular instalments make planning and budgeting easier Spreads the cost of an asset over its useful life	Overall amount paid for the use of an asset is likely to be higher than if purchased outright Only really suitable for relatively low cost assets, e.g. vehicles and not premises
<b>Leasing</b>	Responsibility for maintaining and repairing the asset stays with the supplier Spreads the cost of an asset over its life to avoid paying a lump sum up front	Overall amount paid for the use of an asset is likely to be higher than if purchased outright Never actually own the asset and therefore payments are ongoing
<b>Trade credit</b>	Delays the need to pay for goods and services purchased, therefore aiding cash flow No loss of ownership or control	Potential loss of discounts offered for cash payments Only suitable as a short-term source of finance
<b>Grants</b>	No need to repay and no interest charges No loss of ownership or control	Often require a lengthy application process Might only be awarded if certain conditions are met affecting the way the business operates on a day-to-day basis
<b>Donations</b>	No need to repay and no interest charges No loss of ownership or control	Likely to be small amounts only Unpredictable
<b>Peer to peer lending</b>	Interest rates can be lower than lending from more traditional financial institutions Fixed rate of interest can be agreed making it easier to plan and budget	Amounts available may be limited and provided for a short period of time only
<b>Invoice discounting</b>	No need to repay and no interest charges No loss of ownership or control Reduces costs to the business so increases profit	Often only available if purchases are paid in cash which affects cash flow

### Assessment practice 3.4

- 1 Give **two** examples of external finance. (2 marks)
  - 2 Outline **two** advantages of net current assets as an internal source of finance. (4 marks)
- Ahmed wants to open a small business selling custom bikes, and is looking at ways of raising money. He owns his own house and is considering acquiring a second mortgage. He is also speaking to his bank about a loan and is looking at crowd-funding sites, as he thinks his product is innovative and could attract investors.
- 3 Assess a mortgage, a loan and crowd-funding as sources of finance for Ahmed. (8 marks)



## Break-even and cash flow forecasts

### Cash flow forecasts

Cash flows into and out of a business on a regular basis. A **cash flow forecast** tries to predict in advance what and when these cash flows will be. Having a healthy cash flow is crucial to the survival of a business. A healthy cash flow means that a business will have enough cash at any one point in time to be able to meet demand for short-term cash outflows. Imagine what would happen if at the end of the week a manager turned to the business's employees and said, 'Sorry, I haven't got enough cash to pay your wages this week.'

By forecasting cash flow in advance, a business can identify where there might be shortages and either try to prevent this from happening or put plans in place to deal with it.

#### Inflows/receipts

Cash inflows or receipts are the money coming into the business from various sources, which include:

- ▶ cash sales – the customer pays at the time of purchase
- ▶ credit sales – the customer pays in a pre-agreed period after the sale, for example 30 days
- ▶ loans – bank loans to fund the purchase of assets such as machinery and vehicles
- ▶ capital introduced – money invested from entrepreneurs or shareholders when a business is first set up or looks to expand
- ▶ sale of assets – the sale of items owned by the business which are no longer needed in order to bring a short-term cash injection into the business
- ▶ bank interest received – interest paid by the bank on credit balances.

#### Outflows/payments

Cash outflows or payments are the money going out of the business for various purposes, which include:

- ▶ cash purchase – items purchased by a business and paid for at the time of purchase
- ▶ credit purchases – items purchased by a business and paid for at a later point in time
- ▶ purchase of assets – non-current assets that a business is likely to keep for more than one year such as machinery and vehicles
- ▶ Value Added Tax (VAT) – businesses that are VAT registered must pay VAT to HM Revenue & Customs (HMRC), and this should be shown in the cash flow forecast
- ▶ bank interest paid
- ▶ rent
- ▶ rates
- ▶ salaries
- ▶ wages
- ▶ utilities.

A business with sales in excess of the VAT threshold, £82,000 in 2015, must register itself with HMRC and then record VAT received on sales and paid on purchases. A business must then work out whether it has paid or received more money in VAT, then claim a refund or make a payment as appropriate.

#### Key term

**Cash flow forecast** – a document that shows the predicted flow of cash into and out of a business over a given period of time, normally 12 months.

#### Tip

Formulas used in this topic will not be given to you in the examination. It is therefore important that you learn them.

## Worked Example

Paddington Games sells £10,000, excluding VAT, of games per month and purchases supplies of £6000, excluding VAT. The tables below show the cash in and the cash out for Paddington Games.

Cash in	January	February	March
Sales	£10,000	£10,000	£10,000
VAT on sales	£2000	£2000	£2000
Refund from HMRC			
Total cash in	£12,000	£12,000	£12,000

Cash out	January	February	March
Purchases	£6000	£6000	£6000
VAT paid	£1200	£1200	£1200
Payment to HMRC			
Total cash out	£7200	£7200	£7200

Over the three months of January to March:

- the total VAT received was  $£2000 \times 3 = £6000$
- the total VAT paid was  $£1200 \times 3 = £3600$ .

The net VAT is therefore  $£6000 - £3600 = £2400$

This means that the business has received more in VAT than it has paid and therefore must make a payment of £2400 to HMRC.

### Key terms

**Opening balance** – amount of cash available in a business at the start of a set time period, for example a month.

**Closing balance** – amount of cash available in a business at the end of a set time period, for example a month.

### Prepare, complete, analyse, revise and evaluate cash flow

A cash flow forecast is a simple statement showing opening balance, cash in, cash out and closing balance. It is normally shown on a monthly basis and drawn up for a 12-month period. The **opening balance** is how much money the business has at the start of the month and the **closing balance** shows how much money it has at the end of the month. For example, the closing balance at the end of January becomes the opening balance at the start of February.

### Case study

#### Carla's Cycles

Carla owns a small bicycle store in Sheffield, called Carla's Cycles. She opened the business three years ago with a friend who had a finance degree, but has recently had to start completing the finances for the business herself. The illustration below shows the cash flow forecast for Carla's Cycles.



	January (£)	February (£)	March (£)
<b>Opening balance (b/f)</b>	1,000	(280)	240
<u>Income</u>			
Sales	1,000	2,800	2,000
<b>Total inflows</b>	1,000	2,800	2,000
<b>Total cash available</b>	2,000	2,520	2,240
<u>Expenses</u>			
Purchases	980	980	500
Wages	1,000	1,000	1,000
Heat & light	300	300	300
<b>Total outflows</b>	2,280	2,280	1,800
<b>Closing balance (c/f)</b>	(280)	240	440

Opening balance; how much is available at the start of the year

February's closing balance becomes March's opening balance

Cash available = Opening balance + Total inflows  
 $\text{£}1,000 + \text{£}1,000 = \text{£}2,000$

Closing balance = total cash available – total outflows  
 $\text{£}2,000 - \text{£}2,280 = (\text{£}280)$

Brackets are used to show that a figure is negative

► **Figure 3.3:** Cash flow forecast for bicycle shop, Carla's Cycles

Carla's Cycles has £1000 available at the start of the year; Carla then predicts the following sales:

- £1000 in January
- £2800 in February
- £2000 in March.

In this case, total inflows and sales are the same, showing that Carla only makes cash sales and not credit sales. The total cash available is opening balance plus total inflows. Carla predicts the following:

- her purchases will be £980 in both January and February, and £500 in March
- wages will be £1000 per month
- heating and lighting will be £300 per month.

Total outflows are all of Carla's expenses added together. The closing balance is calculated by deducting the total outflows from the cash available. Remember that one month's closing balance becomes the next month's opening balance.

The timing of the cash inflows and outflows is important. At the end of three months Carla has a positive balance of £440, but in January she had a negative balance of £280. This means that, although her cash flow was healthy at the end of three months, she had problems earlier and would have had an overdraft of £280 in her bank or been unable to pay one of her expenses, which could stop her from operating successfully in the following months.

#### Check your knowledge

- 1 What problems might Carla experience as a result of cash flow in January and February?
- 2 Outline three reasons why cash flow forecasts are so important to businesses.
- 3 Can you think of any actions Carla should take in light of her cash flow forecast?

### Key term

**Credit period** - the length of time given to customers to pay for goods or services received.

### Key terms

**Liquidity** - measures a firm's ability to meet short-term cash payments.

**Insolvent** - when a firm is unable to meet short-term cash payments.

You will need to learn the formula to calculate the closing balance:

$$\text{opening balance} + \text{cash inflows} - \text{cash outflows} = \text{closing balance}$$

**Credit periods** have two major influences on a business's cash flow.

The business must consider how long it gives its customers to pay. If it accepts cash sales only, then this will not be a concern, but it may have to offer credit in order to ensure a sale. The longer the credit period, the slower will be the money coming in. If a greengrocer gives one month's credit for a sale made in January, they will not see cash flowing into the business until February. Yet the greengrocer may have had to pay for their stock up front.

- ▶ Credit periods affect the ability of the business to gain credit from its suppliers. If a business can secure supplies on credit, then this will slow down the flow of cash out of a business. The longer the credit period, the later the cash flows out. Some businesses can secure credit periods of 30, 60 or even 90 days.

If a business both sells on credit to its customers and buys on credit from its suppliers, it needs the first to have a shorter credit period than the second.

### Opening and closing cash/bank balances

The opening balance at the start of the year will be a true reflection of the business's bank balance, whereas the closing balance will be based upon the predicted incomes and expenditures over the period of the cash flow forecast, normally a year. One of the key purposes of the cash flow forecast is to highlight, in advance any months where there is a risk of a negative cash flow, as this allows the business to make arrangements - for example, a prearranged overdraft with the bank - or to try to take actions to avoid this.

A business with a negative closing balance is often said to have **liquidity** problems and is in danger of becoming **insolvent**. In the next section on cash flow management, you will look in more detail at methods available to try to avoid these negative closing balances.

Figure 3.4 illustrates a sample cash flow forecast for the first four months of a sole trader.

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FILL????



	January £	February £	March £	April £	Total £
<b>Opening balance (b/f)</b>	0	(3,500)	(1,520)	2,500	
Income owner's capital	10,000				10,000
Bank loan	15,000				15,000
Cash sales	5,000	7,000	8,000	7,000	27,000
Credit sales	0	9,000	11,000	12,000	32,000
Commission received	0	800	950	950	2,700
<b>Total inflows</b>	30,000	16,800	19,950	19,950	86,700
<b>Total cash available</b>	30,000	13,300	18,430	22,450	
<b>Expenses</b>					
Cash purchases	8,000	9,500	9,500	3,500	30,500
Credit purchases	0	0	0	7,000	7,000
Heat and light	0	0	0	200	200
Fixtures and fittings	5,000	600	0	0	5,600
Equipment	5,000	0	0	0	5,000
Drawings	0	2,000	2,000	2,000	6,000
Marketing	3,000	0	1,200	0	4,200
Premises costs	10,000	0	0	0	10,000
Insurance	500	0	0	0	500
Wages	1,000	1,500	2,000	2,000	6,500
Administrative costs	1,000	750	800	1,250	3,800
Overdraft interest	0	70	30	0	100
Loan repayments	0	400	400	400	1,200
<b>Total outflows</b>	33,500	14,820	15,930	16,350	80,600
<b>Closing balance (c/f)</b>	(3,500)	(1,520)	2,500	6,100	

► **Figure 3.4:** Why might a new business experience cash flow problems in the first few months of trading?

## Case study

### Lily's cleaning services



Lily is setting up a small business providing cleaning services to offices on a trading estate in Scarborough. She has asked you to help her prepare a cash flow forecast for her first 12 months of trading.

You should produce a forecast from January to December based on the information provided below.

Sales and purchases for the 12 months are expected to be as follows.

Month	Sales	Purchases
January	£5000	£600
February	£5000	£600
March	£5000	£600
April	£5000	£600
May	£5000	£600
June	£5000	£600
July	£4000	£500
August	£4000	£500
September	£5000	£600
October	£6000	£650
November	£6000	£650
December	£6000	£650

At the beginning of January, Lily will buy two small cars, to drive herself and staff to the offices, each costing £10,000. She will invest £15,000 of her own money and has agreed a bank loan of £7000. Lily will receive the loan in January and start repayments the following month at a fixed rate of £250 per month. When meeting with her bank manager, she also agreed a business overdraft that will be charged at a rate of 1 per cent on any negative closing balances.

In order to start trading in January, she buys £4000 worth of cleaning equipment, including vacuum cleaners and floor buffers. In addition, she spends £150 on less durable (not as long-lasting) products such as dusters and mops, which she plans to replace every second month.

Lily plans to offer 30 days' credit terms to two of her bigger cleaning contracts. These two combined will account for £2200 of her monthly sales.

Lily has rented a small lock-up to store her equipment and materials at a cost of £600 per month. She will employ four cleaners, each earning £400 per month, and a cleaning supervisor earning an annual salary of £7200. She will withdraw £1000 a month for herself, and hopes to be able to increase this to £1200 per month after six months.

Additional monthly costs include:

- £300 car insurance
- £20 advertising
- £100 fuel.

#### Check your knowledge

- 1 Use a spreadsheet to produce a 12-month cash flow forecast for Lily.
- 2 Identify and explain any potential cash flow problems she may face.
- 3 Do you think Lily was right to offer her two biggest customers 30 days' credit? Justify your answer.

### Use of cash flow forecasts for planning, monitoring, control and target setting

A cash flow forecast can help to identify where there are potential shortfalls but might also indicate where there are large amounts of cash left at the end of a month or year. Although you may think this is a good thing, if the cash balance at the end of each month is high, it might be an indication that the business is not taking advantage of opportunities. For example, could it use this cash surplus to improve or expand the business?

Cash flow forecasts are just that, a forecast, and therefore the actual cash flow of the business should be monitored alongside the forecast to see if inflows and outflows are as expected, better or worse.

### Problems within the cash flow forecast

Problems occur with cash flows when the business's outflows are greater than the opening balance plus the inflows, as this will result in a negative closing balance. This means that the business will not have enough cash to meet payments that are due.

Very few businesses have consistent cash flows throughout the year; they are likely to experience busy times and quiet times. These fluctuations are known as the cash flow cycle. For some businesses, particularly those in a seasonal industry, these fluctuations can be quite severe. Someone who owns a small bed and breakfast in a seaside town will have to pay costs like rent, heat and light, insurance and bank charges throughout the year. In season, they will also have additional costs like wages and stock, but it might only be in the summer months where there are any cash inflows.

### Solutions to cash flow problems

If a business has predicted cash flow problems in advance, then there are a number of possible solutions. These are outlined below.

- ▶ **Overdraft arrangements** – a business with a fluctuating cash flow cycle should be able to show the forecast to the bank and make arrangements for periods of negative cash flows. Banks sometimes offer free overdraft facilities to help businesses through these periods, but only if pre-agreed. Going overdrawn on a bank account without an agreement with the bank can be a very expensive option.
- ▶ **Negotiating terms with creditors** – creditors are people or businesses that a business owes money to, normally because goods or services have been bought on credit as opposed to cash purchases. A business with cash flow problems could try to negotiate a longer payment term with its suppliers – for example, an increase from 30 days to 60 days. This would slow down the flow of cash out of the business. A negative effect of this, however, may be the loss of any discounts offered for prompt or early payment.
- ▶ **Reviewing and rescheduling capital expenditure** – having identified cash flow problems, the owner or manager could review what cash outflows were being spent on. Such a review might identify areas of expenditure that could be cut or postponed. It is difficult to do this if the expenditure is on revenue items – for example, replacement stock – but more achievable if it is capital expenditure. A business could, for example, postpone plans to replace machinery or buy a new van.

An alternative action here could be to consider leasing an item of capital equipment rather than buying it outright. This can prove expensive in the long run, but means that rather than paying one lump sum, the business can pay to use it on a monthly basis.

#### Theory into practice

Draw a cash flow table to show your personal finances for the next month. Think about what money will be coming in from wages, presents, parents, as appropriate, and what expenses you will have. These might include food and drink, presents, trips, travel etc.

- 1 What is your opening balance at the start of the month?
- 2 What is your closing balance at the end of the month?
- 3 Are there any points during the month where you may have a cash flow problem?
- 4 What actions can you take to ensure that any cash flow problems are solved?

## Benefits and limitations of cash flow forecasts

Cash flow forecasts are a very useful tool for many businesses. Table 3.13 outlines the benefits and limitations of using them.

► **Table 3.13:** Benefits and limitations of cash flow forecasts

Benefits	Limitations
<ul style="list-style-type: none"><li>• Encourages planning for cash inflows and outflows</li><li>• Enables cash flow to be monitored and corrective action taken if necessary</li><li>• Can be used as part of a business plan to help raise finance</li><li>• Identifies in advance times of negative closing balances allowing the business to plan for these</li></ul>	<ul style="list-style-type: none"><li>• Based on forecasts and therefore may be inaccurate</li><li>• Cannot plan for unexpected events such as a rise in the cost of raw materials</li><li>• Time taken to produce a cash flow forecast could have been spent on other tasks</li></ul>

### II PAUSE POINT

Draw a flow diagram showing how cash can flow into and out of a business. Identify whether each cash flow is a regular or one-off (less frequent) occurrence.

#### Hint

Think about your own cash flow table. Are there any similarities between your cash flow and a business'?

#### Extend

'It is possible for a successful business to go out of business because it has cash flow problems.' Can you explain this statement?

### Discussion

Work in small groups. Each group takes a different local business – a retailer, leisure provider, manufacturer, service provider etc.

Produce a diagram to show fixed, semi-variable and variable costs for each business.

How easy was it to classify each cost? What are the similarities and differences between different types of business? Why might there be similarities between businesses that are different?

## Break-even analysis

Break-even is the point at which a business is not making a profit or a loss, i.e. it is just breaking even. This means that the money being received from sales is the same as the money being spent on costs.

Costs to a business can be categorised as follows:

- ▶ variable costs – vary with the level of output, for example raw materials
- ▶ semi-variable – part of the cost stays the same and part varies in relation to the degree of business activity, for example a worker may be paid a fixed rate of pay but at busy times earn additional payments for working overtime
- ▶ fixed costs – do not vary with output, for example rent
- ▶ total costs – fixed costs + variable costs.

Sales by a business generate revenue; this is cash coming into the business. Important terms are:

- ▶ total revenue – the total amount of money coming in from sales, calculated as quantity sold multiplied by selling price
- ▶ total sales – the amount of sales made in a set time period, for example a year; this can be expressed as value or volume
- ▶ selling price per unit – the amount a customer pays for each unit bought
- ▶ sales in value – sales expressed in monetary value, for example £s, calculated as quantity sold multiplied by selling price per unit
- ▶ sales in volume – sales expressed as a quantity, for example tons or units.

Break-even is the point where total revenue (TR) = total costs (TC).

This can be calculated using the formula below:

$$\text{break-even point} = \frac{\text{fixed costs}}{\text{contribution per unit}}$$

Contribution per unit is calculated as:

$$\text{selling price} - \text{variable costs per unit}$$

Total contribution is calculated as:

$$\text{sales revenue} - \text{total variable costs}$$

Total variable cost is calculated as:

$$\text{variable cost per unit} \times \text{quantity}$$

or

$$\text{contribution per unit} \times \text{number of units sold}$$

### Worked Example

Fay makes celebration cakes from a rented kitchen. She has fixed costs of £20,000. Her variable cost per cake is £10 and her selling price is £26.

contribution per unit = selling price – variable cost

$$\text{contribution per unit} = £26 - £10 = £16$$

$$\text{break-even point} = \frac{\text{fixed costs}}{\text{contribution per unit}}$$

$$\text{break-even point} = \frac{£20,000}{£16} = 1250 \text{ cakes}$$

Fay must sell 1250 cakes to achieve break-even. If she sells less than this she will make a loss. If she sells more she will make a profit.

If Fay sells 1251 cakes she will make £16 profit, because after, break-even has been reached, the contribution per unit no longer has to contribute towards fixed costs and therefore becomes profit.

How much profit would Fay make if she sold 1500 cakes?



Margin of safety is the actual number of units sold over and above the break-even point. This is calculated as:

$$\text{actual sales in units} - \text{break-even level of output}$$

To work out the break even level you need to calculate:

$$\text{break-even point} = \text{fixed costs} / \text{contribution per unit}$$

$$\text{contribution per unit} = \text{selling price} - \text{variable costs}$$

then

$$\text{margin of safety} = \text{actual sales} - \text{break-even level of output}$$

### Worked Example

Assume Fay sold 1500 cakes.

$$\text{margin of safety} = \text{actual sales in units} - \text{break-even level of output}$$

$$\text{margin of safety} = 1500 \text{ cakes} - 1250 \text{ cakes} = 250 \text{ cakes}$$

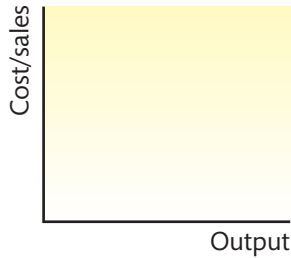
### Drawing a break-even chart

Break-even can also be shown on a break-even chart. This plots the costs and revenues at each unit of output. The break-even point is where the total cost line crosses the total revenue line. A break-even chart can also be used to calculate margin of safety and profit or loss at different levels of output.

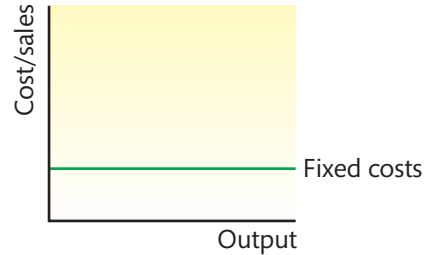
## Step by step: drawing a break even chart

6 Steps

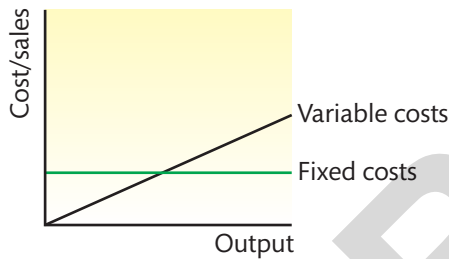
- 1** Draw your axes, adding labels 'Cost/sales' on the vertical axis and 'Output' on the horizontal axis.



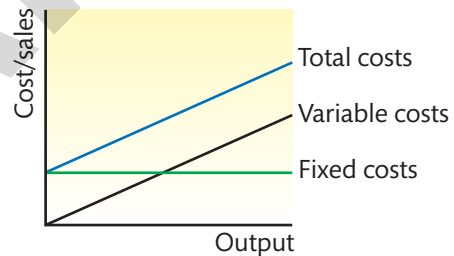
- 2** Draw your fixed cost line.
- Remember this stays the same regardless of output and is therefore a horizontal straight line.



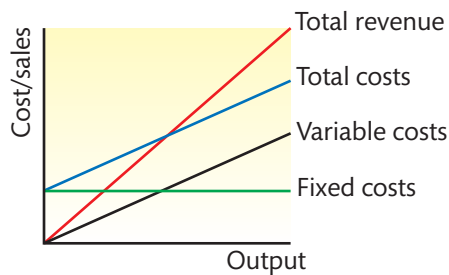
- 3** Draw your variable cost line.
- At 0 output variable costs will be £0.
  - As output increases variable costs will increase.
  - The variable cost line therefore slopes upwards from 0.



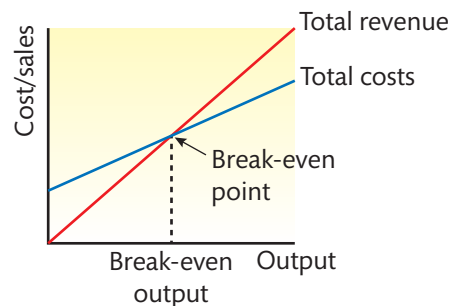
- 4** Draw your total cost line.
- Remember total costs are fixed costs plus variable costs.
  - The total cost line therefore starts at the fixed cost point and slopes upwards.
  - Notice the total cost line is parallel to the variable cost line.



- 5** Draw your total revenue line.
- If no units are sold, total revenue will be £0.
  - As sales increase, total revenue will increase.
  - The total revenue line therefore slopes upwards from 0.



- 6** Identify the break-even point.
- Identify where the total cost line crosses the total revenue line.
  - Draw a line downwards to the x axis.
  - Read off the break-even level of output.



► **Figure 3.5:** Completing a break-even chart

**Theory into practice**

You are the finance assistant at Deluxe Car Washing Services. Produce a break-even chart and check your workings against the break-even formula for the following:

- car wash price = £12.50 per car
- overhead costs = £175 per week
- labour costs per wash = £4.50 per car
- materials and water cost = £1 per car.

- 1 Label your graph in full and include the break-even formula to show you are right.
- 2 The business averaged 30 cars per week during July – work out the margin for safety.
- 3 How much profit would they make if they washed 20 cars during one week, and what recommendations would you make to them about this?

**Identification of area of profit and area of loss**

Break-even level of output is the level of output where the business is making neither a profit nor a loss. If the business sells less than the break-even level of output, then it is making a loss. For every item sold above the break-even level it is making a profit.

**Worked Example**

Suki imports silk dresses from Vietnam which she then sells through her online shop. She has imported 100 dresses at a cost of £1000. In addition to the cost of the dresses, it costs her £3 per dress postage and packaging. Her fixed costs are £1105. She sells her dresses for £35 with free postage and packaging offered to the customer.

First calculate Suki's break-even level of output.

$$\text{contribution} = \text{selling price} - \text{variable cost}$$

Her variable cost per dress is  $(£1000/100) + £3$  postage and packaging = £13

$$\text{contribution} = £35 - £13 = £17$$

break-even = fixed costs/contribution

$$\text{break-even} = \frac{£1105}{£17} = 65 \text{ dresses}$$

Suki must sell 65 dresses to reach her break-even point.

If she sells 50 dresses she makes a loss.

$$\text{sales revenue} = 50 \times £35 = £1750$$

$$\text{total costs} = £1105 + £1000 = £2105$$

$$\text{loss of } £2105 - £1750 = £355$$

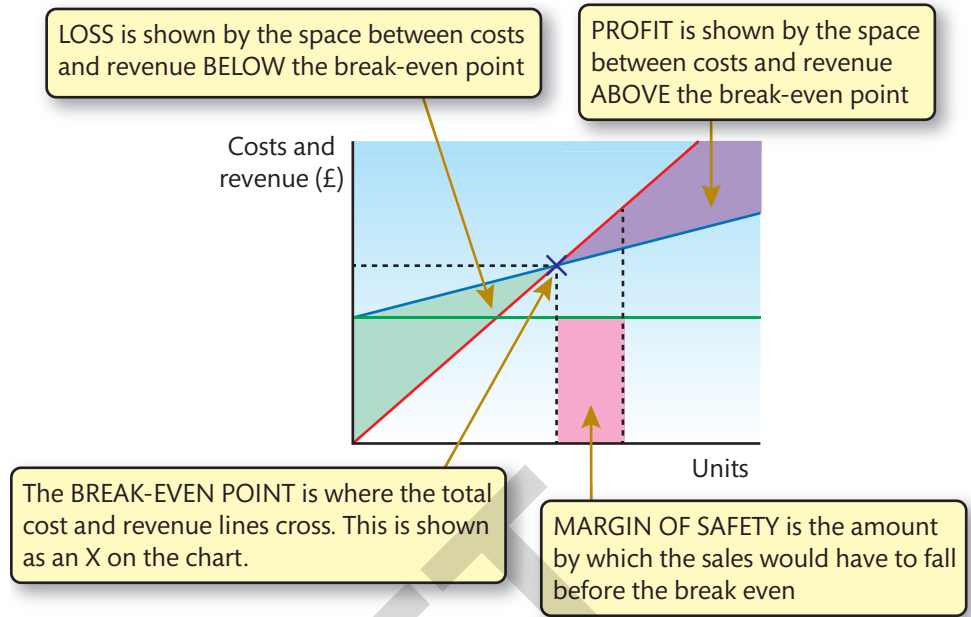
If she sells 66 dresses she will make a profit of £17 as the contribution from the one dress over her break-even now becomes profit.

If she sells all 100 dresses she will make a profit of £595.

Carry out a calculation to show how she will make a profit of £595.



Profit and loss can also be shown on a break-even chart, as demonstrated by Figure 3.6.



► **Figure 3.6:** What are the benefits of showing profit and loss on a break-even chart?

### Contribution per unit benefits and limitations

Contribution per unit is used by businesses to help inform decision making. There are benefits and limitations to it as a decision-making tool, as shown in Table 3.14.

► **Table 3.14:** Benefits and limitations of contribution per unit

Benefits	Limitations
<ul style="list-style-type: none"> <li>• Straightforward to calculate</li> <li>• Allows for the calculation of break-even level of output</li> <li>• Can be used to inform decisions, e.g. what price to charge</li> <li>• Can be used to carry out what-if analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Does not take into account fixed costs</li> <li>• Assumes that prices remain constant</li> <li>• Does not take into account any unexpected changes to variables, e.g. selling price and variable costs can fluctuate</li> </ul>

### Use of break-even for planning, monitoring, control and target setting

Break-even can be used as a management tool for planning, monitoring, control and target setting.

- Planning
  - Set budgets for the amount of sales necessary and costs.
  - Forms part of a business plan to show at what point the business will start to make a profit.
  - Informs pricing decisions.
- Monitoring
  - Monitor progress towards achieving break-even point.
  - Identify changes to selling price of costs.
  - Take corrective action if targets look unlikely to be met.
- Control
  - Keep costs within budget.
  - Motivate employees.
  - Manage sales accounts.



- ▶ Target setting
  - Set sales targets for individual employees, teams or products.
  - Set expenditure budgets.
  - Set profit budgets based upon sales targets and cost targets.

### Prepare, complete, analyse, revise and evaluate break-even

You should now be able to prepare a break-even chart, calculate the break-even level of output and analyse the effect on break-even and margin of safety if any of the variables, i.e. costs or selling prices, vary.

#### Case study

#### Cheltenham Coffee



Faizal is looking to set up a mobile coffee van in the centre of Cheltenham. He has calculated that his fixed costs will be £24,000 per year. Each cup of coffee will cost him 40p to make. He has decided on a selling price of £1.60 per cup to undercut major competitors such as Costa and Starbucks who have stores nearby. He plans

to trade 250 days a year and estimates he can sell 120 cups of coffee each day.

- 1 Calculate Faizal's break-even level of output.
- 2 What is Faizal's margin of safety?
- 3 Draw a break-even chart to show:
  - break-even point
  - margin of safety
  - loss if he sells just 60 cups per day
  - profit if he sells 120 cups per day.

Unfortunately, Faizal had forgotten about some of the cheaper competitors in the local area including Wetherspoons who charge just £1.20 per cup of coffee with unlimited refills.

- 4 Draw a new total revenue line to show what would happen if Faizal lowered his selling price to match Wetherspoons.

Break-even is a useful management tool. Table 3.15 shows the advantages and disadvantages of break-even.

▶ **Table 3.15:** The advantages and disadvantages of break-even

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• The business knows how many items it must sell in order to break-even</li> <li>• Informs decisions on what price to charge</li> <li>• Can set targets</li> <li>• Identifies fixed and variable costs</li> <li>• Can identify if costs are too high allowing the business to look for ways of lowering costs</li> <li>• Can set targets which will motivate employees</li> <li>• Easy way to calculate profit or loss at different levels of output</li> </ul>	<ul style="list-style-type: none"> <li>• Does not take account of variations in costs or selling price</li> <li>• Forecast sales may not be achieved and hence, even though the break-even point is known, it may not be achieved</li> <li>• Targets set may be too high, creating stress</li> </ul>



#### PAUSE POINT

Do you know how and why a business should use break-even analysis?

##### Hint

Think back over the case studies and identify what they needed to know from the analysis.

##### Extend

What actions do you think businesses might take from the results of their break-even analysis?

### Assessment practice 3.5

- 1 Give **two** examples of inflows or receipts that might come into a business. (2 marks)
- 2 State **three** uses of break-even. (3 marks)
- 3 Outline two benefits to a business of using contribution per unit. (4 marks)

Dominic has started his own bread-making business. So far, he has been just checking his finances month-to-month. A friend recommends he complete a cash flow forecast for his business. Dominic isn't sure that completing a forecast will be worth his time.

- 4 Assess the benefits and limitations of cash flow forecasts for Dominic. (8 marks)



## Complete statements of comprehensive income and financial position and evaluate business performance

Until now, you have focused on whether or not a business has enough cash to survive on a day-to-day basis and whether it can achieve break-even. As part of this you have already learned a number of formulas including costs, revenues, contribution and break-even. Beyond survival, a business is also likely to have an objective of profit. Here you will look at the financial documents that a business produces at the end of a financial year (or mid-year, called interim accounts). There are two key documents that a firm will produce, and these are:

- ▶ a **statement of comprehensive income**, which calculates whether the firm has made a profit or a loss by deducting all expenses from sales revenue
- ▶ a **statement of financial position**, which calculates the net worth of a business by balancing what the business owns against what it owes.

#### Key term

**Statement of comprehensive income** – shows the trading position of the business which is used to calculate gross profit. It then takes into account all other expenses to calculate the profit or loss for the year.

**Statement of financial position** – a snapshot of a business's net worth at a particular moment in time, normally the end of a financial year.

**Cost of goods sold** – the actual value of inventory used to generate sales.

### Statement of comprehensive income

#### Purpose and use

A statement of comprehensive income, if produced correctly, will give an accurate calculation showing how much profit or loss the business has made. It records sales, costs and profit over a period of time (normally a year).

#### Calculation of gross profit

The first part of the statement of comprehensive income is made up of three components.

- ▶ Sales revenue is the money coming into the business from providing a trade – for example, selling goods, manufacturing goods, or providing a service. The calculation for sales turnover is quantity sold × selling price.
- ▶ **Cost of goods sold** includes the costs directly linked to providing that trade, for example, the cost of buying in the goods or the raw materials used to produce the goods. To work out the cost of goods sold, a simple calculation is done to ensure that the figure recorded for cost of goods sold can be directly linked to the goods actually sold and not just all the materials purchased.

If, for example, you bought 12 balls of wool and knitted a jumper, is the cost of wool for that jumper 12 balls? What if you had three spare balls to start with or two balls left at the end?

The calculation for cost of goods sold is:

**opening inventories** + purchases – **closing inventories**

- ▶ Gross profit is the amount of money left or the surplus after the cost of goods sold has been deducted from the sales turnover. This is not, however, the business's final profit as there are still other expenses to deduct in the next part of the account. The calculation for gross profit is:

sales turnover – cost of goods sold.

#### Key term

**Opening inventory** – the value of inventory in a business at the start of a financial year.

**Closing inventory** – the value of inventory at the end of a financial year.

	£000s	£000s
Sales		411,529
Less cost of goods sold		
Opening inventory	34,993	
Purchases	128,129	
Closing inventory	21,445	
		141,677
Gross profit		269,852

- ▶ **Figure 3.7:** Why is it important to calculate the actual cost of goods sold rather than just use the purchases for the year?

### Calculation of profit or loss for the year

Profit is the money after all other expenses have been deducted from gross profit and any other revenue income has been added. Revenue income is non-capital income that is received by the business from sources other than sales, for example, discounts received and interest on positive bank balances.

Depreciation appears as an expense in the statement of comprehensive income, as this is a way that accountants can spread the cost of a fixed asset over its lifetime. Depreciation will be explained in more detail under the fixed asset heading when you look at a balance sheet.

The calculation for profit for the year is:

gross profit – expenses + other revenue income

gross profit = sales revenue – cost of goods sold

cost of goods sold = opening inventory + purchases – closing inventory

profit or loss for the year = gross profit – expenses + other income

Figure 3.8 shows a statement of comprehensive income for the year ended 30 April 2015. What expenses do you think a business might include under the heading 'miscellaneous'?

<b>Statement of comprehensive income for the year ended 30 April 2015</b>		
	<b>£000s</b>	<b>£000s</b>
<b>Sales</b>		411,529
Less cost of goods sold		
Opening inventory	34,993	
Purchases	128,129	
Closing inventory	21,445	
		141,672
<b>Gross profit</b>		269,852
Less expenses		
Rent and rates		37,554
Wages and salaries		96,221
Telephone and postage		1,359
Distribution		31,593
Advertising		15,579
Miscellaneous expenses		28,452
Depreciation		17,848
Total expenses		228,696
Revenue income		0
<b>Net profit before tax</b>		41,246

► **Figure 3.8:** Statement of comprehensive income for year ended 30 April 2015

### Reflect

Assume that Lily's cash flow forecast for year 1 was accurate and at the end of the year she holds one month's worth of purchases. Produce a statement of comprehensive income for Lily's cleaning business. Swap your work with another learner and check each other's work. Did you remember all the information you needed? Is there anything you need to remember for future activities?

### Transfer of profit to a statement of comprehensive income

Tax is to be deducted from the profit: this is a percentage of the profit that is to be paid to HM Revenue & Customs (HMRC). This then gives profit after tax.

The business then has to decide how to use this profit. In the case of a company, a proportion of it may be issued to shareholders in the form of dividends. For a sole trader or partnership, it could be taken out of the business as drawings. Either some or all of it is likely, however, to be ploughed back into the business – this is called retained profit. Retained profits are transferred from the statement of comprehensive income to the statement of financial position.

### Adjustments for depreciation (straight-line and reducing balance)

Depreciation is an accountancy concept used to spread the cost of an asset over its useful life. It is important that when fixed assets are shown in the statement of financial position, they are given a realistic value. For this reason, they are depreciated on an annual basis. The annual amount by which the assets are depreciated is therefore included as an expense in the statement of comprehensive income. If, for example, a business bought a delivery van for £30,000 and three years later still showed its value

as £30,000, this would be unrealistic and inaccurate accounting. The statement of financial position should therefore show the historic cost of an asset, the amount by which it has depreciated over its life and then a current value for the asset. This final figure is called the net book value and this represents what the asset is thought to be worth at that moment in time.

There are two ways in which depreciation can be calculated. These are:

- ▶ straight-line depreciation: an asset is depreciated by a set amount each year
- ▶ reducing balance depreciation: an asset is depreciated by a set percentage of its remaining value each year.

The straight line method involves reducing the value of an asset, from the price paid, i.e. its **historic cost**, by a fixed amount each year. To calculate the amount, the accountant must, first of all, make two decisions:

- ▶ how long the asset is expected to be useful to the business, i.e. its **expected life**
- ▶ at the end of its useful life, how much it might be worth if sold on or sold for scrap, i.e. its **residual value**.

Once these decisions have been made, the following formula can be applied.

$$\frac{\text{historic value} - \text{residual value}}{\text{expected life}}$$

If, therefore, a Ford transit van cost £16,000 and it was expected to be used by the business for four years with a resale value of £4000, the calculation of depreciation would be shown as follows.

$$\frac{£16,000 - £4,000}{4 \text{ years}} = \frac{£12,000}{4} = £3,000 \text{ depreciation per year}$$

The £3000 would be shown as an expense on the statement of comprehensive income.

The reducing balance method involves reducing the value of the asset by a set percentage each year. The percentage is decided by a senior accountant and stated in the financial reports. This method depreciates an asset by a lower amount as the asset ages.

If, therefore, a Ford transit cost £16,000 and a decision was made to depreciate it by 20 per cent per year the depreciation would be calculated as:

Historic cost = £16,000

Year 1 depreciation = £16,000 × 0.20 = £3200  
Net book value = £16,000 – £3200 = £12,800

Year 2 depreciation = £12,800 × 0.20 = £2560  
Net book value = £12,800 – £2560 = £10,240

Year 3 depreciation = £10,240 × 0.20 = £2480  
Net book value = £10,240 – £2480 = £7760

### Adjustments for prepayments, accruals

It is important that the financial records are a true and fair record of the business's activities. For this reason, adjustments will be made to a statement of comprehensive income so that the expenditure shown matches the period in which the good or service is used. For example, if rent is paid quarterly in advance, the expense may be incurred in one financial year but the premises are actually used in the next financial year. To take account of such timing differences, two types of adjustment are made.

#### Key terms

**Historic cost** – the cost of an asset when it was first purchased.

**Expected life** – how long an asset is expected to be used within a business.

**Residual value** – the value of an asset when it is disposed of by the business, for example, resale value.



- ▶ Why do new cars depreciate as soon as they are driven out of a car showroom? Can you list five possible factors that might explain it?

These are outlined below.

- ▶ Prepayments
  - A prepayment is when an expense is made in advance of the periods to which it relates.
  - The expense is therefore taken out of expenses in the statement of comprehensive income and shown as a current asset in the statement of financial position.
  - An example would be rental on a phone line paid quarterly in advance.
- ▶ Accruals
  - An accrual is when an expense is paid after the periods to which it relates.
  - The expense is therefore added as an expense in the statement of comprehensive income and shown as a current liability in the statement of financial position.
  - An example would be electricity paid quarterly in arrears.

### Interpretation, analysis and evaluation of statements

Once produced, the statement of comprehensive income can be used internally by management to help measure the performance of the business and inform future decision making. It can also be used externally by potential investors and creditors. A creditor, for example, might look at the business's statement of comprehensive income when deciding whether or not to offer trade credit.

The statement of comprehensive income may be analysed in a number of ways including making:

- ▶ comparisons between figures within the statement of comprehensive income, e.g. profit as a percentage of sales revenue
- ▶ comparisons between years, i.e. gross profit this year as compared with gross profit for last year
- ▶ intrafirm comparisons to see how different aspects of the business are performing, e.g. revenue for one product or branch compared with another profit or branch
- ▶ interfirm comparisons to see how the business is performing in relation to its competitors.

When interpreting and analysing a statement of comprehensive income, it is also useful to consider profit quality. Profit quality is how sustainable the profit is. If profits have increased, but this is because of a one-off event, such as selling an asset, then this cannot be repeated the following year and profit quality may therefore be seen as poor. However, if the increase in profit is as a result of increased sales or lower costs, then this may be seen as achievable in future years and therefore profit quality is seen as good.

Profit quality can be used to evaluate the statement of comprehensive income. Anyone looking at the accounts may also want to consider the accuracy of the information. Accounts must be accurate to meet legal requirements but it is possible to manipulate data to make it look more favourable. This is called window dressing.



#### PAUSE POINT

Write out a list of all the headings shown on a statement of comprehensive income. Write a short explanation or formula next to each heading.

Hint

Remember to include the adjustments you have just read about.

Extend

What are the benefits of comparing a statement of comprehensive income between different years for the same business?

## Statement of financial position

### Purpose and use

A statement of financial position is a snapshot of a business's net worth at a particular moment in time, normally the end of a financial year. It is a summary of everything that the business owns (its assets) and owes (its liabilities). A statement of financial position therefore states the value of a business.

### Statement of financial position

Statements of financial position can be shown in a vertical or horizontal format, vertical being the most common, and therefore the style of presentation you will use in this unit. A vertically presented balance sheet is presented as:

non-current assets

- intangible assets
- tangible assets

+ current assets

– current liabilities

= non-current assets/liabilities

– non-current liabilities

= net assets.

This is the first half of the balance sheet that calculates the net assets – that is, the worth of the business. Imagine if the business were to close today and you sold all of its assets, then paid off all of its liabilities. This is the amount you would be left with.

### Non-current assets

Non-current assets are those items of value that are owned by the business and likely to stay within the business for more than one year. These can be:

- ▶ tangible assets
  - i.e. they can be touched, for example a machine or premises.
- ▶ intangible assets
  - i.e. they cannot be touched, for example a trademark or recognised name.

Tangible assets include premises, fixtures and fittings, equipment and vehicles. It is important that when these are shown in the statement of financial position, they are given a realistic value. For this reason, they are depreciated on an annual basis. As you have already learned, if a business buys a delivery van for £30,000 and three years later still shows its value as £30,000, this is unrealistic and inaccurate accounting. The statement of financial position should therefore show the historic cost of an asset, the amount by which it has depreciated over its life and then a current value for the asset. This final figure is called the net book value and this represents what the asset is thought to be worth at that moment in time.

You have already looked at how to calculate depreciation using the straight-line method. The Ford transit van that cost £16,000, with a residual value of £4000, was to be depreciated by £3000 per year.

In the balance sheet, the net book value (the cost of an asset minus depreciation) would therefore be shown as in Table 3.6.

► **Table 3.16:** Example net book value for a Ford transit van

Year	Cost	Accumulated depreciation	Net book value
1	£16,000	£3000	£13,000 <sup>(1)</sup>
2	£16,000	£6000	£10,000
3	£16,000	£9000	£7000
4	£16,000	£12,000	£4000 <sup>(2)</sup>

<sup>(1)</sup> The value of the van at the end of 1 year: £16,000 – £3000 = £13,000.

<sup>(2)</sup> The value of the van at the end of 4 years matches the residual value used in the calculation above.

An intangible asset is something that adds value to the business but does not have a physical presence. One example of this that you might see on a balance sheet is 'goodwill'. This means when someone buys an already-established business, they are also buying the goodwill that the business has built up, such as brand recognition or a loyal customer base.

The value of an intangible asset can change over time. If a decision is made to decrease the value of an intangible asset, a principle similar to depreciation is applied. This is called 'amortisation' where a one-off change is made to the value of the intangible asset. This will be shown in the statement of financial position to record the cost, amortisation and net book value of the intangible asset.



► Why is it important for this business to put a realistic value on its office equipment?

### Current assets

**Current assets** are those items of value owned by a business whose value is likely to fluctuate on a regular basis. Every time a business makes a transaction, the value of its current assets will fluctuate. Current assets include:

- inventories
- trade receivables
- prepayments
- cash in the bank
- cash in hand.

Inventory is the value of stock held at that moment in time. Depending upon the nature of the business, it can take three different forms: raw materials, work in progress and finished goods. A business must be careful to give stock a realistic value and not overvalue stock – for example, inventory which they are unlikely to sell because it has gone out of fashion or is damaged.

#### Key term

**Current assets** – items owned by the business that change in value on a regular basis, such as stock.



Trade receivables are people who owe the business money. Although the business does not yet physically have the money, it is, in effect, owned by the business. Trade receivables are customers who have not yet paid for the good or service provided by the business and must be monitored to ensure that they do make the payment by the due date.

Prepayments are when an expense is made in advance of the period to which it relates. Therefore it is classed as an asset and transferred from the statement of comprehensive income.

Current assets are listed in order of how easy it is to turn them into cash quickly. For example, if a business has liquidity problems, it may find it difficult to turn inventory into cash quickly. In addition, in trying to do so, it may not receive its true value. In contrast, cash in hand is just that – cash!

### Current liabilities

A current liability is something owed by the business that should be paid back in under one year. Examples of current liabilities are outlined below.

- ▶ Overdrafts
  - The ability to withdraw money from a current account that you do not have.
- ▶ Accruals
  - This is when an expense is paid after the period to which it relates.
- ▶ Trade payables
  - These are people or businesses the business owes money to because it has received a good or service but has not yet paid for it.

### Net current assets/liabilities

Net current assets/liabilities is a very important figure for a business; it represents the business's ability to meet short-term debts. A business with insufficient net current assets, also called working capital, does not have enough current assets to meet its current liabilities. This is potentially disastrous because, if the liabilities have to be paid for now, and the business cannot meet these demands from its current assets, then it will have to find the cash elsewhere. This could mean being forced to sell a fixed asset without which the business cannot operate. Net current assets/liabilities is calculated as current assets minus current liabilities.

- ▶ Current assets are greater than current liabilities = net current assets.
- ▶ Current assets are less than current liabilities = net current liabilities.

### Non-current liabilities

A liability is something that the business owes. If it is classed as non-current, this means the business will pay it back in more than one year. Examples of non-current liabilities include bank loans and mortgages. These are likely to be used to buy fixed assets or to set up the business initially.

### Net assets

Net assets are the figure that represents the total value of all the assets minus the value of the liabilities. Net assets are calculated as follows.

$$\text{Non-current assets} + \text{current assets} - (\text{current liabilities} + \text{long term liabilities})$$

### Capital

The second half of the statement of financial position then asks how this has been financed. This shows the **capital employed** and is presented as:

- owners' or shareholders' capital
- + retained profit
- drawings
- = capital employed.

#### Key term

**Capital employed** – the total amount of capital tied up in a business at a point in time. It is calculated as owners' or shareholders' capital + retained profit – drawings.

Opening capital is the capital in the business at the start of trading. This is the money invested in the business from the owners. Owners may be a sole trader, partners or shareholders.

Retained profit is the profits kept from previous years plus the net profit from the current year. This will be transferred from the statement of financial position.

Drawings are withdrawals made by owners from the business. For a statement of financial position to balance, net assets must be equal to capital employed.

	Cost	Accumulated depreciation	Net book value
	£	£	£
<b>Non-current assets</b>			
Premises	218,000	28,880	189,120
Fixtures and fittings	38,500	15,800	22,700
Vehicles	19,500	19,500	0
<b>Current assets</b>			
Stock			34,294
Debtors			21,455
Cash at bank			0
Cash in hand			381
			<b>56,130</b>
<b>Less current liabilities</b>			
Creditors			17,881
Overdraft			12,389
			<b>30,270</b>
Working capital			25,860
<b>Non-current liabilities</b>			
Bank loans			50,998
Net assets			186,682
<b>Financed by</b>			
Capital			60,000
Retained profit			126,682
Capital employed			<b>186,682</b>

► **Figure 3.9:** Example of a statement of financial position

## Adjustments

Adjustments will be made between the statement of comprehensive income and the statement of financial position to ensure that both records are showing a true and fair picture of the business's activity. These adjustments are outlined below.

- ▶ Depreciation, straight line or reducing balance
  - Annual depreciation is shown as an expense on the statement of comprehensive income.
  - Each year depreciation is deducted from the net book value of an asset to show the value of the asset at the end of the year; this is the value of the asset recorded in the statement of financial position.
- ▶ Prepayments
  - A prepayment is when an expense is made in advance of the periods to which it relates.
  - The expense is therefore taken out of expenses in the statement of comprehensive income and shown as a current asset in the statement of financial position.
  - If, for example, broadband is paid for 12 months in advance, and the accounts are produced half way through this 12 month period, half of the total payment would be recorded as a prepayment under the current asset heading on the statement of financial position.
- ▶ Accruals
  - An accrual is when an expense is paid after the periods to which it relates.
  - The expense is therefore added as an expense in the statement of comprehensive income and shown as a current liability in the statement of financial position.
  - An example would be electricity paid quarterly in arrears; a figure would be shown in the statement of financial position to account for the value of electricity already consumed.
- ▶ Interpretation, analysis and evaluation of statements.

Once produced, the statement of financial position can be used internally by management to help measure the financial health of the business and inform future decision making. It can also be used externally by potential investors and creditors. An investor, for example, might look at the business's statement of financial position when deciding whether or not to offer capital to the business.

The statement of financial position may be analysed in a number of ways. These include making:

- ▶ comparisons between figures within the statement of financial position, e.g. current assets in relation to current liabilities
- ▶ comparisons between years, i.e. value of fixed assets or current liabilities in one year compared with previous years
- ▶ intrafirm comparisons to see how different aspects of the business are performing, e.g. debtors for one branch compared with another branch to identify any potential concerns regarding bad debts
- ▶ interfirm comparisons to see how the business is performing in relation to its competitors.

When interpreting and analysing a statement of financial position, it is also useful to consider working capital because this is a measure of the firm's ability to meet day-to-day expenses. The statement of financial position is a useful indicator of how effectively management are running the business.

Both statements of financial position and statements of comprehensive income are interpreted with the use of ratios.



## PAUSE POINT

Write out a list of all the headings shown on a statement of financial position. Write a short explanation or formula next to each heading.

Hint

Remember to include the adjustments you have just read about.

Extend

Explain the relationship between a statement of financial position and a statement of comprehensive income.

## Measuring profitability

You should now be familiar with the basic language of accounts and the key financial accounts produced by businesses. You will now look at what these accounts actually tell us and how an accountant can use or interpret them. Ratio analysis allows for a more meaningful interpretation of published accounts by comparing one figure with another. Ratio analysis also allows for both **interfirm** and **intrafirm** comparisons.

Ratios will be used by internal **stakeholders** such as managers and employees, as well as external stakeholders such as investors and creditors.

Profitability is a measure of the profit of a firm in relation to another factor. It allows for a more comprehensive assessment of the performance of a firm by comparing one figure to another. Imagine that there are two firms, A and B, both with a profit of £750,000 per year – how would you be able to tell which one was performing better? If, however, you were told that Firm A has sales revenue of £1.5 million and Firm B has sales revenue of £3 million, then it is clear that Firm A has greater profitability as it is generating the same amount of profit from a lower level of sales. This indicates it is more efficient and better at controlling its costs.

There are four profitability ratios you will look at here:

- ▶ gross profit margin
- ▶ mark-up
- ▶ net profit margin
- ▶ return on capital employed (ROCE).

### Key terms

**Interfirm** – between different firms, for example, comparing the performance of two different house builders.

**Intrafirm** – within the firm, for example, comparing this year's results with last year's, or the performance of the York branch with the Leicester branch of a retail store.

**Stakeholder** – anyone with an interest in the activities of a business, whether directly or indirectly involved.



- ▶ What sort of information will the investors in this business need to be given about the company's finances?

## Gross profit margin

This is calculated using the following formula:  $\frac{\text{gross profit}}{\text{revenue}} \times 100$

This ratio looks at gross profit as a percentage of sales turnover. It shows us, for every £1 made in sales, how much is left as gross profit after the cost of goods sold has been deducted. A gross profit of 88 per cent therefore means that, for every £1 of sales made, 88p is left as gross profit.

If gross profit margin falls from one year to the next or is thought to be too low, a firm may try to reduce the cost of its purchases. This may involve looking for a cheaper supplier, but the firm must try to ensure that this does not affect the quality of the product. Alternatively, it may try to increase sales without increasing the cost of goods sold.

## Mark-up

This is calculated using the following formula:  $\frac{\text{gross profit}}{\text{cost of sales}} \times 100$

This ratio looks at profit as a percentage of cost of sales. It shows what percentage of cost of sales is added to reach selling price. For example, a mark-up of 25 per cent would mean that if the cost of raw materials used to produce a good were £1, it has been sold for £1.25.

## Net profit margin

This is calculated using the following formula:  $\frac{\text{net profit}}{\text{revenue}} \times 100$

This ratio looks at net profit as a percentage of sales turnover. It shows, for every £1 made in sales, how much of it is left as net profit after all expenses have been deducted. A net profit of 31 per cent therefore means that, for every £1 of sales made, 31p is left as net profit.

If net profit margin falls from one year to the next or is thought to be too low, a firm may look to reduce its expenses, for example, by moving to cheaper premises or cutting staffing costs. Before taking any action, however, the accountant must try to identify the cause of a falling figure – whether it is related to sales, cost of goods sold or expenses – as all of these factors will impact upon the net profit margin.

### Worked Example – Freedom Fashion Ltd

Sales turnover = £411,529

Gross profit = £269,792

Net profit = £41,246

Gross profit percentage of sales =  $\frac{£269,852}{£411,529} \times 100 = 65.5$  per cent

For every £1 Freedom Fashion Ltd makes in sales, 65p is left as gross profit.

A fashion retailer is likely to have reasonably high costs of sales due to the nature of their product. If it was a service industry then you might expect this percentage to be higher.

Net profit percentage of sales =  $\frac{£41,246}{£411,529} \times 100 = 10$  per cent

For every £1 Freedom Fashion Ltd makes in sales, just 10p is left as net profit. A fashion retailer is likely to have reasonably high expenses due to the nature of their business. A retail business with a physical location (as opposed to e-commerce) may have high overhead costs such as premises and heat and light.



## Return on capital employed (ROCE)

This is calculated using the following formula:

$$\frac{\text{net profit before interest and tax}}{\text{capital employed}} \times 100$$

This ratio shows the percentage return a business is achieving from the capital (or money) being used to generate that return. It shows, for every £1 invested in the business in owners' capital or retained profits, what per cent is being generated in profit. A ROCE of 5 per cent means that, for every £1 tied up in the business, 5p is being generated in net profit.

Investors will often compare ROCE to the interest rate being offered in a bank or building society to see if their investment is working effectively for them in generating a return.

### Worked Example – Freedom Fashion Ltd

Net profit before interest and tax = £41,246

Capital employed = £186,682

$$\text{ROCE} = \frac{£41,246}{£186,682} \times 100 = 22 \text{ per cent}$$

This means that, for every £1 being used within the business, there is a return of 22p. This is certainly higher than you could expect from a bank.

## Measuring liquidity

Liquidity ratios measure how solvent a business is – that is, how able it is to meet short-term debts. There are two liquidity ratios you will look at here:

- ▶ current ratio
- ▶ acid test ratio/liquidity ratio (liquid capital ratio).

### Current ratio

This is calculated using the following formula:

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

This ratio shows the amount of current assets in relation to current liabilities and is expressed as x:1. If a firm had a current ratio of 2:1, this would mean that, for every £2 it owned in current assets, it owed £1 in current liabilities, and this would generally be considered acceptable. If, however, a firm had a current ratio of 0.5:1, this would mean that, for every 50p it owned in current assets, it owed £1 in current liabilities. This means if the firm's bank demanded that it repaid its overdraft immediately and creditors demanded payment, the firm would not be able to cover these demands from current assets. This is therefore a dangerous position to be in.

### Worked Example – Freedom Fashion Ltd

Current assets = £56,130

Current liabilities = £30,270

$$\text{Current ratio} = \frac{£56,130}{£30,270} = £1.85$$

This means that, for every £1 the business owes in short-term debt (that is, its current liabilities), it owns £1.85 in current assets. The business therefore has sufficient liquidity to meet short-term debts.

### Liquid capital ratio

This is calculated using the following formula:

$$\frac{\text{Current assets} - \text{inventory}}{\text{current liabilities}}$$

The liquid capital ratio is thought to be a tougher measure of a firm's liquidity. Like the current ratio, it shows the amount of current assets in relation to current liabilities, but it does not include inventory. This is because inventory is considered to be the hardest current asset to turn into cash quickly. The result is expressed as x:1.

### Worked Example – Freedom Fashion Ltd

Current assets = £56,130

Stock = £34,294

Current liabilities = £30,270

$$\begin{aligned} \text{Acid test} &= \frac{£56,130 - £34,294}{£30,270} \\ &= \frac{£21,826}{£30,270} = 0.72 \end{aligned}$$

This means that, for every £1 the business owes in short-term debts, it only has 72p in liquid assets (current assets excluding stock). This figure shows the firm to be **illiquid**, as it could not meet its short-term debts if immediate repayment was demanded. A fashion retailer is likely to have a large amount of its current assets in the form of stock, due to the nature of the firm.

#### Research

Select a business that you are interested in (or you could use the one you studied in *Unit 1: Exploring Business*). Compare the profitability and liquidity of your chosen business to that of Freedom Fashion Ltd.

Which one do you think is performing best? Justify your answer..

#### Key term

**Illiquid** – not easily converted into cash.

## Measuring efficiency

Efficiency ratios tend to be used to assess how well management is controlling key aspects of the business, primarily stock and finances. There are three efficiency ratios you will look at here:

- ▶ trade receivable days
- ▶ trade payable days
- ▶ inventory turnover.

### Trade receivable days

This is calculated using the following formula:

$$\left( \frac{\text{trade receivables}}{\text{credit sales}} \right) \times 365$$

If you do not know what percentage of sales were made on credit, then it is acceptable to use the sales figure as given in the statement of comprehensive income. The ratio measures, on average, how long it takes for debtors to pay; it is expressed as a number of days. For example, if a business has a debtors' payment period of 60 days, this means, on average, it takes debtors two months to pay for goods or services purchased on credit. A business with cash flow problems will try to reduce its debtors' payment period.

### Worked Example – Freedom Fashion Ltd

Debtors' trade receivables = £21,455

Sales = £411,529

$$\text{Trade receivables days} = \frac{£21,445}{£411,529} \times 365 = 19 \text{ days}$$

This means that, on average, it takes a customer 19 days to pay for their purchases. A fashion retailer is unlikely to offer long payment terms.

#### Key terms

**Business-to-business** – B2B refers to when one business sells to another business – for example, a stationery business selling to a firm of accountants.

**Business-to-consumer** – B2C refers to when one business sells to an individual – for example, a stationery business selling wedding stationery to a bride and groom.

Trade receivable days will vary from firm to firm, depending upon the nature and price of items sold and whether the business deals in **business-to-business** or **business-to-consumer** sales. If it is business-to-business, longer payment terms may be given. One business may also give different payment terms to different customers depending upon the size and importance of a customer's business, reliability of payment and discounts offered.

### Trade payable days

This is calculated using the following formula:

$$\left( \frac{\text{trade payables}}{\text{credit purchases}} \right) \times 365$$

If you do not know what percentage of purchases were made on credit, then it is acceptable to use the purchases figure as given in the statement of comprehensive income. The ratio measures, on average, how long it takes a firm to pay for goods and services bought on credit; it is expressed as a number of days. For example, if a business has trade payable days of 30 days, this means that, on average, there is a one month gap between the business buying the good or service and paying for it. A business with cash flow problems will try to lengthen its trade payables days.



### Worked Example – Freedom Fashion Ltd

Trade payables = £17,881

Purchases = £128,129

$$\text{Trade payables days} = \frac{£17,881}{£128,129} \times 365 = 51 \text{ days}$$

This means that, on average, the firm pays its suppliers in 51 days. This may mean that some suppliers offer one month's credit and others two months.

### Inventory turnover

This is calculated using the following formula:

$$\left( \frac{\text{average inventory}}{\text{cost of sales}} \right) \times 365$$

Average inventory is calculated as follows:

$$\frac{\text{opening inventory} + \text{closing inventory}}{2}$$

This ratio measures the average amount of time an item of stock is held by a business, and is expressed as a number of days. If a business has an inventory turnover of 7, this means that, on average, it holds each item of stock for one week. The rate of inventory turnover is very much dependent upon the nature of the firm. For example, you could expect a florist or fishmonger to have a much lower inventory turnover than a fashion store or car showroom. However, if the rate of inventory turnover appears high for the nature of the product, this might result in stock going out of date or out of fashion.

### Worked Example – Freedom Fashion Ltd

Opening inventory = £34,993

Closing inventory = £21,445

Cost of goods sold = £141,737

$$\begin{aligned} \text{Average inventory} &= \frac{£34,993 + £21,445}{2} \\ &= \frac{£56,438}{2} = £28,219 \end{aligned}$$

$$\text{Inventory turnover} = \frac{£28,219}{£141,737} \times 365 = 73 \text{ days}$$

This means that, on average, the business turns its stock over, or sells its stock, every 73 days. This is just over every two months, which is what you might expect from a fashion retailer with approximately six new lines per year.

## Limitations of ratios

Although ratios are very useful there are also a few limitations. These are described below.

- ▶ They are calculated on past data and therefore may not be a true reflection of the business's current performance.
- ▶ Financial records may have been manipulated and therefore the ratios will be based on potentially misleading data.
- ▶ Ratios do not consider qualitative factors.
- ▶ A ratio can indicate that there is a problem in a business but does not directly identify the cause of the problem or the solution.
- ▶ Interfirm comparisons can be difficult as not all firms report their performance in the same way or generate their accounts in the same way.

Ratios only report on the financial performance at a set point in time; the statement of financial position is a snapshot of the business at a point in time. At other times of year the picture may be different.

### Assessment practice 3.6

- 1** Identify **two** components that make up the first part of the statement of comprehensive income. (2 marks)
- 2** A business purchases 20 new laptops for £11,500. They expect each laptop to last around 3 years and hope to resell nine of the laptops at the end of this time.  
Calculate the straight line depreciation value of the laptops. (2 marks)
- 3** It costs Dominic 85p to make a loaf of sourdough bread. He sells the bread for £1.25. He is thinking of increasing the price to £1.50.  
Calculate the following.
  - (a) The mark up on the bread when sold for £1.25. (2 marks)
  - (b) The mark up on the bread when sold for £1.50. (2 marks)

# THINK ▶ FUTURE



**Charlotte Donaldson**  
Assistant Management  
Accountant

I've been working in accounts for four years since finishing in the sixth form at school. I started as an apprentice which meant I was being paid to work at the same time as gaining professional qualifications. I am now AAT qualified and studying for CIMA. At the end of this I will be a fully qualified accountant. When I first started, I was responsible for everything from raising invoices for customers and processing invoices from suppliers, to keeping a register of fixed assets, including controlling company cars. Since I started, the company has grown and I now manage two junior clerks who have taken responsibility for raising and processing invoices. Managing and training other members of staff has given me a real sense of responsibility. I have even been sent on two management courses to help me develop my management skills. This has been a great experience.

## Focusing your skills

It is important to take care and ensure that everything I do is accurate. I have to check everything I do because it has a knock-on effect on the final management accounts.

- Company records have to be up to date and correct in preparation for any VAT inspections.
- Employees' benefits need to be recorded otherwise they may be taxed incorrectly.
- The information I pass on to the management accountant has to be correct in order for her to produce accurate reports to HMRC and the company directors.
- The accounts we produce have to meet legal requirements.

## Looking ahead

After four years, I have learned so much and was lucky to be in a company that was growing. This meant my job role was constantly growing and evolving with the company, allowing me to take on more responsibility. I have now been successful in gaining a new job in a different company, which is a promotion. I am looking forward to learning new skills and continuing with my studies to become fully qualified as a management accountant in my new job.

- Once Charlotte had decided she was ready for a new challenge, what do you think she had to do to get ready for a promotion?
- Do you think she was right to look for a new job with a new company?
- What might the advantages be of moving to a new company?

## Getting ready for assessment

This section has been written to help you to do your best when you take the external examination. Read through it carefully and ask your tutor if there is anything you are not sure about.

### About the test

This unit is externally assessed using an unseen paper-based examination. Pearson sets and marks the examination. The assessment must be taken under examination conditions. The external assessment will last two hours and there are 100 marks available. The test is in two sections:

- Part A: personal finance
- Part B: business finance.

There are three types of questions:

- short answer questions
- calculation questions
- longer answer questions.

### Sitting the test

Listen to, and read carefully, any instructions you are given. Lots of marks are often lost through not reading questions properly and misunderstanding what the question is asking.

Most questions contain command words. Understanding what these words mean will help you understand what the question is asking you to do.

Command word	Definition – what it is asking you to do
Give	You can provide: <ul style="list-style-type: none"> <li>• examples</li> <li>• justifications.</li> </ul>
Outline	Your work, performance or practice provides a summary or overview or a brief description of something.
Identify	Indicate the main features or purpose of something by recognising it and/or being able to discern and understand facts or qualities.
Illustrate	Include examples, images or diagrams to show what is meant within a specific context.
Calculate	Work out an answer, usually by adding, multiplying, subtracting or dividing. Can involve the use of formulas.
Explain	Your work shows clear details and gives reasons and/or evidence to support an opinion, view or argument. It could show how conclusions are drawn (arrived at). You are able to show that you understand the origins, functions and objectives of a subject, and its suitability for purpose.
Discuss	Consider different aspects of: <ul style="list-style-type: none"> <li>• a theme or topic</li> <li>• how they interrelate</li> <li>• the extent to which they are important.</li> <li>• A conclusion is not required.</li> </ul>
Analyse	Present the outcome of methodical and detailed examination either by breaking down: a theme, topic or situation in order to interpret and study the relationships between the parts and/or information or data to interpret and study key trends and interrelationships.
Assess	Present a careful consideration of varied factors or events that apply to a specific situation or identify those which are the most important or relevant and arrive at a conclusion.
Evaluate	Your work draws on varied information, themes or concepts to consider aspects such as: strengths or weaknesses <ul style="list-style-type: none"> <li>• advantages or disadvantages</li> <li>• alternative actions</li> <li>• relevance or significance.</li> </ul> Your inquiries should lead to a supported judgement showing relationship to its context. This will often be in a conclusion.

## Sample answers

For some of the questions you will be given some background information on which the questions are based.

Look at the sample questions which follow and the tips on how to answer them well.

### Answering short answer questions – give, state and identify

- Read the question carefully.
- Highlight or underline key words.
- Note the number of marks available which will match the number of points asked for in the question, e.g. 'state one' = 1 mark or 'give two' = 2 marks.

Make sure that you make the same number of statements as there are marks available. Take care that if you are making two or more points that these are sufficiently different points (not the same one made in a slightly different way).

#### Worked example

State **two** functions of money. [2]

**Answer:** Unit of account. Store of value.

Two accurate and different points are made gaining full marks.

Command words 'give', 'state' or 'identify' can be answered in single words or statements. There is no need to write in full sentences as the examiner is only testing your knowledge, i.e. your ability to recall information.

### Answering short answer questions – describe

Note the number of marks available. If 2 marks are available you will be required to describe one concept. 'Describe' requires two linked sentences where the second sentence adds a development to the first. If the question is worth 4 marks, you would repeat this process of making a point and then adding a development a second time.

#### Worked example

Describe **one** benefit of producing a cash flow forecast. [2]

**Answer:** One benefit of producing a cash flow forecast is it will identify months where there is a potential cash shortage. It can also be shown to a bank manager as part of a business plan.

The first point is correct, as is the second. However, the candidate would only be awarded 1 mark as these are two separate points rather than one point which has been described or developed. A better response would have made the first point: 'One benefit of producing a cash flow forecast is it will identify months where there is a potential cash shortage'. This statement would then have been developed, gaining a second mark: 'This would allow the business to make plans for these months, maybe by arranging an overdraft'.

## Answering calculation questions

Write down the formula.

- Identify the numbers provided in the additional information given within the question.
- Put numbers into the formula.
- Show all your working.
- Express the answer in the correct way, e.g. £, units.
- Check your working.

### Worked example

Jack has provided you with the following information from his statement of financial position.

Revenue	£250,000
Cost of goods sold	£130,000
Expenses	£80,000

Calculate Jack's net profit margin. [5]

$$\text{Net profit margin} = \frac{\text{net profit}}{\text{sales revenue}} \times 100$$

Net profit = revenue – cost of goods sold – expenses

$$\text{Net profit} = £250\,000 - £130\,000 - £80\,000 = £40\,000$$

$$\text{Net profit margin} = \frac{£40\,000}{£250\,000} = 0.16$$

The candidate has written down all of the information, including the formulas, correctly. Working is well laid out, making it easy for the examiner to see what they have done. Unfortunately, they have forgotten to multiply by 100 at the end to gain the correct answer of 16%. However, because everything else is correct, only 1 mark would be lost for this error.

## Answering extended answer questions – explain

You are required to develop a line of argument using linking words such as therefore, so that, because. Start your answer by making a relevant point and expand on this using two or three steps in a line of argument.

- Avoid moving on to new points until the point you have made has been fully developed.

**Example:**

*Explain the benefits of an individual taking out travel insurance before travelling abroad. [6]*

Travel insurance protects the holder from financial losses incurred while away from home.

One benefit of this is that if personal belongings are lost or stolen they will be covered by the insurance policy. Therefore, the holder will be able to make a claim so that they can get back the cost of replacing the lost items, e.g. money or a camera. This means that the person travelling has not lost a lot of money because they had taken out protection in advance.

A second benefit is that the traveller may be protected if the holiday is cancelled or other changes are made, such as flight delays. This means that, although the inconvenience will still exist, the traveller could be compensated for this. This would allow them to cover additional expenses incurred while waiting for flights, etc.

A third benefit is the traveller would be insured if they fell sick. This would mean that they could receive treatment without having to worry about big medical bills. These would be paid for by the insurance company or paid for and then reclaimed. This means that the traveller will feel more confident while away and be happy that if they need medical care that they can seek this.

*A number of steps have then been given in a logical line of argument, e.g. covered – claim – get back the cost – not lost money. Three different aspects of travel insurance have been identified and explained in context.*

It is a good idea to start by identifying the key term in the question. Here the answer starts by showing the examiner that the candidate understands what travel insurance is. It is important here that the candidate has said 'while away from home', so they are not just talking about insurance in general but the answer is specific to travel insurance.

### Answering extended answer questions – discuss, analyse, assess, evaluate

- Read the question carefully.
- Highlight or underline key words.
- Look at the number of marks available as an indication of how many arguments are required and the depth of arguments.
- You are required to develop a line of argument using linking words such as therefore, so that, because.
- Start your answer by making a relevant point and expand on this using two or three steps in a line of argument.
- Avoid moving on to new points until the point you have made has been fully developed.
- You will need to present two arguments from different viewpoints, e.g. one advantage and one disadvantage or one argument for and one argument against.
- You do not need to make judgements and write a conclusion.

**Example:**

*Karren runs a road haulage business. She is looking to expand the business and wants to purchase two more lorries.*

*Assess the use of external sources of finance to Karren. [10]*

External sources of finance are from outside the business, e.g. bank loans and leasing.

Karren could use a bank loan. This would involve receiving a lump sum from the bank. She could use this to buy the lorries. However, it is expensive.

Karren could lease the lorries rather than buy them. The advantage of this is that she would be able to expand the business as she would have the lorries now. However, she would not be paying a lump sum for them but paying in smaller amounts on a regular basis to the lease company. This helps spread out the payment for the lorries and could help Karren's cash flow. She would also avoid potentially high interest payments. However, although this is a good source of finance in the short run, in the long run it is likely to be more expensive as Karren will have to keep paying to lease the lorries for as long as she wants to use them. She will never actually own them. Therefore, this may have a negative effect on her profit margins in the long run.

Overall, a bank loan may be the better option as Karren wants to expand the business and she will therefore benefit from owning the lorries rather than leasing them. Or she could look at asking friends and family or a venture capitalist to invest money into the business to help her expand.

*The conclusion tries to weigh up the two options but then moves on to bring in new points/ideas. It is not a good idea to bring in new points in the conclusion. This should be a judgement made based on the arguments that have already been presented. The candidate would have gained more marks if they had brought in additional sources of finance earlier and discussed the advantages and disadvantages of these to help present a more balanced argument.*

This answer shows a good understanding of the topic, i.e. external sources of finance, and uses technical language throughout the answer. The first paragraph makes a relevant point and some judgement but lacks development. It is rather descriptive. The second paragraph is much better, discussing the issues related to leasing in a more developed way. It also provides a balanced argument.