Learning Objectives

Chapter 1

In this chapter you will

- Learn that economics is about the allocation of scarce resources
- Examine some of the trade-offs that people face
- Learn the meaning of opportunity cost
- See how to use marginal reasoning when making decisions
- Discuss how incentives affect people's behaviour
- Consider why trade among people or nations can be good for everyone
- Discuss why markets are a good, but not perfect, way to allocate resources
- Learn what determines some trends in the overall economy

You should be able to

- Define scarcity
- Explain the classic trade-off between "guns and butter"
- Add up your particular opportunity cost of attending university
- Compare the marginal costs and marginal benefits of continuing to attend school indefinitely
- Consider how a quadrupling of your tuition payments would affect your decision to educate yourself
- Explain why specialization and trade improve people's choices
- Give an example of an externality
- Explain the source of large and persistent inflation

Chapter 2

In this chapter you will

- See how economists apply the methods of science
- Consider how assumptions and models can shed light on the world
- Learn two simple models—the circular-flow and the production possibilities frontier
- Distinguish between microeconomics and macroeconomics
- Learn the difference between positive and normative statements
- Examine the role of economists in making policy
- Consider why economists sometimes disagree with one another

- Describe the scientific method
- Understand the art of making useful assumptions
- Explain the slope of a production possibilities frontier

- Place economic issues into the categories of microeconomics or macroeconomics
- Place economic statements into the categories of normative or positive.
- See the link between policy making and normative statements
- List two reasons why economists disagree

In this chapter you will

- Consider how everyone can benefit when people trade with one another
- Learn the meaning of absolute advantage and comparative advantage
- See how comparative advantage explains the gains from trade
- Apply the theory of comparative advantage to everyday life and national policy

You should be able to

- Show how total production rises when individuals specialize in the production of goods for which they have a comparative advantage
- Explain why all people have a comparative advantage even if they have no absolute advantage
- Demonstrate the link between comparative advantage and opportunity cost
- Explain why people who are good at everything still tend to specialize

Chapter 4

In this chapter you will

- Learn what a competitive market is
- Examine what determines the demand for a good in a competitive market
- Examine what determines the supply of a good in a competitive market
- See how supply and demand together set the price of a good and the quantity sold
- Consider the key role of prices in allocating scarce resources in market economies

- List the two characteristics of a competitive market
- List the factors that affect the amount that consumers wish to buy in a market
- List the factors that affect the amount that producers wish to sell in a market

- Draw a graph of supply and demand in a market and find the equilibrium price and quantity
- Shift supply and demand curves in response to an economic event and find the new equilibrium price and quantity

In this chapter you will

- Learn the meaning of the elasticity of demand
- · Examine what determines the elasticity of demand
- Learn the meaning of the elasticity of supply
- Examine what determines the elasticity of supply
- Apply the concept of elasticity in three very different markets

You should be able to

- Calculate the price and income elasticity of demand
- Distinguish between the price elasticity of demand for necessities and luxuries
- Calculate the price elasticity of supply
- Distinguish between an inelastic and elastic supply curve
- Demonstrate the impact of the price elasticity of demand on total revenue

Chapter 6

In this chapter you will

- Examine the effects of government policies that place a ceiling on prices
- Examine the effects of government policies that put a floor under prices
- Consider how a tax on a good affects the price of the good and the quantity sold
- Learn that taxes levied on buyers and taxes levied on sellers are equivalent
- See how the burden of a tax is split between buyers and sellers

- Describe the conditions necessary for a price ceiling to be a binding constraint
- Explain why a binding price floor creates a surplus
- Demonstrate why a tax placed on a good generally reduces the quantity of the good sold
- Demonstrate why the results are the same when a tax is placed on the buyers or sellers of a good
- Show whether the buyers or sellers of a good bear the burden of the tax when demand is inelastic and supply is elastic

In this chapter you will

- Examine the link between buyers' willingness to pay for a good and the demand curve
- Learn how to define and measure consumer surplus
- Examine the link between sellers' costs of producing a good and the supply curve
- Learn how to define and measure producer surplus
- See that the equilibrium of supply and demand maximizes total surplus in a market

You should be able to

- Derive a demand curve from a group of individual buyers' willingness to pay schedules
- Locate consumer surplus on a supply and demand graph
- Derive a supply curve from a group of individual sellers' cost of production schedules
- Locate producer surplus on a supply and demand graph
- Demonstrate why all other quantities other than the equilibrium quantity fail to maximize total surplus in a market

Chapter 8

In this chapter you will

- Examine how taxes reduce consumer and producer surplus
- Learn the meaning and causes of the deadweight loss of a tax
- Consider why some taxes have larger deadweight losses than others
- Examine how tax revenue and deadweight loss vary with the size of a tax

You should be able to

- Place a tax wedge in a supply and demand graph and determine the tax revenue and the levels of consumer and producer surplus
- Place a tax wedge in a supply and demand graph and determine the value of the deadweight loss
- Show why a given tax will generate a greater deadweight loss if supply and demand are elastic than if they are inelastic
- Demonstrate why some very large taxes generate little tax revenue but a great deal of deadweight loss

Chapter 9

- Consider what determines whether a country imports or exports a good
- Examine who wins and who loses from international trade
- Learn that the gains to winners from international trade exceed the losses to losers
- Analyse the welfare effects of tariffs and import quotas
- Examine the arguments people use to advocate trade restrictions

- Determine whether a country imports or exports a good if the world price is greater than the before-trade domestic price
- Show that the consumer wins and the producer loses when a country imports a good
- Use consumer and producer surplus to show that the gains of the consumer exceed the losses of the producer when a country imports a good
- Show the deadweight loss associated with a tariff or a quota
- Defeat the arguments made in support of trade restrictions

Chapter 10

In this chapter you will

- Learn what an externality is
- See why externalities can make market outcomes inefficient
- Examine how people can sometimes solve the problem of externalities on their own
- Consider why private solutions to externalities sometimes do not work
- Examine the various government policies aimed at solving the problem of externalities

You should be able to

- Distinguish between a positive and a negative externality
- Demonstrate why the optimal quantity and the market quantity differ in the presence of an externality
- Define the Coase theorem
- Explain how transaction costs may impede a private solution to an externality
- Demonstrate the potential equality of a Pigovian tax and pollution permits

Chapter 11

In this chapter you will

Learn the defining characteristics of public goods and common resources

- Examine why private markets fail to provide public goods
- Consider some of the important public goods in our economy
- See why the cost-benefit analysis of public goods is both necessary and difficult
- Examine why people tend to use common resources too much
- Consider some of the important common resources in our economy

- Classify goods into the categories of public goods, private goods, common resources, or goods produced by a natural monopoly
- Explain why production of public goods is unprofitable to private industry
- Explain the public good nature of national defence
- Explain why surveys to determine the benefits of public goods are a less precise valuation of benefits than prices of private goods
- Tell the story of the "tragedy of the commons"
- Explain why fish and wildlife are common resources

Chapter 12

In this chapter you will

- Get an overview of how the UK government raises and spends money
- Examine the efficiency costs of taxes
- Learn alternative ways to judge the equity of a tax system
- See why studying tax incidence is crucial for evaluating tax equity
- Consider the trade-off between efficiency and equity in the design of a tax system

You should be able to

- List the three largest sources of tax revenue to the UK government from the largest to the smallest source
- Describe the administrative burdens of a tax
- Compare the benefits principle to the ability-to-pay principle of allocating a tax burden
- Explain why the burden of a tax is often borne by someone other than the person from whom the tax is collected
- Discuss the efficiency and equity of a flat tax

Chapter 13

- Examine what items are included in a firm's costs of production
- Analyse the link between a firm's production process and its total costs

- Learn the meaning of average total cost and marginal cost and how they are related
- Consider the shape of a typical firm's cost curves
- Examine the relationship between short-run and long-run costs

- Explain the difference between economic profit and accounting profit
- Utilize a production function to derive a total cost curve
- Explain why the marginal cost curve must intersect the average total cost curve at the minimum point of the average total cost curve
- Explain why a production function might exhibit increasing marginal product at low levels of output and decreasing marginal product at high levels of output
- Explain why, as a firm expands its scale of operation, it tends to first exhibit economies of scale, then constant returns to scale, then diseconomies of scale

Chapter 14

In this chapter you will

- Learn what characteristics make a market competitive
- Examine how competitive firms decide how much output to produce
- Examine how competitive firms decide when to shut down production temporarily
- Examine how competitive firms decide whether to exit or enter a market
- See how firm behaviour determines a market's short-run and long-run supply curves

You should be able to

- List up to three conditions that characterize a competitive market
- Locate the supply curve for a competitive firm on a graph of its cost curves
- Demonstrate why firms temporarily shut down if the price they receive for their output is less than average variable cost
- Demonstrate why firms exit a market permanently if the price they receive for their output is less than average total cost
- Show why the long-run supply curve in a competitive market is more elastic than the short-run supply curve

Chapter 15

In this chapter you will

· Learn why some markets have only one seller

- Analyse how a monopoly determines the quantity to produce and the price to charge
- See how the monopoly's decisions affect economic well-being
- Consider the various public policies aimed at solving the problem of monopoly
- See why monopolies try to charge different prices to different customers

- List three reasons why a monopoly can remain the sole seller of a product in a market
- Use a monopolist's cost curves and the demand curve it faces to show the profit earned by a monopolist
- Show the deadweight loss from a monopolist's production decision
- Show why forcing a natural monopoly to set its selling price equal to its marginal cost of production creates losses for the monopolist
- Demonstrate the surprising result that price discrimination by a monopolist can raise economic welfare above that generated by standard monopoly pricing

Chapter 16

In this chapter you will

- See what market structures lie between monopoly and competition
- Examine what outcomes are possible when a market is an oligopoly
- Learn about the prisoners' dilemma and how it applies to oligopoly and other issues
- Consider how competition laws try to foster competition in oligopolistic markets

You should be able to

- Describe the characteristics of oligopoly and monopolistic competition
- Describe the conditions under which an oligopolistic market generates the same outcome as a monopolistic market
- Show why the outcome of the prisoners' dilemma may change if the game is repeated
- Show why some business practices that appear to reduce competition may have a legitimate business purpose

Chapter 17

- Analyse competition among firms that sell differentiated products
- Compare the outcome under monopolistic competition and under perfect competition
- Consider the desirability of outcomes in monopolistically competitive markets
- Examine the debate over the effects of advertising
- Examine the debate over the role of brand names

- Show the long-run adjustment that takes place in a monopolistically competitive market when a firm generates economic profits
- Show why monopolistically competitive firms produce at less than efficient scale in the long run
- Discuss the inefficiencies of monopolistically competitive markets
- Provide an argument in support of and in opposition to the use of advertising
- Provide an argument in support of and in opposition to the use of brand names

Chapter 18

In this chapter you will

- Analyse the labour demand of competitive, profit-maximizing firms
- Consider the household decisions that lie behind labour supply
- Learn why equilibrium wages equal the value of the marginal product of labour
- Consider how the other factors of production—land and capital—are compensated
- Examine how a change in the supply of one factor alters the earnings of all the factors

You should be able to

- Explain why the labour demand curve is the value of the marginal product curve for labour
- Explain why the labour supply curve is usually upward sloping
- Explain why a competitive firm maximizes profit when it hires labour to the point where the wage equals the value of the marginal product of labour
- Demonstrate the similarity between the labour market and the market for other factors of production
- Explain why the change in the supply of one factor alters the value of the marginal product of the other factors

Chapter 19

In this chapter you will

- Examine how wages compensate for differences in job characteristics
- Learn and compare the human capital and signalling theories of education
- Examine why in some occupations a few superstars earn tremendous incomes
- Learn why wages rise above the level that balances supply and demand
- Consider why it is difficult to measure the impact of discrimination on wages
- See when market forces can and cannot provide a natural remedy for discrimination

You should be able to

- Explain why an economics lecturer earns less than a corporate economist of similar age, background, and training
- Explain the differing impact of policies aimed at increasing the educational attainment of all workers under the signalling and the human capital view of education
- · List the characteristics of a market where superstars can arise
- List three reasons why a wage can rise above the equilibrium wage
- Explain why differences in wages among groups does not by itself say anything about how much discrimination there is in the labour market
- Explain why competitive employers are unlikely to discriminate against groups of employees unless the customers or the government demands it

Chapter 20

In this chapter you will

- Examine the degree of economic inequality in our society
- Consider some problems that arise when measuring economic inequality
- See how political philosophers view the government's role in redistributing income
- Consider the various policies aimed at helping poor families escape poverty

You should be able to

- Explain how the changing role of women in the economy has affected the distribution of income
- Name some factors that cause the measurement of income distribution to exaggerate the degree of income inequality
- Compare and contrast utilitarianism, liberalism, and libertarianism
- Explain the concept of a negative income tax

Chapter 21

In this chapter you will

- See how a budget constraint represents the choices a consumer can afford
- Learn how indifference curves can be used to represent a consumer's preferences
- Analyse how a consumer's optimal choices are determined
- See how a consumer responds to changes in income and changes in prices
- Decompose the impact of a price change into an income effect and a substitution effect
- Apply the theory of consumer choice to three questions about household behaviour

You should be able to

- Draw a budget constraint on a graph if you are given the value of income and the prices of the goods
- Explain why indifference curves must slope downward if the two products considered are "goods"
- Explain the relationship between the relative prices and the marginal rate of substitution between two goods at the consumer's optimum
- Shift the budget constraint when the price of a good increases
- Demonstrate the income and substitution effect on a graph using indifference curves and budget constraints
- Show why someone's labour-supply curve might be backward sloping

Chapter 22

In this chapter you will:

- Examine the problems caused by asymmetric information
- Learn about market solutions to asymmetric information
- Consider why democratic voting systems may not represent the preferences of society
- Consider why people may not always behave as rational maximizers

- Describe the information asymmetry in the labour market
- Explain why insurance companies screen potential customers
- Generate an example of the Condorcet voting paradox
- Explain why people are willing to sign contracts that require them to contribute a portion of their salary to a retirement savings program

In this chapter you will

- Consider why an economy's total income equals its total expenditure
- Learn how gross domestic product (GDP) is defined and calculated
- See the breakdown of GDP into its four major components
- Learn the distinction between real GDP and nominal GDP
- Consider whether GDP is a good measure of economic well-being

You should be able to

- Demonstrate why income equals expenditure equals output
- Explain the key words and phrases in the definition of GDP
- Define consumption, investment, government purchases, and net exports
- Calculate real and nominal GDP using base year and current year prices
- List a number of welfare-enhancing activities that are not captured by GDP

Chapter 24

In this chapter you will

- Learn how the consumer price index (CPI) is constructed
- Consider why the CPI is an imperfect measure of the cost of living
- Compare the CPI and the GDP deflator as measures of the overall price level
- See how to use a price index to compare dollar amounts from different times
- Learn the distinction between real and nominal interest rates

You should be able to

- List the five steps necessary to calculate the inflation rate
- Discuss three reasons why the CPI may be biased
- Describe two differences between the CPI and GDP deflator
- Convert a value measured in 1965 pounds (or euros) to its value measured in 1990 pounds (or euros)
- Explain the relationship between the real interest rate, the nominal interest rate, and the inflation rate

Chapter 25

- See how much economic growth differs around the world
- Consider why productivity is the key determinant of a country's standard of living
- Analyse the factors that determine a country's productivity
- Examine how a country's policies influence its productivity growth

- List the countries with the highest GDP per person and the countries whose GDP per person is growing the fastest
- Explain why production limits consumption in the long run
- List and explain the factors of production
- Explain seven areas of policy action that may influence a country's productivity and growth

Chapter 26

In this chapter you will

- Learn about some of the important financial institutions in the economy
- Consider how the financial system is related to key macroeconomic variables
- Develop a model of the supply and demand for loanable funds in financial markets
- Use the loanable funds model to analyse various government policies
- Consider how government budget deficits affect the economy

You should be able to

- List and describe four important types of financial institutions
- Describe the relationship between national saving, government deficits, and investment
- Explain the slope of the supply and demand for loanable funds
- Shift supply and demand curves in a model of the loanable funds market in response to a change in taxes on interest or investment
- Shift supply and demand curves in a model of the loanable funds market in response to a change in the government's budget deficit

Chapter 27

In this chapter you will:

- Learn the relationship between present value and future value
- Consider the effects of compound growth
- Learn how risk-averse people reduce the risk they face
- Analyse how asset prices are determined

You should be able to:

• Choose between receiving €100 now or €120 two years from now, given an interest rate of 8 percent

- Explain why two people whose incomes grow at slightly different rates may end up with significantly different incomes after a number of years
- Explain the benefits of diversification
- Show why randomly choosing stocks may be as good as more sophisticated stock picking methods

In this chapter you will

- Learn about the data used to measure the amount of unemployment
- Consider how unemployment can result from minimum wage laws
- See how unemployment can arise from bargaining between firms and unions
- Examine how unemployment results when firms choose to pay efficiency wages

You should be able to

- Use data on the number of employed, unemployed, and not in the labour force to calculate the unemployment rate and the labour force participation rate
- Explain why some unemployment is inevitable
- Illustrate in a diagram the impact of the minimum wage on high wage and low wage sectors
- List the reasons why unions cause unemployment and, alternatively, why unions might increase efficiency in some cases
- Describe the four reasons why firms may choose to pay wages in excess of the competitive wage

Chapter 29

In this chapter you will

- Consider what money is and what functions money has in the economy
- Learn what a central bank is
- Examine how the banking system helps determine the supply of money
- See what tools central banks use to alter the supply of money

- Define money and list the three functions of money
- Explain the role of the central bank in money creation
- Explain the money multiplier in a fractional reserve banking system
- List and explain the three tools central banks use to change the money supply

In this chapter you will

- See why inflation results from rapid growth in the money supply
- Learn the meaning of the classical dichotomy and monetary neutrality
- See why some countries print so much money that they experience hyperinflation
- Examine how the nominal interest rate responds to the inflation rate
- Consider the various costs that inflation imposes on society

You should be able to

- Demonstrate the link between money and prices with the quantity equation
- Explain why money has no impact on real variables in the long run
- Explain the concept of an inflation tax
- Show the relationship between the nominal interest rate, the real interest rate, and the inflation rate
- Explain who gains and who loses on a loan contract when inflation rises unexpectedly

Chapter 31

In this chapter you will

- Learn how net exports measure the international flow of goods and services
- Learn how net capital outflow measures the international flow of capital
- Consider why net exports must always equal net capital outflow
- See how saving, domestic investment, and net capital outflow are related
- Learn the meaning of the nominal exchange rate and the real exchange rate
- Examine purchasing power parity as a theory of how exchange rates are determined

- Define net exports
- Define net capital outflow
- Explain why net exports and net capital outflow are two sides of the same coin
- Explain why a trade deficit and a negative net capital outflow can be beneficial to a country if that country has a small savings rate
- Show the relationship between the real and nominal exchange rate
- Show why the nominal exchange rate between two country's currencies should equal their relative price levels

In this chapter you will

- Build a model to explain an open economy's trade balance and exchange rate
- Use the model to analyse the effects of government budget deficits
- Use the model to analyse the macroeconomic effects of trade policies
- · Use the model to analyse political instability and capital flight

You should be able to

- Explain the slope of supply and demand curves in the market for foreign currency exchange
- Show why a budget deficit tends to cause a trade deficit
- Demonstrate that a quota on imports fails to have an effect on net exports
- Show why capital flight causes a currency to depreciate

Chapter 33

In this chapter you will

- Learn three key facts about short-run fluctuations
- Consider how the economy in the short run differs from the economy in the long run
- Use the model of aggregate demand and aggregate supply to explain economic fluctuations
- See how shifts in either aggregate demand or aggregate supply can cause booms and recessions

You should be able to

- Explain why the term "business cycle" is misleading
- Explain why money is unlikely to be neutral in the short run
- List three reasons why the aggregate demand curve is downward sloping
- Demonstrate the short-run and long-run effects of an oil price shock on the economy

Chapter 34

- Learn the theory of liquidity preference as a short-run theory of the interest rate
- Analyse how monetary policy affects interest rates and aggregate demand
- Analyse how fiscal policy affects interest rates and aggregate demand

 Discuss the debate over whether policy makers should try to stabilize the economy

You should be able to

- Show what an increase in the money supply does to the interest rate in the short run
- Illustrate what an increase in the money supply does to aggregate demand
- Explain crowding out
- Describe the lags in fiscal and monetary policy

Chapter 35

In this chapter you will

- Learn why policy makers face a short-run trade-off between inflation and unemployment
- Consider why the inflation-unemployment trade-off disappears in the long run
- See how supply shocks can shift the inflation-unemployment trade-off
- Consider the short-run cost of reducing the rate of inflation
- See how policy makers' credibility affects the cost of reducing inflation

You should be able to

- Draw a graph of a short-run Phillips curve
- Draw a graph of a long-run Phillips curve
- Show the relationship between a shift in the short-run aggregate supply curve and a shift in the short-run Phillips curve
- Explain the sacrifice ratio
- Explain why more than rational expectations are needed to reduce inflation costlessly

Chapter 36

In this chapter you will

- Consider the characteristics of an optimum currency area.
- Consider the benefits and costs that might be expected to arise from a country joining a currency union.
- Learn about the debate concerning whether the euro area is an optimum currency area.

- Explain the characteristics a group of countries should have if they are to be considered an optimum currency area
- Explain and illustrate with diagrams the macroeconomic effects of asymmetric shocks in a common currency area, wherein exchange rate adjustment is not possible
- Explain and illustrate with diagrams how fiscal policy could be used for macroeconomic stabilization in the absence of exchange rate adjustment and independent monetary policy

In this chapter you will

- Consider whether policymakers should try to stabilize the economy
- Consider whether monetary policy should be made by rule rather than by discretion
- Consider whether the government should balance its budget
- Consider whether the tax laws should be reformed to encourage saving
- Consider whether the UK should join the European monetary union

- Give an example of a macroeconomic policy response that "leans against the wind"
- Explain what is meant by the "time inconsistency of policy"
- Explain the benefits of reducing the budget deficit
- Explain why a consumption tax encourages saving but enhances economic inequality
- Discuss the five tests laid down by the UK government and which the government has said must be passed before the UK joins EMU