The economic environment of business and finance



Upon completion of this chapter you will be able to:

- identify the key macroeconomic factors that affect businesses
- explain the signalling, rewarding and allocating effects of the price mechanism on business (including the concept of price elasticity)
- explain the potential types of failure of the market mechanism and their effects on business.

MyKaplan resources This topic is covered on MyKaplan in the module External environment.

ICAEW resources

The underpinning detail for this chapter can be found in Chapter 13 of your ICAEW Study Manual.





1 The macroeconomic environment

1.1 The national economy

Changes in the macroeconomic environment can have major effects on business.

The national output of goods and services is measured as gross domestic product (GDP).

Four factors are considered which generate a return:

Factor of production	Return
Land	Rent
Labour	Wages
Capital	Interest
Entrepreneurship	Profit

GDP = amount of expenditure spent on output.

Level of national output is important as it is a measure of economic activity in a country.



1.2 Influences on the national economy

Government

- > producing goods and services e.g. education, health etc.
- > purchasing goods and services e.g. uniforms , supplies etc.
- > investing in capital projects e.g. new roads, schools etc.
- transferring payments from one section of economy to another e.g. taxes to fund unemployment payments.

Consumers

- > spending their disposable income on goods and services rather than saving it.
- the amount spent depends on:
 - changes in disposable income and marginal propensity to consume (spend rather than save)
 - changes in distribution of wealth
 - government policy (via taxation and spending)
 - development of major new products
 - interest rates
 - price expectations.



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Savers

- > investing what they choose not to spend
- > the amount saved depends on:
 - income
 - interest rates
 - need for long term savings.

Businesses

> the amount they invest in capital goods which drives growth of the economy.

Notes

1.3 The business/trade cycle



The continual sequence of rapid growth in GDP, followed by a slow-down in growth and then a fall. Growth then comes again, and when this has reached a peak, the cycle turns once more.

Four main phases of the business cycle can be distinguished.

- Recession (A)
 Recovery (C)
- Depression (B)

Boom (D)



1.4 Stages of the business/trade cycle

Recession

At point **A**, the economy is entering a recession:

- consumer demand falls
- businesses sell fewer goods
- business failures occur
- production and employment fall
- deflation may occur as supply exceeds demand
- business and consumer confidence diminish.

Recession begins relatively quickly due to the speed with which declining demand is felt by businesses suffering a loss in sales revenue \rightarrow reducing inventory and cutting back on investment \rightarrow adds momentum to the recession.

Depression

Eventually, if demand is not stimulated, a period of full depression may set in and the economy will reach point **B**.

Recovery

At point **C**, the economy has reached the recovery phase of the cycle.

Can be slow to begin because of lack of consumer confidence. Governments try to limit the decline by boosting demand in the economy as a whole. Once begun, recovery is likely to quicken as confidence returns.

Boom

As recovery proceeds, output levels climb reaching point \mathbf{D} , in the boom phase. During the boom:

- > Demand may outstrip supply causing inflation
- Businesses tend to be profitable
- > Expectations of the future are very optimistic.



1.5 Inflation



Inflation is an increase in price levels generally, and a decline in the purchasing power of money.

Deflation is falling prices generally, which is normally associated with low rates of growth and recession.

Why is inflation a problem?

Most governments aim for **stable prices**. A high rate of inflation is undesirable because:

- Fewer people (e.g. low paid and those on fixed incomes) can afford goods.
- \rightarrow Wage inflation \rightarrow productivity falling whilst new rates are agreed.
- > \rightarrow Exports falling as imports appear cheaper (exchange rates usually alter to accommodate this).
- Consumers may stock pile fearing price increases → shortages → prices being pushed up further.

Types of inflation

Cost-push inflation – price rises resulting from an increase in the costs of production of goods and services, e.g. of imported raw materials or from wage increases.

Demand-pull inflation – price rises resulting from a persistent excess of demand over supply. Supply cannot grow any further once 'full employment' is reached.

There are two main causes of demand pull inflation:

- Fiscal An increase in government spending or a reduction in taxes will raise demand in the economy.
- Credit If levels of credit extended to customers increase, expenditure is likely to rise. In this case, inflation is likely to be accompanied by customers increasing their debt burdens.



2 Government macro-economic policies

The following **macroeconomic policies** are used by government to grow the economy and control inflation.

2.1 Monetary policy and aggregate demand



Monetary policy: Government policy on interest rates, exchange rates and the money supply.

Effects of a rise in interest rates

> The price of borrowing in the economy will rise.

Impact on companies:

Reduced borrowing and investment non-current assets.

Impact on households:

- Increase in saving and reduced spending
- Become less willing to borrow for house purchase.
- Outcome = reduces the aggregate demand in the economy.

Results in higher exchange rate for sterling

- Keeps the cost of exports higher and the cost of imports cheaper
- Foreign investors will be attracted to sterling investments
- Reductions in spending and investment
- Outcome = reduces the aggregate demand in the economy.



2.2 Fiscal policy and aggregate demand



Fiscal policy is the government's policy on government spending, taxation and borrowing.

Government spending

The government can increase spending to stimulate aggregate demand and influence the distribution of wealth.

Taxation

The government can increase taxation to raise funds, influence the distribution of wealth and suppress economic growth.

Government borrowing

The government can borrow to fund spending in excess of its income (primarily from taxation).

The government's 'fiscal stance' can be neutral, expansionary or contractionary.

Expansionary fiscal stance

Government spending > taxation = increased borrowing

Contractionary fiscal stance

Government spending < taxation = reduced borrowing</p>

Neutral fiscal stance

Government spending = taxation



2.3 Supply-side macroeconomic policies



Supply wide economics are policies designed to encourage suppliers to produce more goods at lower prices.

The main supply side macroeconomic policies are:

- More involvement of the private sector in the provision of services
- Reduction in taxes to increase incentives to supply
- Increasing flexibility in the labour market by reducing the power of trade unions
- Improving education and training so the quality of labour is enhanced
- Increasing competition through deregulation and privatisation of utilities
- Abolition of exchange controls and allowing the free movement of capital.





3.1 The market mechanism



A **market** is where potential buyers and sellers come together for the purpose of exchange.

The **market mechanism** is the interaction of supply and demand for a particular item.



In particular, we are interested in how prices are determined by the interaction of supply and demand.







The **demand** for a particular good is the quantity that consumers are willing and able to buy at a given price.

4.1 Demand curves

A demand schedule or curve shows demand at each price, assuming that all other variables (see below) are constant.

Quantity demanded usually goes up as price falls.

- > Lower prices make the goods more affordable to people on lower incomes.
- > Lower relative prices make the goods more attractive.

In the example below, demand extends from Q_0 to Q_1 as price falls from P_0 to P_1 .



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- 4.2 Determinants of demand
- Price of the good itself.
- Price of other goods.
- **Substitutes** (e.g. different brands of mobile phones)
- \uparrow Price B ==> \downarrow demand for B ==> \uparrow demand for A as buy instead
- **Complements** (e.g. shirts and ties)
- \uparrow Price B ==> \downarrow demand for B ==> \downarrow demand for A as buy together

National income – normal and inferior goods

- \uparrow Income ==> \uparrow demand for normal goods (e.g. CDs)
- \uparrow Income ==> \downarrow demand for inferior goods (e.g. matches)
- **Fashion**.
- Income distribution.





4.3 Shifts of the demand curve

- > Changes in price cause movements along the demand curve.
- Changes in other factors move the curve itself, e.g. less demand would be shown by the demand curve shifting to the left.

An increase in demand will result in the demand curve shifting to the right. (Quantity demanded will increase at each price level.)

This shift to the right could be caused by any of the following:

- > An increase in household income
- An increase in the price of substitutes
- A decrease in the price of complements
- The good becoming more fashionable
- > An expectation that the price of the good will be higher in the next period.





4.4 Price elasticity of demand

Price elasticity of demand (PED) looks at the degree to which demand is affected by changes in the selling price.

$$\mathsf{PED} = \frac{\% \, \Delta \, \mathsf{Demand}}{\% \, \Delta \, \mathsf{Price}}$$

It is convention to ignore the sign of PED as it is almost always negative.

Elastic and inelastic demand

Inelastic:	PED < 1
Elastic:	PED > 1
Perfectly inelastic:	PED = 0
Perfectly elastic:	PED = ∞
Unitary elasticity:	PED = 1

Factors affecting the PED

- Availability and closeness of substitutes, i.e. if readily available or close substitutes exist then demand will tend to be much more elastic.
- Time: generally in the short run demand tends to be much less elastic, while in the long run it tends to be much more elastic.
- Competitor's pricing: if competitors copy a price cut then demand is unlikely to rise (inelastic). The same competitors may not copy a price rise resulting in a large fall in demand (elastic). This can give rise to 'price stickiness'.
- Nature of the product: in the case of luxuries demand tends to be more elastic, with necessities less elastic. Habit-forming products are price inelastic.
- Proportion of income accounted for by a good. If a good accounts for a large proportion of income, demand will tend to be elastic; if it accounts for only a small proportion, much less elastic.



Illustration 1 – Price elasticity

Demand for a product is 1,000 units at a price of £50. If price increases to £55, demand falls to 800 units. What is the price elasticity of demand?

Step 1: Calculate the percentage change in price and quantity as a percentage of their starting values:

Price:	(£5/£50) × 100	= + 10%
Demand	(- 200/1,000) × 100	= -20%

Step 2: Insert the figures calculated in the PED formula.

PED = $\frac{\% \Delta \text{ Demand}}{\% \Delta \text{ Price}}$ = $\frac{-20}{10}$ = -2

4.5 Significance of price elasticity

- > Allows managers to predict the effect of price changes on demand and revenue.
- Inelastic products (PED <1) increasing the price will increase the total revenue even though fewer units are sold.</p>
- Elastic products (PED >1) increasing the price will cut the total revenue and fewer units will be sold. For elastic demand the price must be cut to increase revenue.



4.6 Giffen and Veblen goods

Both **Giffen** and **Veblen** goods have upward-sloping demand curves and positive price elasticity of demand.

Giffen goods

Giffen looked at income effect of price changes.



Veblen goods

Veblen goods are bought for ostentation, so a higher price makes them more exclusive and desirable.





4.7 Income elasticity of demand

Income elasticity of demand (YED) looks at the degree to which demand is affected by changes in household income.

$$YED = \frac{\% \Delta Demand}{\% \Delta Household income}$$

Income elasticity

- YED > 0 for normal goods
- YED < 0 for inferior goods</p>
- YED > 1 for luxury goods (a type of normal good)

4.8 Cross elasticity of demand

Cross elasticity of demand (XED) looks at the degree to which demand is affected by changes in the price of other products.

$$XED = \frac{\% \triangle Demand for product A}{\% \triangle Price of product B}$$

Cross elasticity

- XED > 0 for substitutes
- XED < 0 for complementary goods</p>
- \succ XED = 0 for unrelated goods



5 Supply



The **supply** of a particular good is the quantity that suppliers (and would-be suppliers) are willing and able to supply at a given price.

5.1 Supply curves

The supply curve shows supply at each price, assuming that all other variables (see below) are constant.

The quantity supplied usually extends as price increases.

- > Existing suppliers produce more.
- > New suppliers switch to making the product.

In the example below, supply increases from Q_0 to Q_1 as price increases from P_0 to P_1 .



5.2 Price elasticity of supply

Price elasticity of supply (PES) looks at the degree to which supply is affected by changes in the price.

$$\mathsf{PES} = \frac{\% \Delta \mathsf{Supply}}{\% \Delta \mathsf{Price}}$$

Usually positive as supply curve is upward sloping.



5.3 Determinants of supply

- Price of the good itself.
- Price of other goods suppliers may switch to producing other more profitable goods, e.g. farmers growing coffee rather than food.
- Price of joint products a price rise for one will make production of both more attractive.
- Costs.
- Changes in technology.
- > **Other,** e.g. weather, harvests.

Elasticity of supply varies with time period

- Market period inelastic as changes in supply limited to availability of inventory.
- Short run can change production plans but still limited by capacity due to fixed plant and machinery, for example.
- Long run can expand capacity, new firms can enter industry more elastic.

5.4 Shifts of the supply curve

- Changes in price cause movements along the supply curve.
- > Changes in other factors move the curve itself.



6 The equilibrium price

6.1 How is the equilibrium price achieved?

The equilibrium price is the price at which supply and demand is equal.



If the **price is too high**, say at P_{high}:

- supply will exceed demand causing a surplus
- this will be reflected in the short-term by retailers having unwanted goods, returns made to manufacturers, reduced orders and some products being thrown away
- the supplier will respond by lowering prices to attract more demand.

If the **price is too low**, say at P_{low}:

- then demand will exceed supply causing a shortage
- this will be reflected in the short-term by retailers having empty shelves, queues, increased orders and high second-hand values
- > the supplier will respond by increasing prices to reduce the shortage.

Eventually the equilibrium is achieved with supply equal to demand.

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6.2 Adjustments to the equilibrium

The key is to consider which of the supply and demand curves are moving and then to find the new equilibrium.



The equilibrium has effectively moved down the supply curve – a contraction of supply.

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6.3 Price regulation

Governments may intervene to try to affect prices in the market.

Maximum prices

Why?

- > To ensure that essential goods are affordable.
- > To limit inflation as part of a 'prices and incomes' policy.

Result?

Excess demand – queues, rationing, black markets.

Minimum prices

Why?

> To protect suppliers, e.g. EU CAP, minimum wage agreements.

Result?

Excess supply – butter mountains, farmers paid not to grow crops, unemployment?

Notes

4

Market structures



Market structure is a description of the number of buyers and sellers in a market for a particular good and their relative bargaining power.

There are four main types of market structure that can exist.



in the industry

7.1 Perfect competition

Structure		Implications	
	Large number of buyers and sellers, none of whom alone can influence the market price (and no collusion!).		There is a single selling price across the market.
	Free entry to/exit from the market place in the long run.		Suppliers are 'price takers' – they can sell as much as they like but only at the market price.
	Free access to perfect information on all market conditions, resulting in identical cost structures.		Suppliers only make 'normal' profits in the long run (hence seen as good for consumers).
\succ	Homogeneous/identical products.		

Examples: large are rare – fruit markets, stock exchange?



7.2 Monopolistic competition

Structure		Implications		
\checkmark	Many buyers and sellers.		Firms have some freedom to set prices (face downward-sloping demand curve	
	Some differentiation of products (e.g. via branding and advertising).	>	so price rises will lose customers). Lack of barriers to entry ensure only	
	Some customer loyalty.			
\checkmark	Few barriers to entry.			

Often-quoted examples: pubs, hairdressers.

7.3 Oligopolies

Stru	icture	Imp	mplications	
\checkmark	Few large suppliers.	\checkmark	Difficult to predict the actions of competitors.	
	Differentiation of products. High degree of mutual		 follow the leader pricing. 	
	dependency.	 rivals copy price cuts but not increases. 		
			 price wars. 	
			May prefer non-price competition, e.g. via advertising.	
		\checkmark	Collusion to form cartels, e.g. OPEC.	

Examples: oil industry, banking, washing powder.



7.4 Monopoly

Stru	icture	9	Imp	lications	
\checkmark	One	esupplier	\blacktriangleright	Supplier can fix price or quantity	
≻	Mar	ny buyers		curve).	
≻	Barr	riers prevent new entrants:	\succ	 Firms make super-normal profits 	
	-	Size/economies of scale		(hence often seen as bad for consumers).	
	_	Patents			
	_	Public sector protection			
	_	Unique talent			
	_	Access to unique resources.			

Types of monopoly

- **Pure** monopoly only one supplier.
- > Actual monopoly one dominant supplier.
- **Government franchise** monopoly based on government policy, e.g. NHS.
- **Natural** monopoly not due to legal factors (e.g. economies of scale).



8 Market failure

Market failure is when a free market fails to produce the optimum allocation of resources.



8.1 Market imperfections

Markets do not satisfy assumptions of perfect competition.

- Monopolists can charge higher prices.
- > Powerful customers can drive prices too low.
- > Imperfect information, resulting in poor decisions.
- Time lags.



8.2 Externalities

Externalities: Costs or benefits which the market mechanism fails to take into account because the market only incorporates private costs and benefits.

Private cost measures the cost to the supplier of producing the good.

Private benefit measures the benefit obtained directly by the supplier/buyer.

Social cost measures the cost to society as a whole of producing the good.

Social benefit measures the benefit obtained by society as a whole.

Negative externalities: social	Positive externalities: social	
cost > private cost	benefit > private benefit	
> Pollution	Training staff who subsequently leave	

8.3 Public goods

Without government intervention some goods would not be provided at all by a market economy. These are often referred to as **public goods**.

Examples: street lighting, police force, national defence.

Public goods have the property of:

- non-excludability, i.e. a person can benefit from the good without having to pay for it (free rider)
- provision of the good for one member of society automatically allows the rest of society also to benefit
- further, consumption of the good by one person does not reduce the amount available for consumption by others. As a result a market for this type of goods does not exist.



8.4 Economies of scale

- Perfect competition involves many smaller firms. In practice large firms exist which may benefit from economies of scale.
- > These may result in lower prices for consumers than under perfect competition.
- > However, economies of scale may result in:
 - larger firms simply making more profit
 - larger firms pushing smaller firms out of business, reducing choice.

Types of economics of scale

Internal economies – arising from the size of the firm		External economies – arising from the size of the industry	
	Specialisation and the division of labour.		Specialisation in the local labour force that reduces training costs.
	Indivisibilities in inputs (more efficient utilisation of capacity).	>	Agglomeration economies, i.e. provision of ancillary or back-up
\checkmark	Financial economies, e.g. bulk discounts, inventory policy.		
Nc	otes		

