

Important diagrams with tips on how to use them

Every diagram you need to know for your IB exams is listed in the IB Economics syllabus. Each of these diagrams is also explained in the learning objectives appearing at the beginning of each section of the coursebook.

These diagrams are reproduced here by chapter so that you can easily refer to all of them for review. They include all the diagrams that appear in the IB economics syllabus. The tip given under each diagram tells you what you should be able to illustrate by use of these diagrams.

Unit 1 Introduction to economics

Chapter 1 The foundations of economics

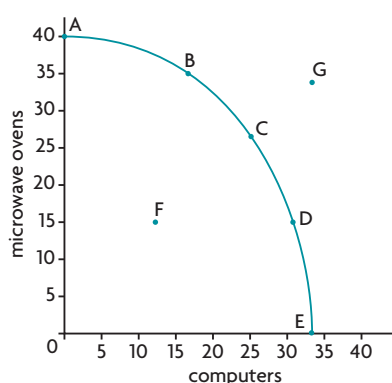
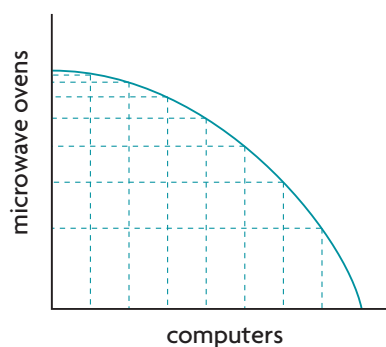


Figure 1.1: Production possibilities curve

TIP

This diagram illustrates choice, opportunity cost and unemployment of resources.

a Increasing opportunity costs



b Constant opportunity costs

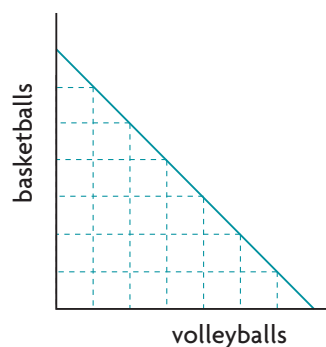


Figure 1.2: Production possibilities curve with increasing and constant opportunity costs

TIP

This illustrates the difference between constant and increasing opportunity costs.

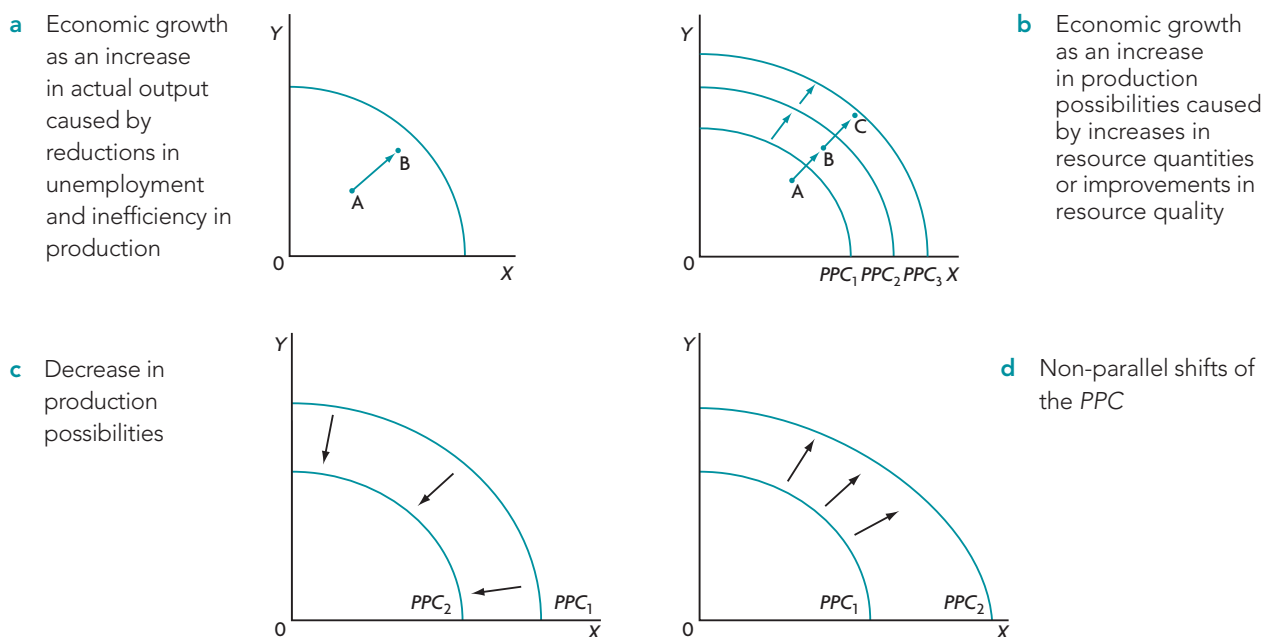


Figure 1.3: Using the production possibilities model to illustrate economic growth

TIP

This diagram illustrates the difference between actual growth and growth in production possibilities.

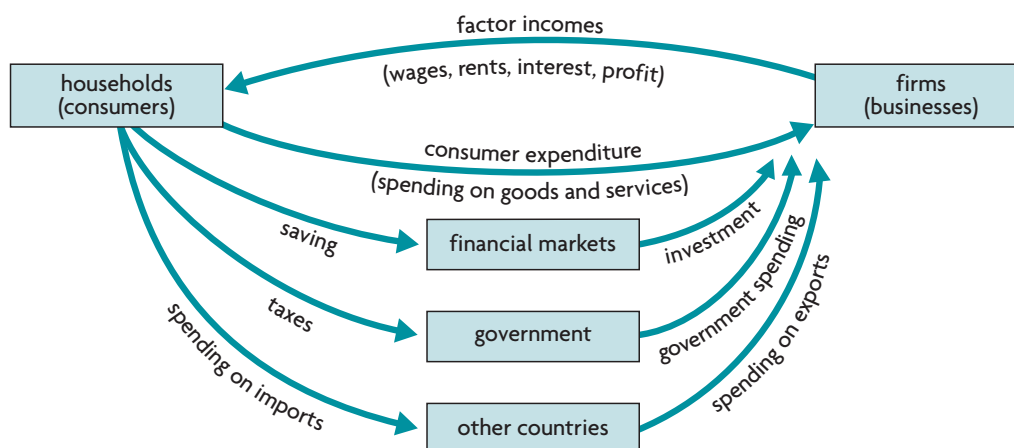


Figure 1.6: Circular flow of income model with leakages and injections

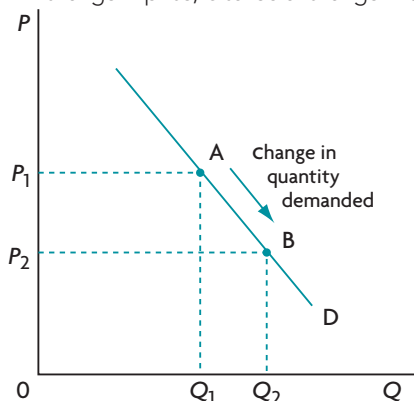
TIP

This diagram shows the interdependence between households and firms, along with financial markets (banks), the government and other countries. It also shows the role of leakages from and injections into the flow of income.

Unit 2 Microeconomics

Chapter 2 Competitive markets: Demand and supply

a A movement along the demand curve, caused by a change in price, is called a 'change in quantity demanded'



b A shift of a demand curve, caused by a change in a determinant of demand, is called a 'change in demand'

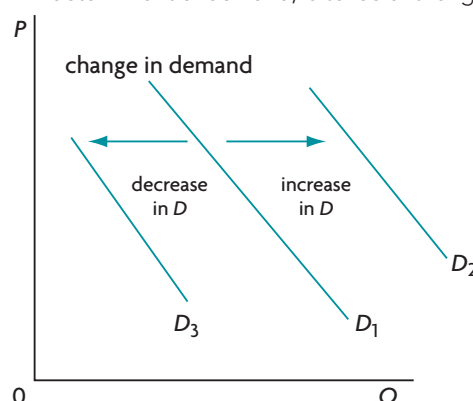
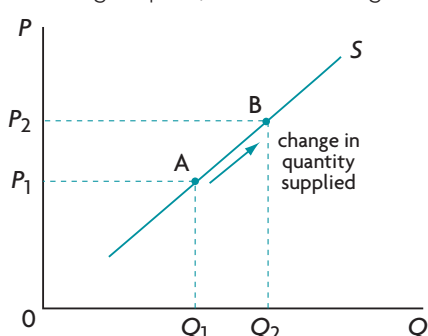


Figure 2.4: Movements along and shifts in the demand curve

TIP

Part (a) shows the downward sloping demand curve illustrating the law of demand. It also illustrates movements along the demand curve: as P falls from P_1 to P_2 , quantity demanded increases from Q_1 to Q_2 . Part (b) shows that if there is any change in a non-price determinant of demand, the demand curve will shift.

a A movement along the supply curve, caused by a change in price, is called a 'change in quantity supplied'



b A shift of the supply curve, caused by a change in a determinant of supply, is called a 'change in supply'

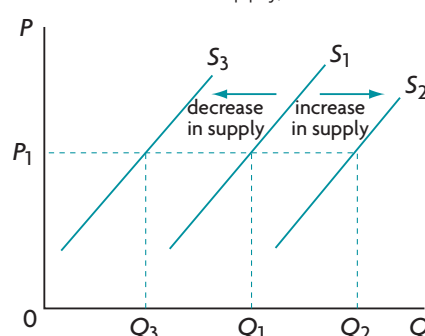


Figure 2.8: Movements along and shifts of the supply curve

TIP

Part (a) shows the upward sloping supply curve illustrating the law of supply. It also illustrates movements along the supply curve: as P increases from P_1 to P_2 , quantity supplied increases from Q_1 to Q_2 . Part (b) shows that if there is any change in a non-price determinant of supply, the supply curve will shift.

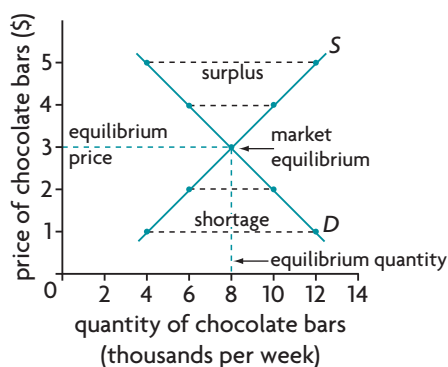
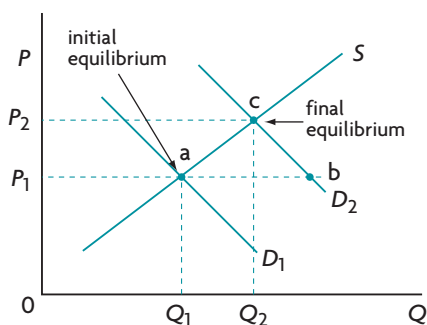


Figure 2.11: Market equilibrium

TIP

Demand and supply determine an equilibrium P and Q at market equilibrium.

a Increase in demand



b Decrease in demand

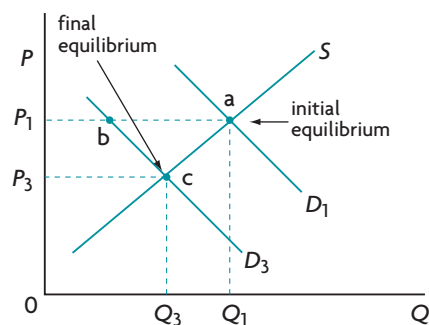
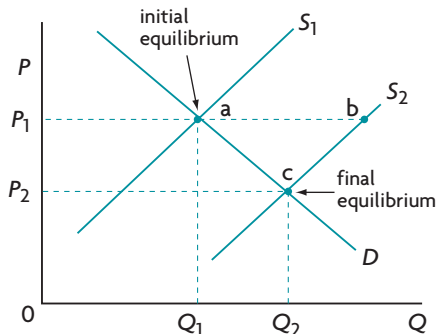


Figure 2.12: Changes in demand and the new equilibrium price and quantity

TIP

If demand changes, there is a new market equilibrium due to the creation of shortages or surpluses.

a Increase in supply



b Decrease in supply

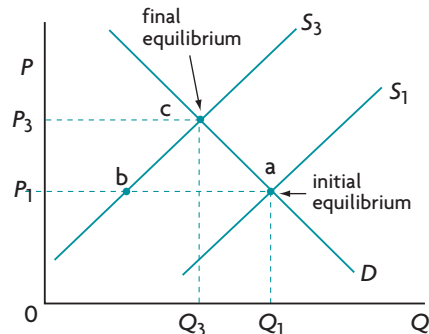


Figure 2.13: Changes in supply and the new equilibrium price and quantity

TIP

If supply changes, there is a new market equilibrium due to the creation of shortages or surpluses.

a Adjustment of price to increased demand

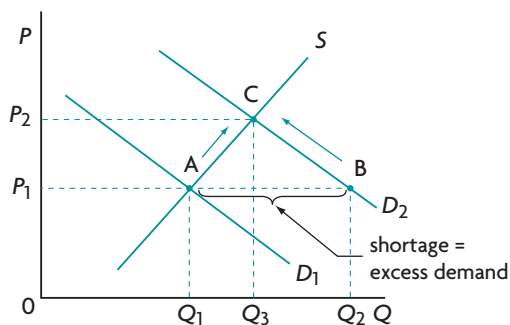


Figure 2.16a: Price as a signal and incentive

TIP

This diagram shows the signalling and incentive functions of price in allocating and reallocating resources.

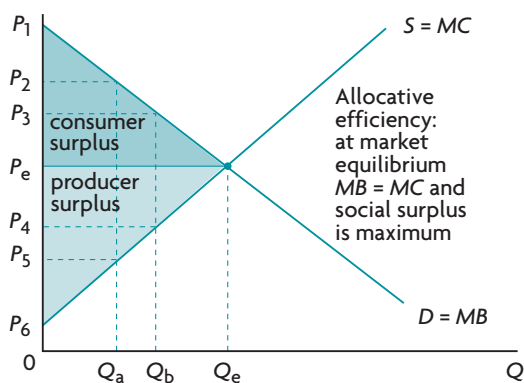


Figure 2.17: Consumer and producer surplus in a competitive market

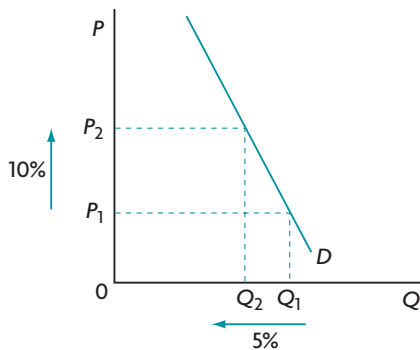
TIP

This diagram shows that consumer surplus and producer surplus are maximum at competitive market equilibrium, therefore social surplus (consumer surplus + producer surplus) is also maximum.

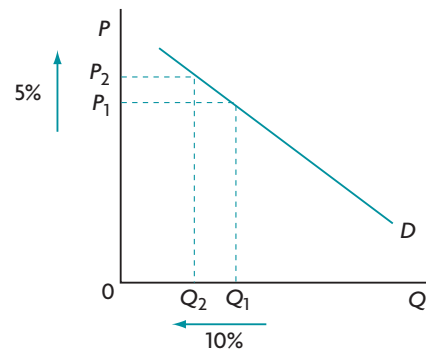
Chapter 3 Elasticities

Frequently encountered cases

a Price inelastic demand: $0 < PED < 1$

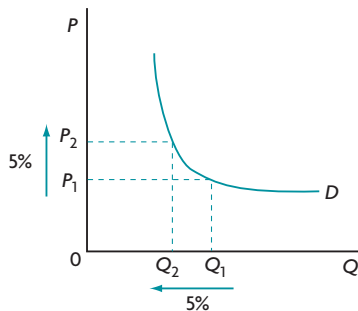


b Price elastic demand: $1 < PED < \infty$

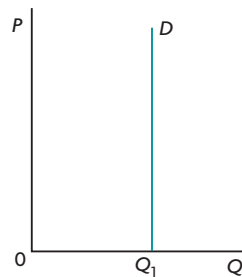


Special cases

c Unit elastic demand: $PED = 1$



d Perfectly inelastic demand: $PED = 0$



e Perfectly elastic demand: $PED = \infty$

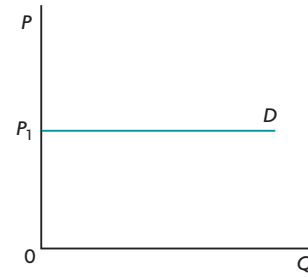


Figure 3.1: Demand curves and PED

TIP

Parts (a) and (b) show that the flatter the demand curve, the more elastic the demand. Parts (c), (d) and (e) show the special cases where PED is constant along the full range of the demand curve.

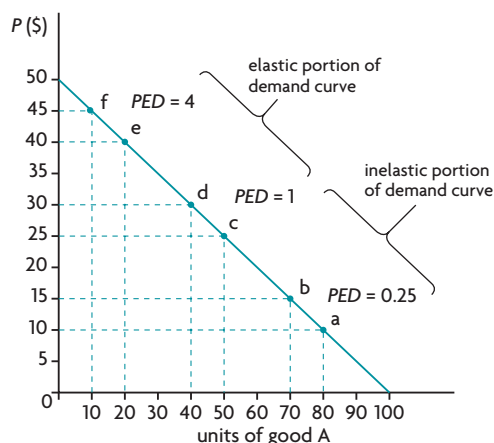
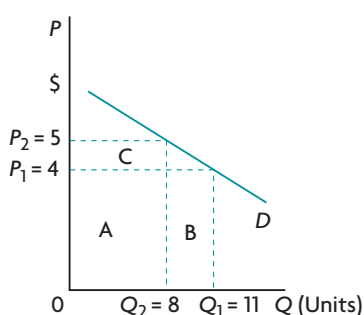


Figure 3.4: (HL only) Variability of PED along a straight-line demand curve

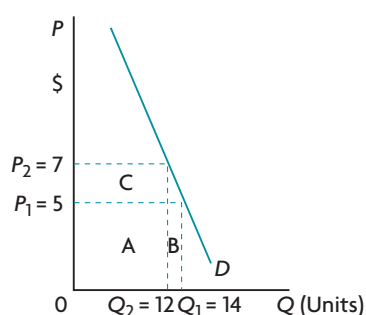
TIP

This diagram shows that the value of PED decreases as we move down the demand curve.

a $PED > 1$ (elastic demand)



b $PED < 1$ (inelastic demand)



c $PED = 1$ (unit elastic demand)

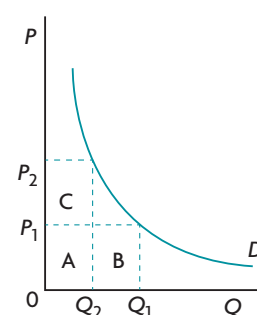


Figure 3.6: PED and total revenue

TIP

These diagrams show how a firm's total revenue changes in response to changes in price depending on whether $PED > 1$, $PED < 1$ or $PED = 1$.

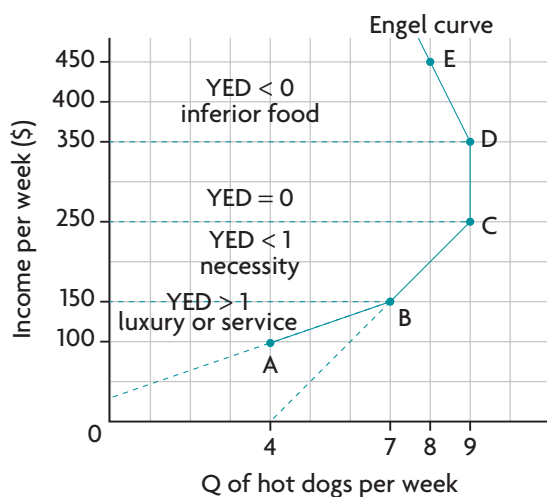


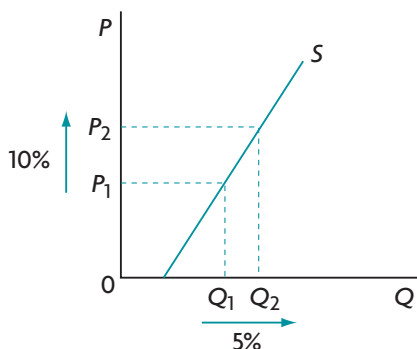
Figure 3.10: The Engel curve showing different YEDs

TIP

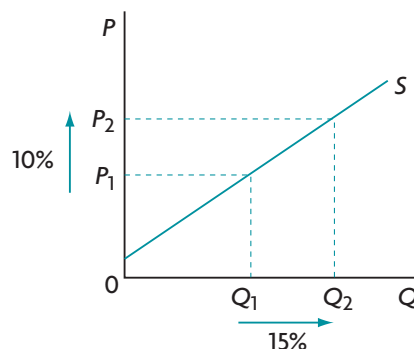
The Engel curve is used to show how income elasticity of demand (YED) changes as income increases; it can be used to show if a good is normal or inferior, and a necessity or luxury (or service).

Frequently encountered cases

a Price inelastic supply: $PES < 1$

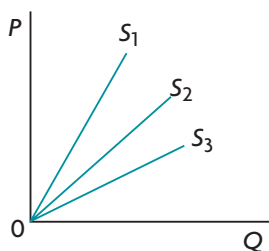


b Price elastic supply: $PES > 1$

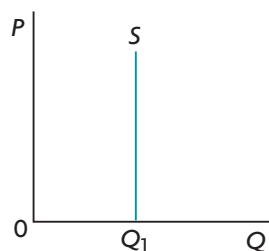


Special cases

c Unit elastic supply: $PES = 1$



d Perfectly inelastic supply: $PES = 0$



e Perfectly elastic supply: $PES = \infty$

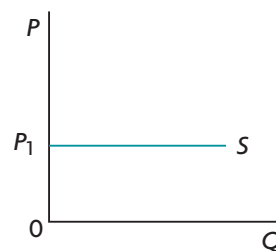


Figure 3.13: Supply curves and PES

TIP

Parts (a) and (b) show relatively inelastic and elastic supply, depending on which axis intersects the supply curve. Parts (c), (d) and (e) show the special cases where PES is constant along the full range of the supply curve.

Chapter 4 Government intervention in microeconomics

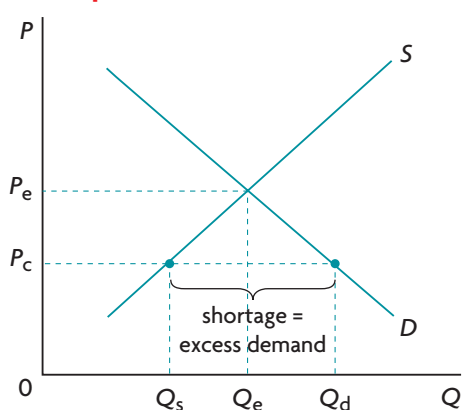
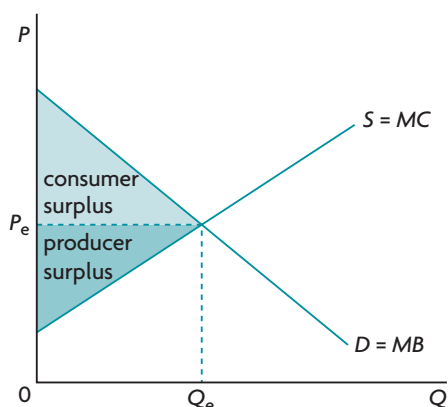


Figure 4.1: Price ceiling (maximum price) and market outcomes

TIP

This illustrates a price ceiling; it results in a shortage of the good.

- a** Consumer and producer surplus in a competitive free market: maximum social surplus



- b** Welfare impacts of a price ceiling (maximum price)

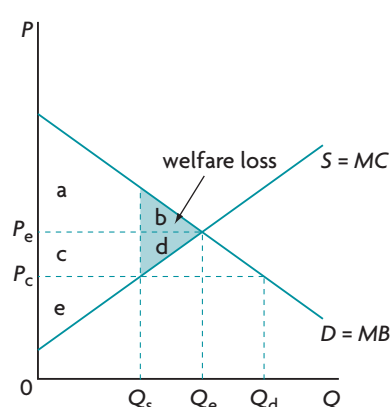


Figure 4.2: Effects of a price ceiling (maximum price) on consumer and producer surplus

TIP

Part (b) shows the loss of consumer and producer surplus, which is compared to maximum social surplus in part (a). It can also be used to illustrate the effects of the price ceiling on consumers, producers, workers and government.

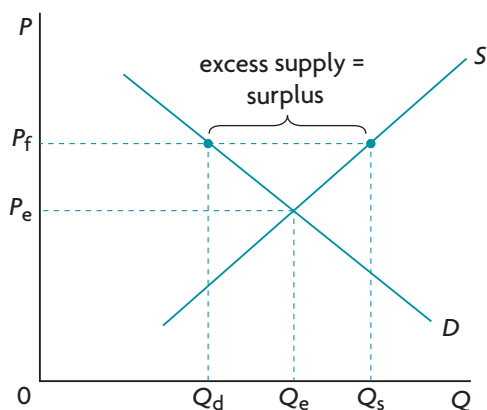
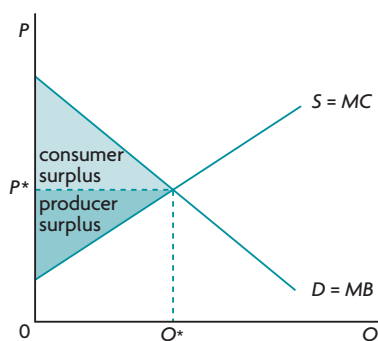


Figure 4.5: Price floor (minimum price) and market outcomes

TIP

This illustrates a price floor; it results in a surplus of the good.

- a Consumer and producer surplus in a competitive free market: maximum social surplus



- b Welfare impacts of a price floor (minimum price)

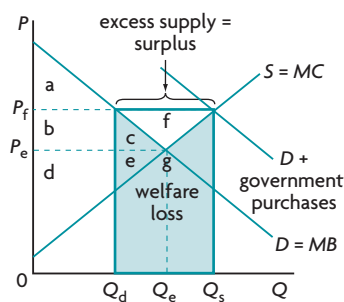
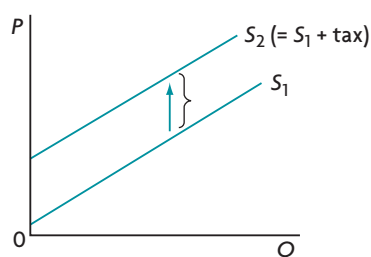


Figure 4.7: Welfare impacts of a price floor (minimum price) for agricultural products and government purchases of the surplus

TIP

Part (b) shows the loss of consumer and producer surplus, which is compared to maximum social surplus in part (a). It can also be used to illustrate the effects of the price ceiling on consumers, producers, workers and government.

a How the supply curve shifts



b Market outcomes due to an indirect tax

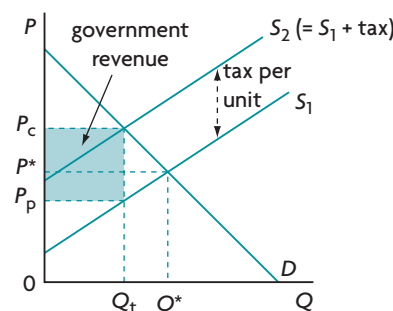
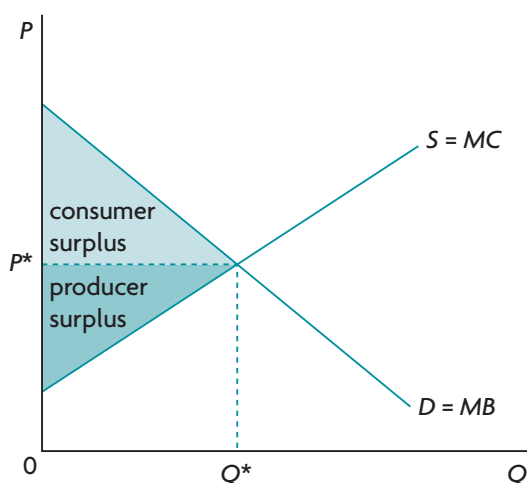


Figure 4.11: Supply curve shifts due to an indirect tax

TIP

Part (a) shows how the supply curve shifts when an indirect tax is imposed. Part (b) illustrates the market outcomes and consequences for stakeholders.

a Consumer and producer surplus in a competitive free market: maximum social surplus



b Consumer and producer surplus with an indirect tax: welfare loss

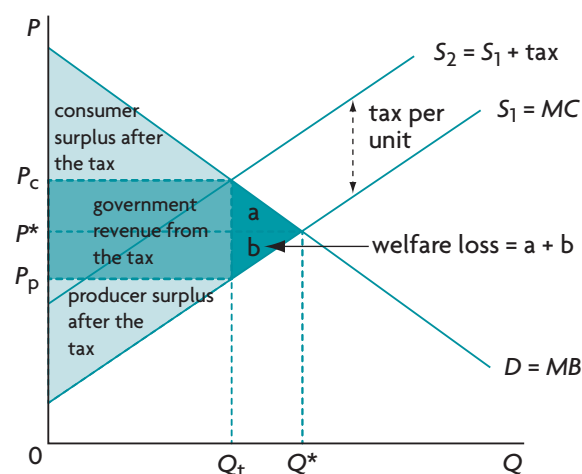


Figure 4.12: Effects of indirect taxes on consumer and producer surplus

TIP

Part (b) shows the loss of consumer and producer surplus (welfare loss) due to the indirect tax, compared to part (a). It can also be used to show the market outcomes consequences for stakeholders.

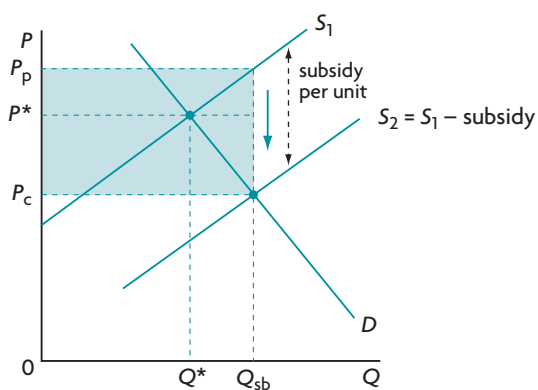
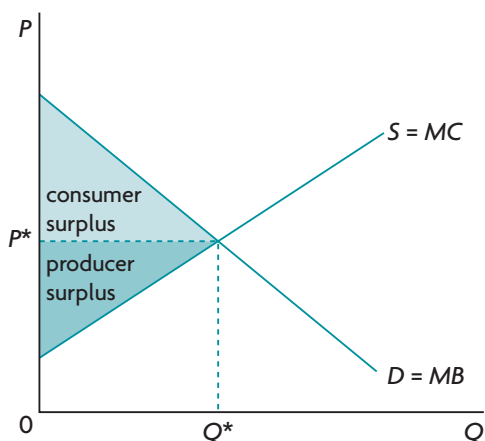


Figure 4.15: Impacts of subsidies on market outcomes

TIP

The diagram illustrates the market outcomes and consequences for stakeholders.

- a Consumer and producer surplus in a competitive free market: maximum social surplus



- b Consumer and producer surplus with a subsidy: welfare loss

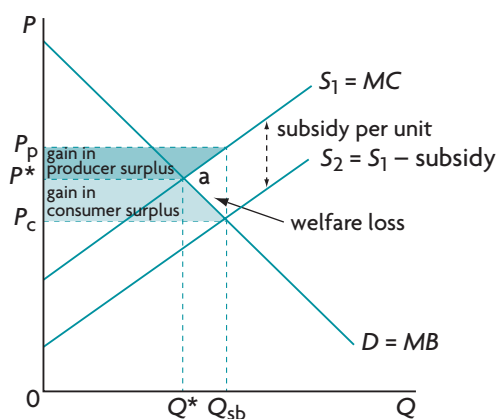


Figure 4.16: Effects of subsidies on consumer and producer surplus

TIP

Part (b) shows the gain of consumer and producer surplus due to the subsidy, as well as welfare loss, compared to part (a). It can also be used to show the market outcomes consequences for stakeholders.

Chapter 5 Market failure and socially undesirable outcomes I: Common pool resources and negative externalities

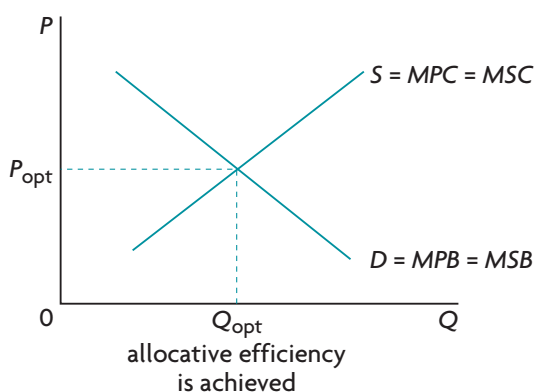


Figure 5.2: Demand, supply and allocative efficiency with no externalities

TIP

This diagram shows that when there are no externalities, the free market achieves allocative efficiency, producing the socially optimum output, where $MSB = MSC$ and social surplus is maximum.

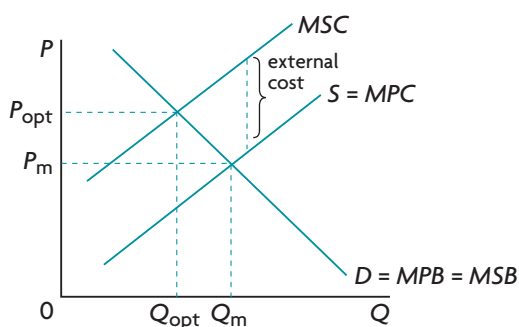


Figure 5.3: Negative production externality

TIP

This shows the external costs and resource misallocation resulting from a negative production externality.

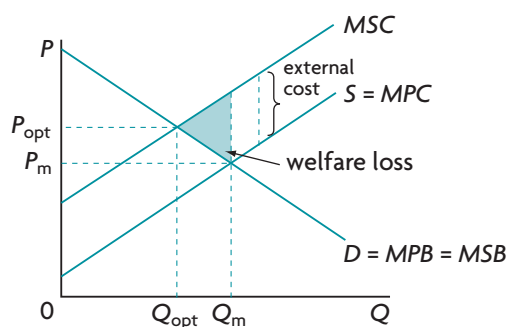


Figure 5.4a: Welfare loss in a negative production externality

TIP

The welfare loss is the shaded area between Q_{opt} and Q_m on the horizontal axis with the point of the triangle pointing to Q_{opt} .

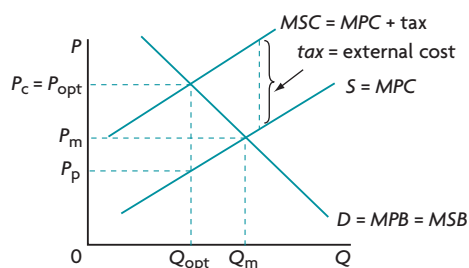


Figure 5.5a: Imposing an indirect tax on output or on pollutants

TIP

This diagram shows how a Pigouvian tax on output or a carbon tax can be used to correct the externality.

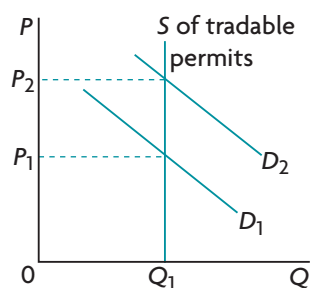


Figure 5.5c: Tradable permits

TIP

This shows how a market for tradable permits works.

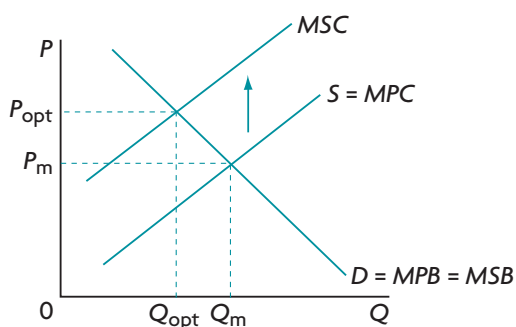


Figure 5.7: Government regulations to correct negative production externalities and promote sustainable use of common pool resources

TIP

This diagram shows the effects on the market of government regulations to correct the externality.

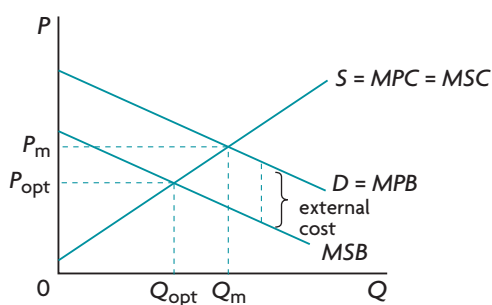


Figure 5.9: Negative consumption externality

TIP

This shows the external costs and resource misallocation resulting from a negative consumption externality.

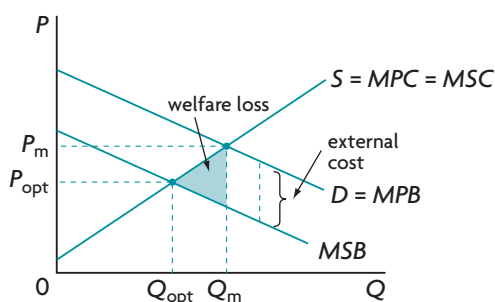
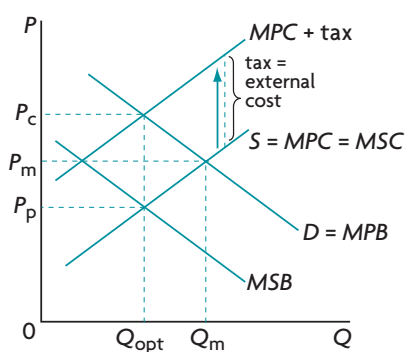


Figure 5.10a: Welfare loss in a negative consumption externality

TIP

The welfare loss is the shaded area between Q_{opt} and Q_m on the horizontal axis with the point of the triangle pointing to Q_{opt} .

a Market-based: imposing an indirect tax



b Government regulations and advertising

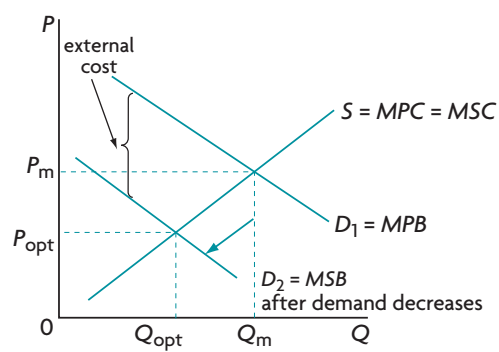


Figure 5.11: Correcting negative consumption externalities

TIP

Part (a) shows how a Pigouvian tax can be used to correct the externality. Part (b) shows the effects on the market of government regulations and advertising to correct the externality.

Chapter 6 Market failure and socially undesirable outcomes II: Positive externalities, public goods, asymmetric information and inability to achieve equity

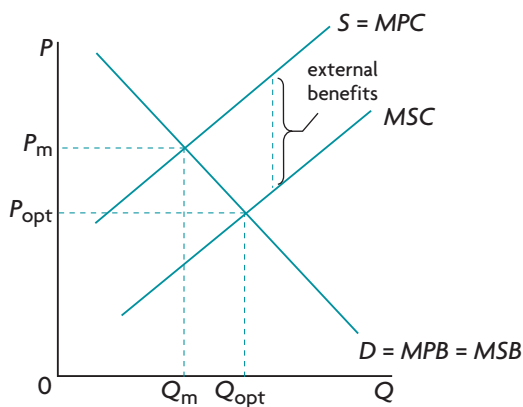


Figure 6.1: Positive production externality

TIP

This shows the external benefits and resource misallocation resulting from a positive production externality

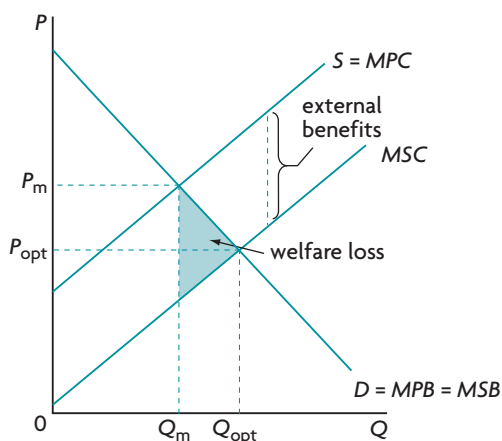
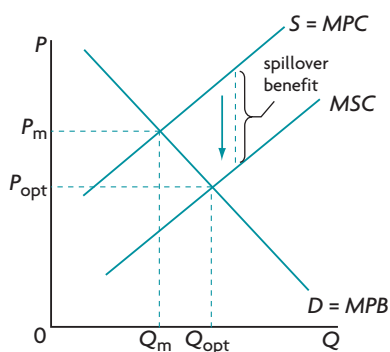


Figure 6.2a: Welfare loss in a positive production externality

TIP

The welfare loss is the shaded area between Q_m and Q_{opt} on the horizontal axis with the point of the triangle pointing to Q_{opt} .

a Direct government provision



b Granting a subsidy

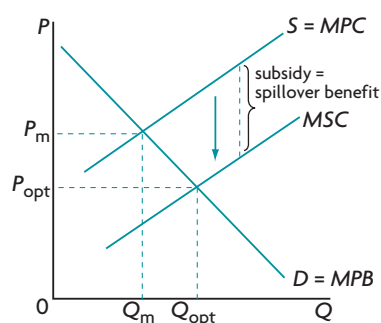


Figure 6.3: Correcting positive production externalities

TIP

This figure shows how this externality can be corrected through: part (a) direct government provision, and part (b) subsidies.

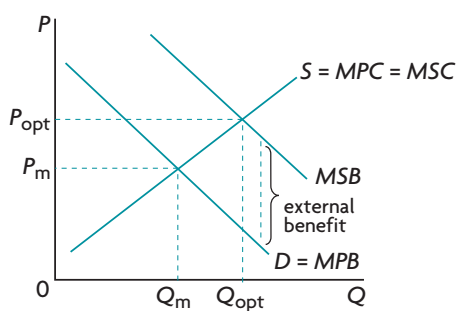


Figure 6.4: Positive consumption externality

TIP

This shows the external benefits and resource misallocation resulting from a positive consumption externality.

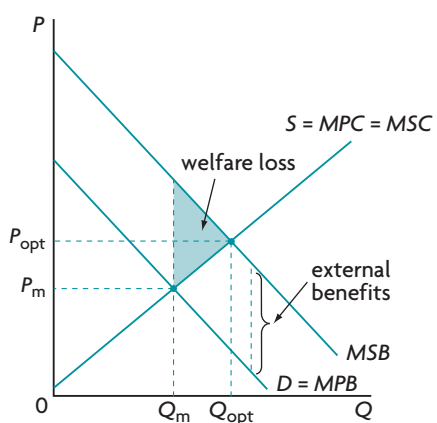
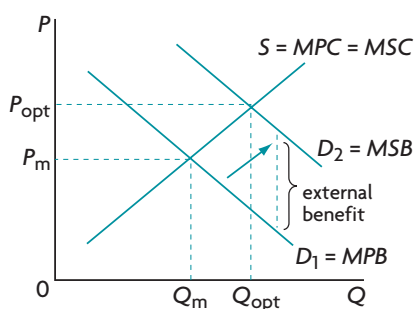


Figure 6.5a: Welfare loss in a positive consumption externality

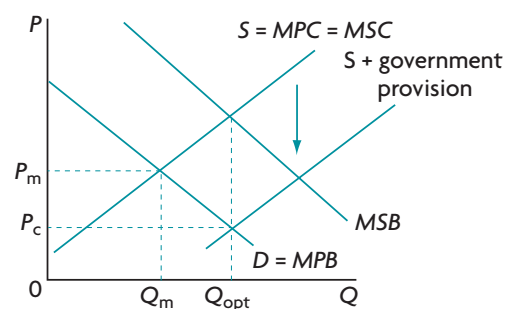
TIP

The welfare loss is the shaded area between Q_m and Q_{opt} on the horizontal axis with the point of the triangle pointing to Q_{opt} .

a Legislation or advertising



b Direct government provision



c Granting a subsidy

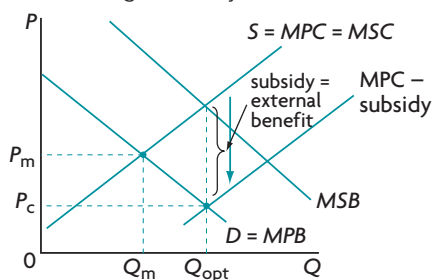


Figure 6.6: Correcting positive consumption externalities

TIP

Legislation, regulations, education, awareness creation and nudges have effects shown in part (a). The effects of direct government provision are shown in part (b). The effects of subsidies are in part (c).

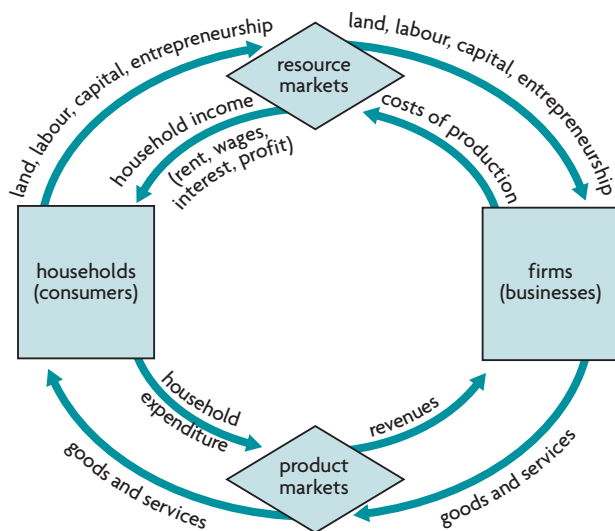


Figure 6.8: (HL only) Circular flow of income model

TIP

This shows that household incomes determined in markets result in income inequalities.

Chapter 7 Market failure and socially undesirable outcomes III: Market power (HL only)

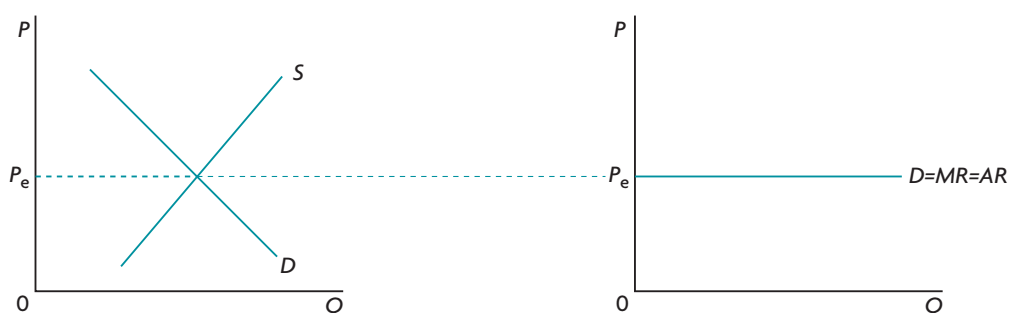
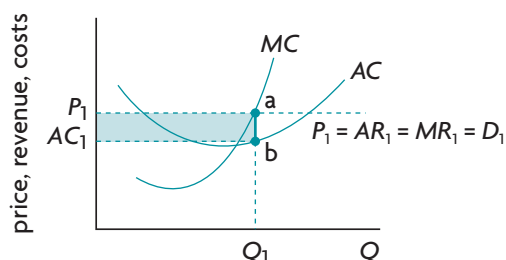


Figure 7.6: (HL only) Market (industry) demand and supply determine demand faced by the perfectly competitive firm

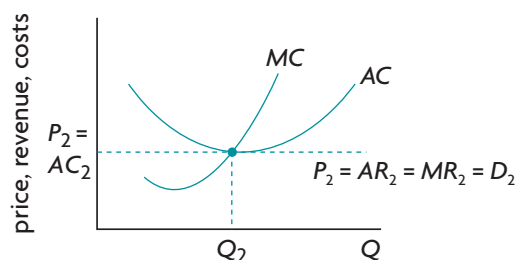
TIP

This diagram shows the perfectly competitive firm as price taker where $P = D = MR = AR$.

a Abnormal profit



b Normal profit



c Loss

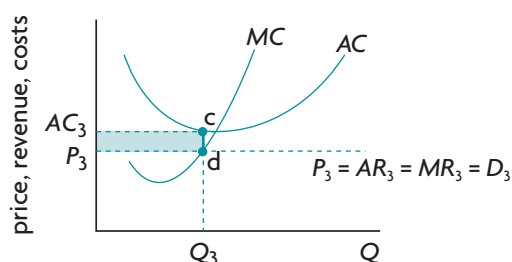


Figure 7.8: (HL only) Short-run profit maximisation in perfect competition

TIP

This diagram shows how the profit maximising firm in perfect competition maximises profit, earning abnormal profit in part (a), normal profit in part (b) and loss in part (c).

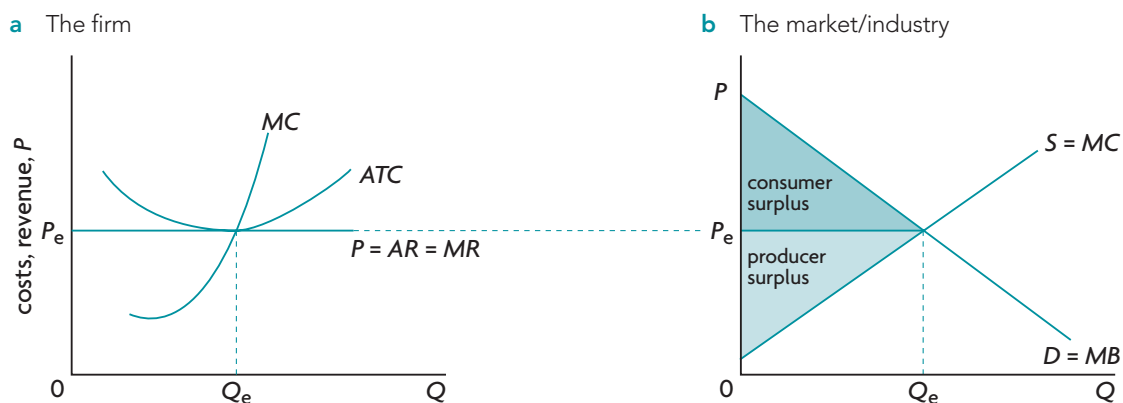


Figure 7.10: (HL only) Allocative efficiency in perfect competition in the long run

TIP

This diagram is used to show that when the perfectly competitive firm is in long run equilibrium it achieves allocative efficiency given by $P = MC$, where at the level of the industry social surplus is maximum and $MB = MC$.

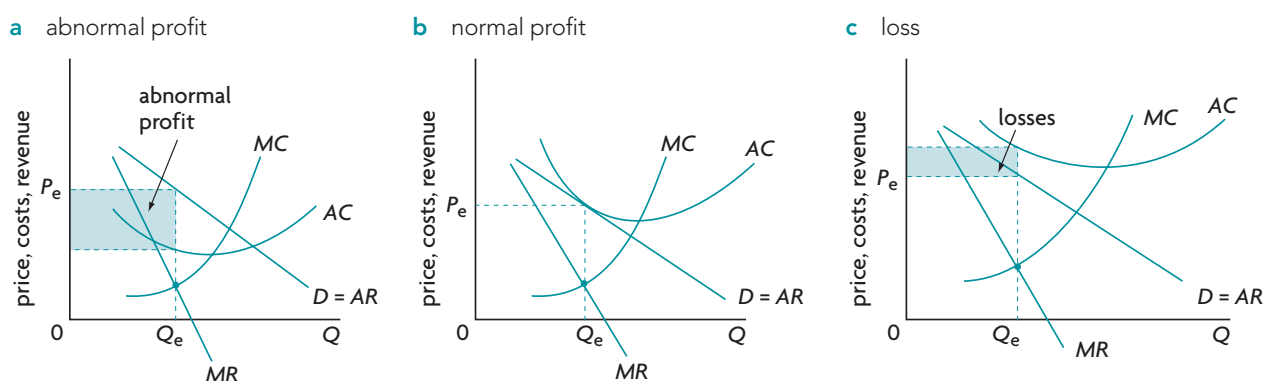


Figure 7.14: (HL only) Profit maximisation and loss minimisation in monopoly: marginal revenue and cost approach

TIP

This shows how the monopolist maximises profit, making abnormal profit in part (a), normal profit in part (b) and loss in part (c).

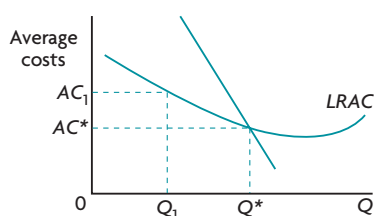


Figure 7.15: (HL only) Natural monopoly

TIP

This shows natural monopoly producing for the entire market when $LRAC$ is still falling.

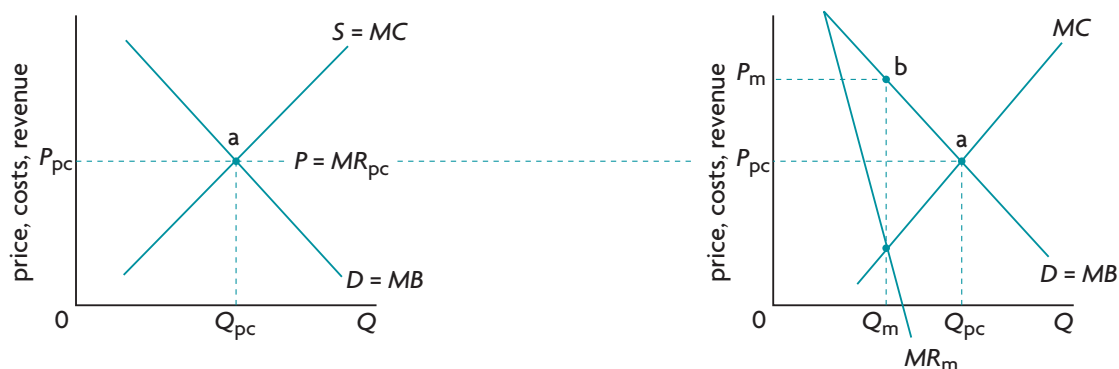


Figure 7.16: (HL only) Higher price, lower output by the firm in monopoly

TIP

These diagrams can be used to show how monopoly charges a higher price while producing a lower quantity than a perfectly competitive industry.

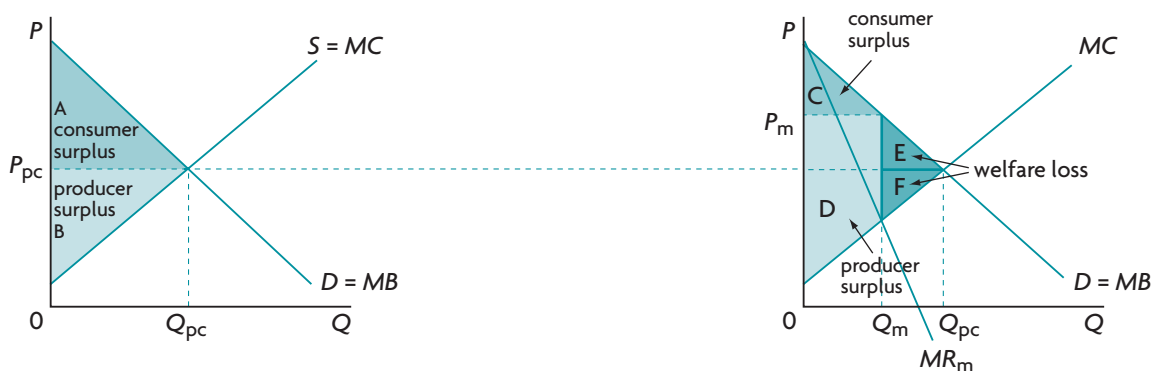


Figure 7.17: (HL only) Consumer and producer surplus and welfare loss in monopoly compared with perfect competition

TIP

This shows that the monopolist's higher price with lower quantity result in welfare loss.

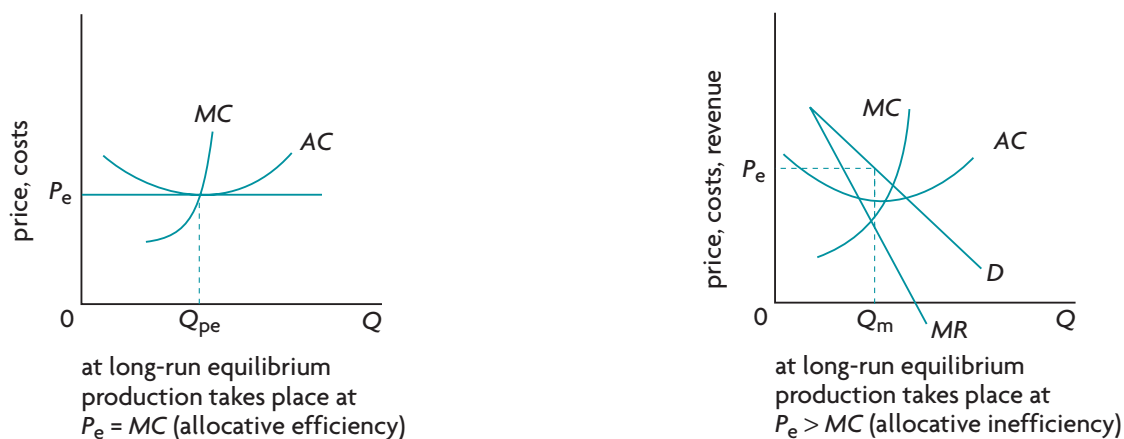
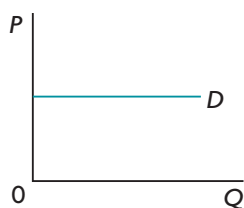


Figure 7.18: (HL only) Allocative efficiency in perfect competition and allocative inefficiency in monopoly

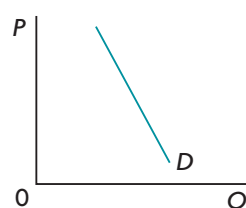
TIP

The perfectly competitive firm produces Q where $P = MC$, indicating allocative efficiency. The monopolist produces a Q where $P > MC$ (or $AR > MC$) indicating the presence of market power.

a Perfect competition



b Monopoly



c Monopolistic competition

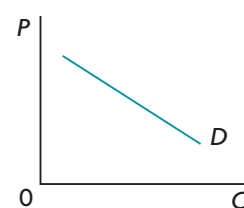


Figure 7.19: (HL only) Demand curves facing the firm under three market structures

TIP

The monopolistically competitive firm faces a more elastic demand curve than monopoly, being somewhere in between monopoly and perfect competition.

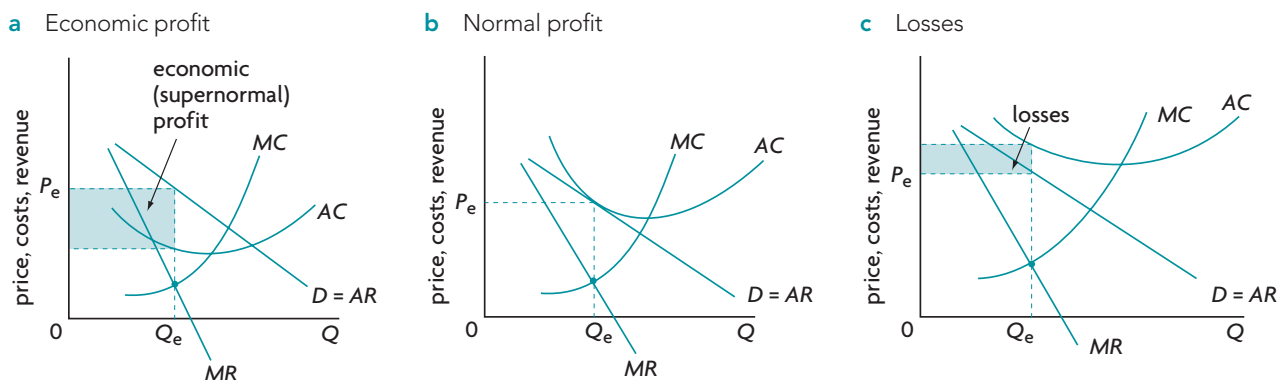


Figure 7.20: (HL only) Short-run equilibrium positions of the firm in monopolistic competition

TIP

This shows how the monopolistically competitive firm maximises profit; there are three possible outcomes in the short run: abnormal profit in part (a), normal profit in part (b) and loss in part (c).

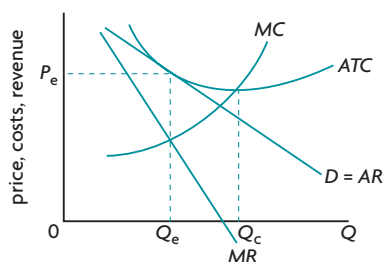


Figure 7.21: (HL only) Long-run equilibrium of the firm in monopolistic competition

TIP

This shows that in the long run the firm in monopolistic competition makes normal profit. It can also be used to show that the firm has allocative inefficiency in long run equilibrium because at the equilibrium level of output Q_e , $P > MC$.

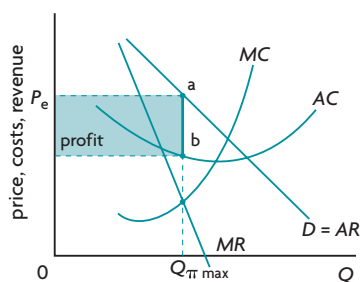


Figure 7.23: (HL only) Profit maximisation by a price-fixing cartel

TIP

This is the same as the monopolist's profit maximisation diagram where the monopolist earns abnormal profit. It shows that the collusive oligopoly behaves like a monopoly.

Unit 3 Macroeconomics

Chapter 8 The level of overall economic activity

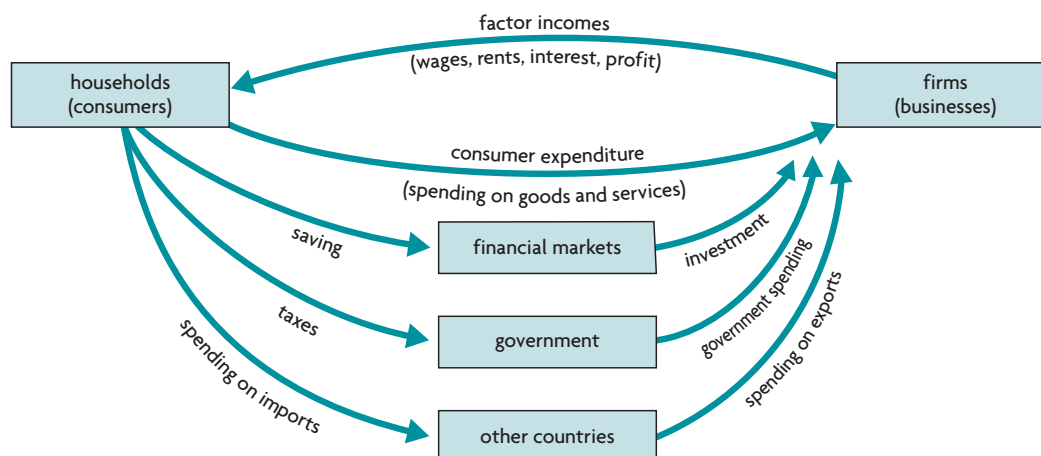


Figure 8.2: Circular flow of income model with leakages and injections

TIP

Refer to Figure 1.6, which appears under Chapter 1, which can be used here to show the interactions between decision-makers, and that the income, output and expenditure approaches to measuring GDP (national income accounting) are equivalent.

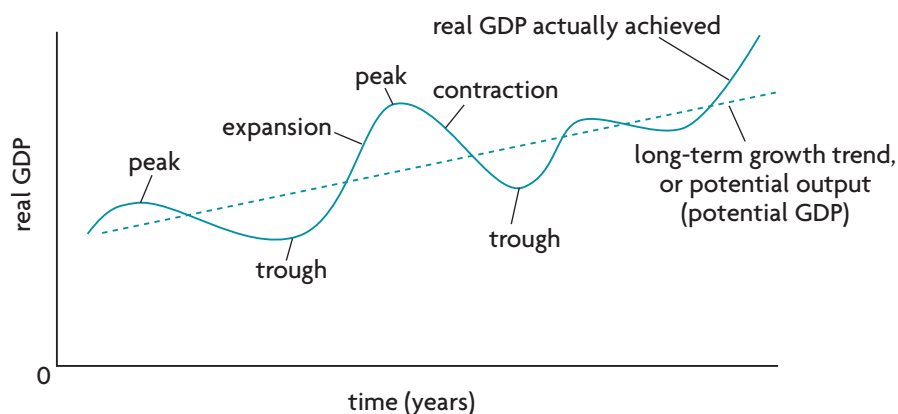


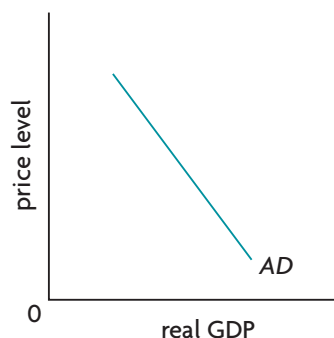
Figure 8.3: The business cycle

TIP

Illustrates short-term fluctuations of real GDP and the long-term growth trend (potential output).

Chapter 9 Aggregate demand and aggregate supply

a The aggregate demand curve



b Shifts in the aggregate demand curve

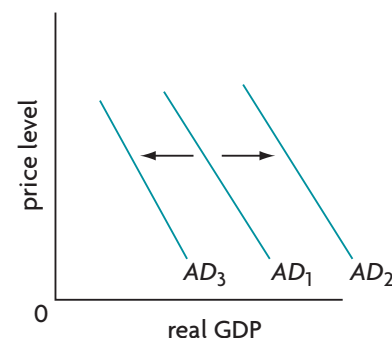


Figure 9.1: The aggregate demand (AD) curve

TIP

Part (a) shows the downward sloping aggregate demand curve; part (b) shows shifts in this curve due to changes in any of the determinants of aggregate demand.

a The upward-sloping SRAS curve



b Shifts in the SRAS curve

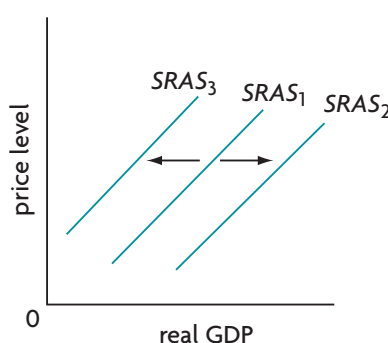


Figure 9.2: The short-run aggregate supply curve (SRAS)

TIP

Part (a) shows the upward sloping SRAS curve; part (b) shows shifts in this curve due to changes in any of its determinants.

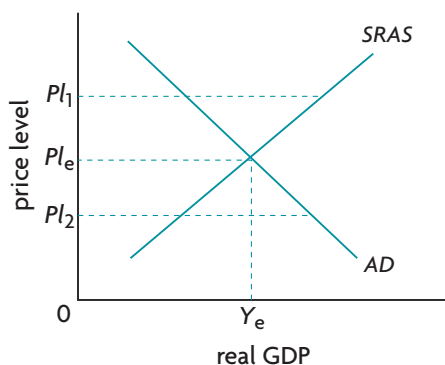
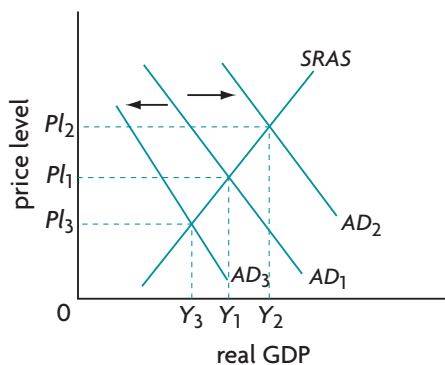


Figure 9.3: Short-run macroeconomic equilibrium

TIP

Short-run macroeconomic equilibrium occurs at the point of intersection of AD with SRAS.

a Changes in aggregate demand



b Changes in short-run aggregate supply

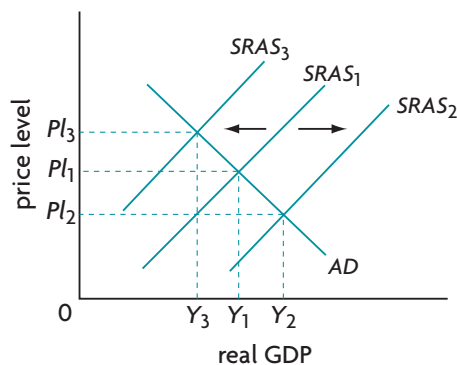


Figure 9.4: Impacts of changes in short-run macroeconomic equilibrium

TIP

Part (a) shows the impact on the price level and real GDP due to changes in AD; part (b) shows the impact of changes in SRAS.

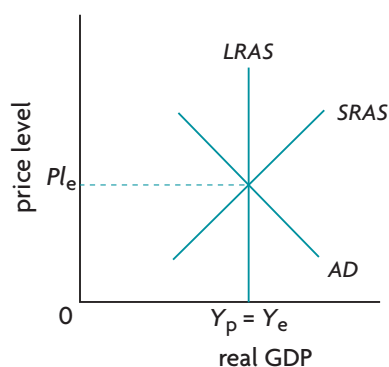
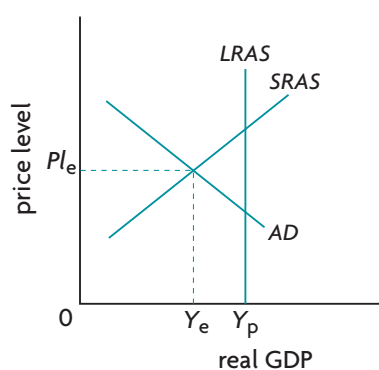


Figure 9.5: The *LRAS* curve and long-run equilibrium in the monetarist/new classical model

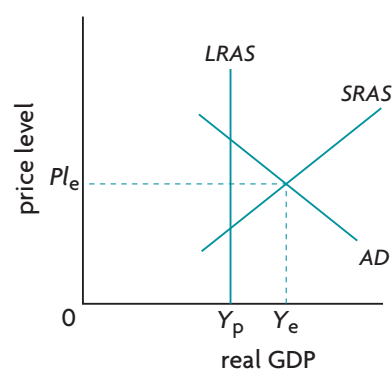
TIP

This shows the *LRAS* curve that is vertical at the level of potential output, as well as long run macroeconomic equilibrium that occurs when the *AD* and *SRAS* curves intersect on the *LRAS* curve.

a The economy with a deflationary (recessionary) gap



b The economy with an inflationary gap



c The economy at the full employment level of output

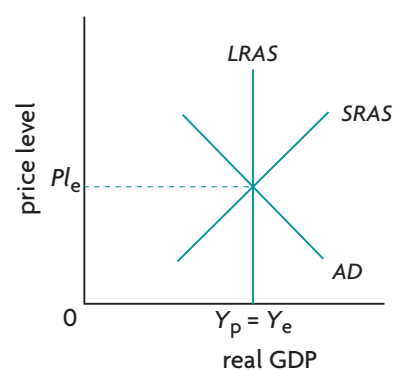
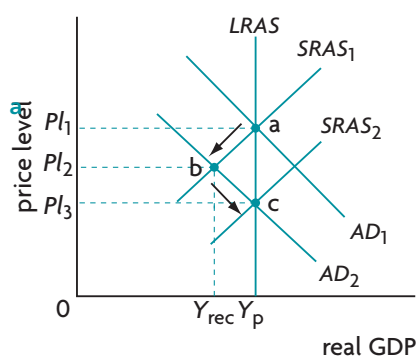


Figure 9.6: Deflationary (recessionary) and inflationary gaps in relation to potential output

TIP

This shows a recessionary or deflationary gap, an inflationary gap, and full employment equilibrium in the monetarist/new classical model

a Creating and eliminating a deflationary gap



b Creating and eliminating an inflationary gap

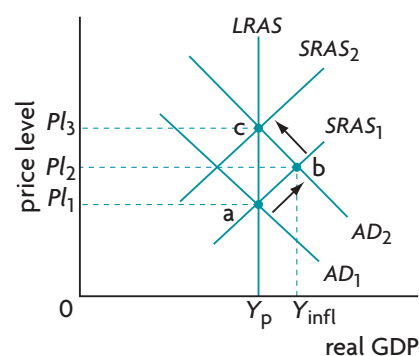


Figure 9.8: Automatic adjustment to long-run full employment equilibrium in the monetarist/new classical model

TIP

This can be used to illustrate how the economy automatically returns to full employment equilibrium in the long run.

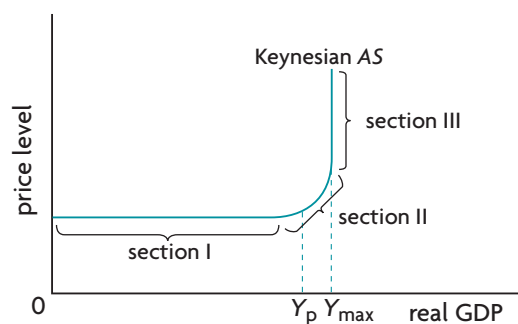


Figure 9.10: The Keynesian aggregate supply curve

TIP

This diagram shows the three segments that compose the Keynesian AS curve.

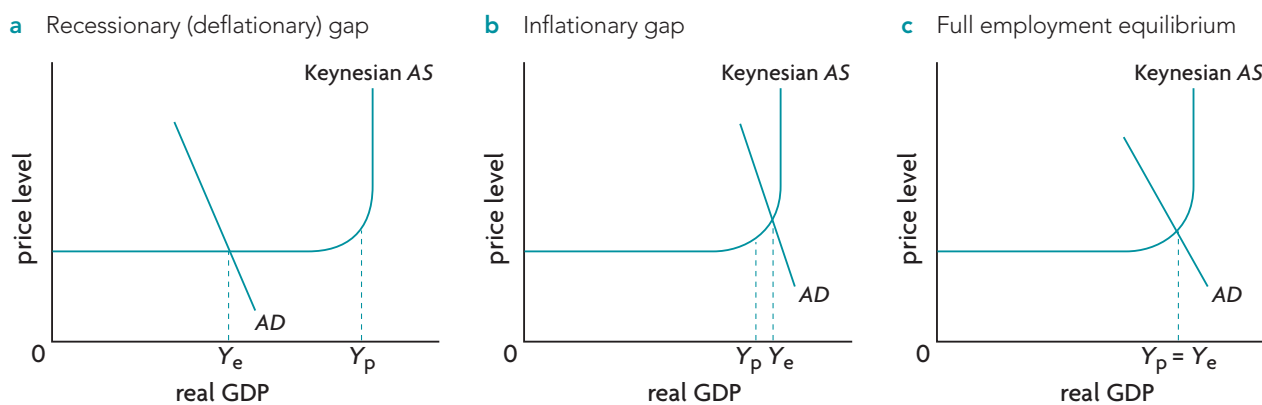


Figure 9.11: Three equilibrium states of the economy in the Keynesian model

TIP

This shows a recessionary or deflationary gap, an inflationary gap, and full employment equilibrium in the Keynesian model.

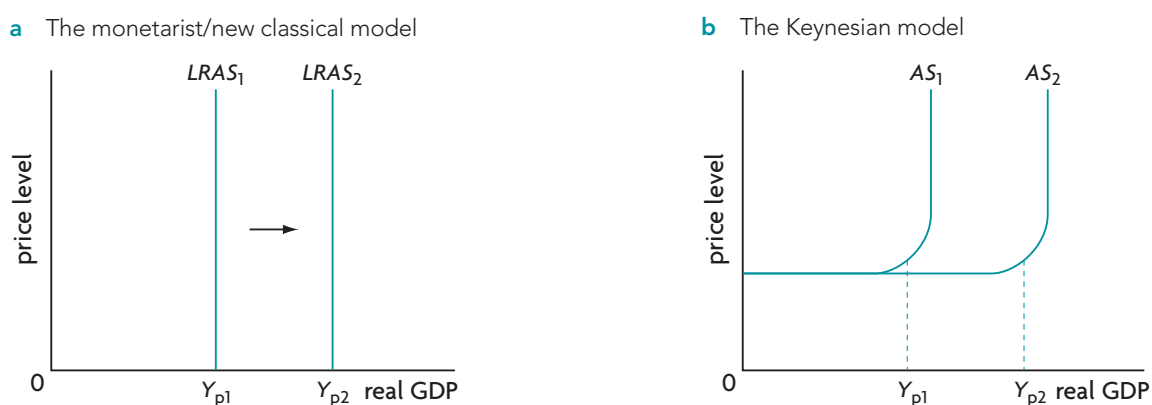


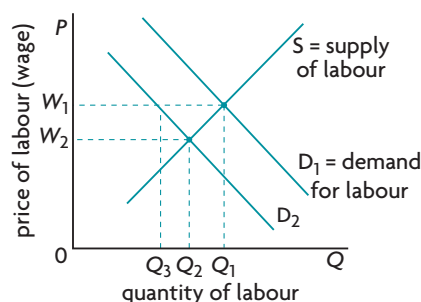
Figure 9.13: Increasing potential output, shifts in aggregate supply curves and long-term economic growth

TIP

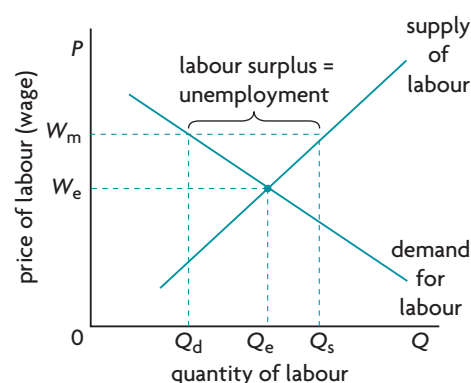
This shows how the $LRAS$ and Keynesian AS curve shift over the long term, illustrating growth of potential output.

Chapter 10 Macroeconomic objectives I: Low unemployment, low and stable rate of inflation

- a** Mismatches between labour demand and labour supply: falling demand for labour



- b** Minimum wage legislation and labour union activities lead to higher than equilibrium wages and lower quantity of labour demanded



- c** Labour market rigidities lead to an increase in costs of production, supply shifts to the left, causing a fall in Q produced; employers hire fewer workers

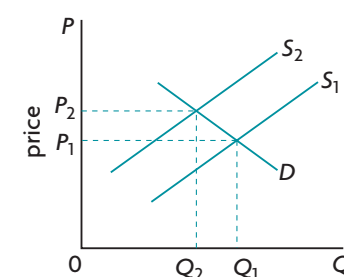
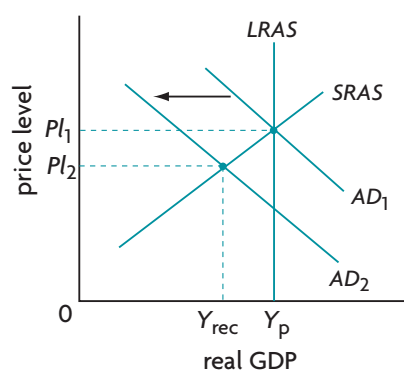


Figure 10.1: Structural unemployment

TIP

Part (a) shows a labour market illustrating unemployment that arises from falling demand for labour in a particular industry or geographical area. Part (b) shows a labour market illustrating how unemployment can arise from a minimum wage. Part (c) shows a product market illustrating the effects of labour market rigidities.

- a** The monetarist/new classical model



- b** The Keynesian model

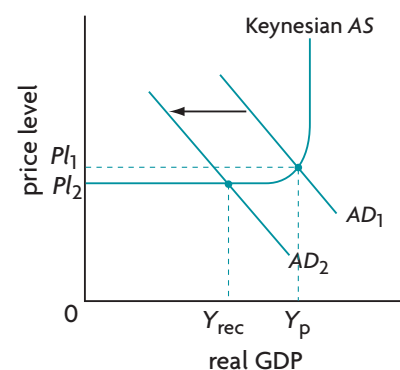
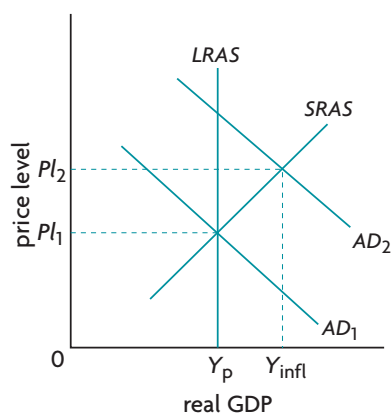


Figure 10.3: Cyclical unemployment

TIP

Using the monetarist/new classical model in part (a) and the Keynesian model in part (b) this figure shows a deflationary gap resulting in lower real GDP which gives rise to cyclical unemployment.

a The monetarist/new classical model



b The Keynesian model

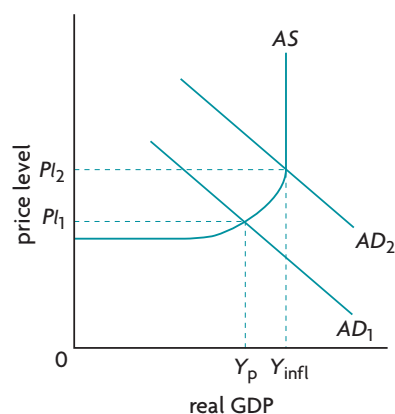


Figure 10.5: Demand-pull inflation

TIP

Using the monetarist/new classical model in part (a) and the Keynesian model in part (b), this figure shows how an increase in aggregate demand results in a higher price level together with an increase in real GDP; this is demand-pull inflation.

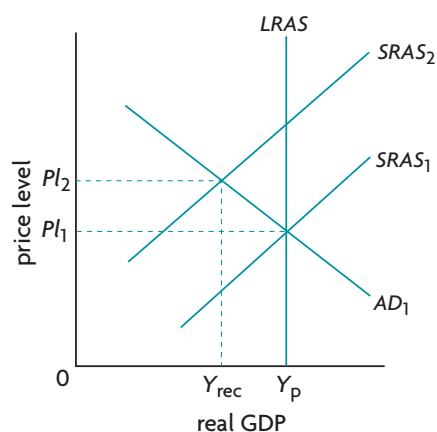
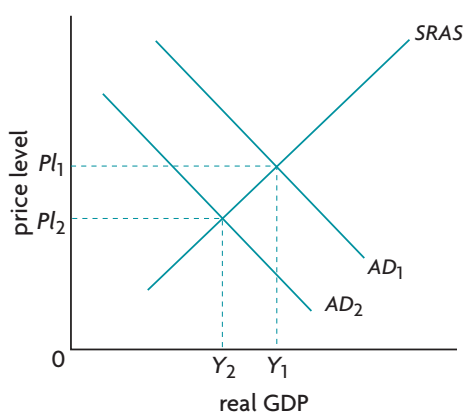


Figure 10.6: Cost-push inflation

TIP

This figure shows how a fall in *SRAS* gives rise to a higher price level and lower real GDP; this is cost-push inflation.

a Falling aggregate demand (AD)



b Increasing short-run aggregate supply (SRAS)

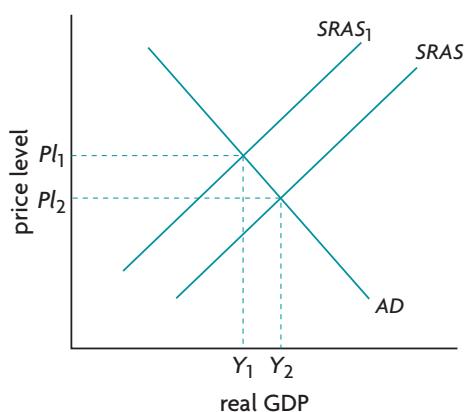


Figure 10.8: Causes of deflation

TIP

Deflation may arise from a fall in aggregate demand, shown in part (a), or an increase in SRAS, shown in part (b).

a The shape of the Phillips curve



b The reasoning behind the Phillips curve in terms of the AD-AS model

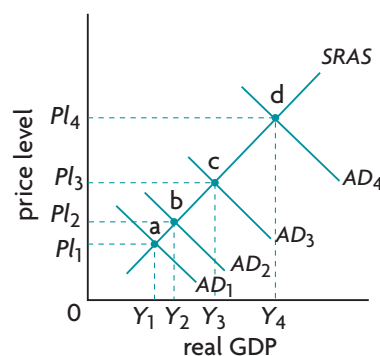
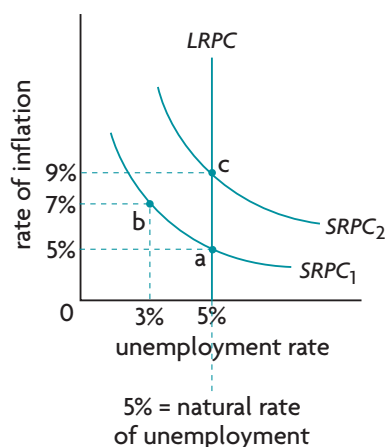


Figure 10.11 (HL only): The short-run Phillips curve

TIP

Part (a) illustrates the trade-off between inflation and unemployment, shown by the short-run Phillips curve. Part (b) uses the AD-AS model to explain why the short-run Phillips curve has a downward slope illustrating this trade-off.

a The shape of the *LRPC* and *SRPC*



b The reasoning behind the two curves in terms of the AD-AS model

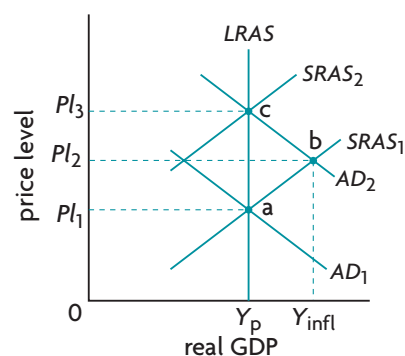


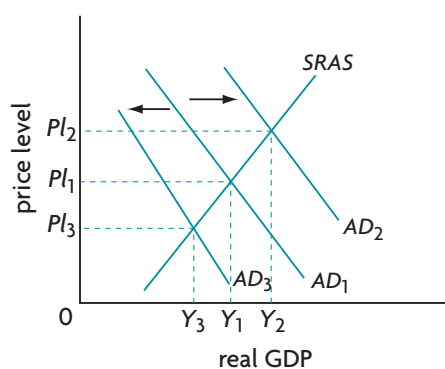
Figure 10.13: (HL only) The short-run and long-run Phillips curves

TIP

Part (a) shows two short-run Phillips curves, together with a long run Phillips curve that is vertical at the natural rate of unemployment. Part (b) uses the AD-AS model to explain why the long-run Phillips curve is vertical at the natural rate of unemployment.

Chapter 11 Macroeconomic objectives II: Economic growth, sustainable level of debt

a The monetarist /new classical model: increase in aggregate demand



b The Keynesian model: increase in aggregate demand

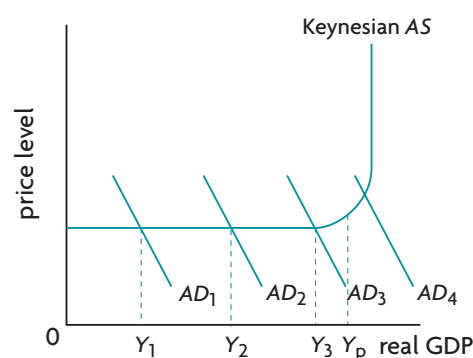


Figure 11.1: Short-term growth in the AD-AS model

TIP

The figure shows how increases in aggregate demand lead to short-term growth using the monetarist/new classical model in part (a) and the Keynesian model in part (b).

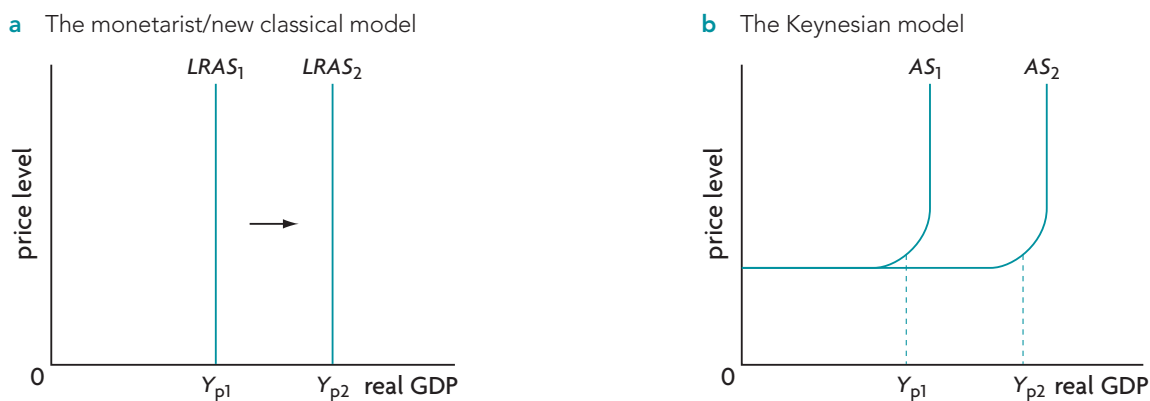


Figure 11.2: Increasing potential output, shifts in aggregate supply curves and long-term economic growth

TIP

This figure illustrates long-term growth in the AD-AS model based on the monetarist/new classical model in part (a) and the Keynesian model in part (b).

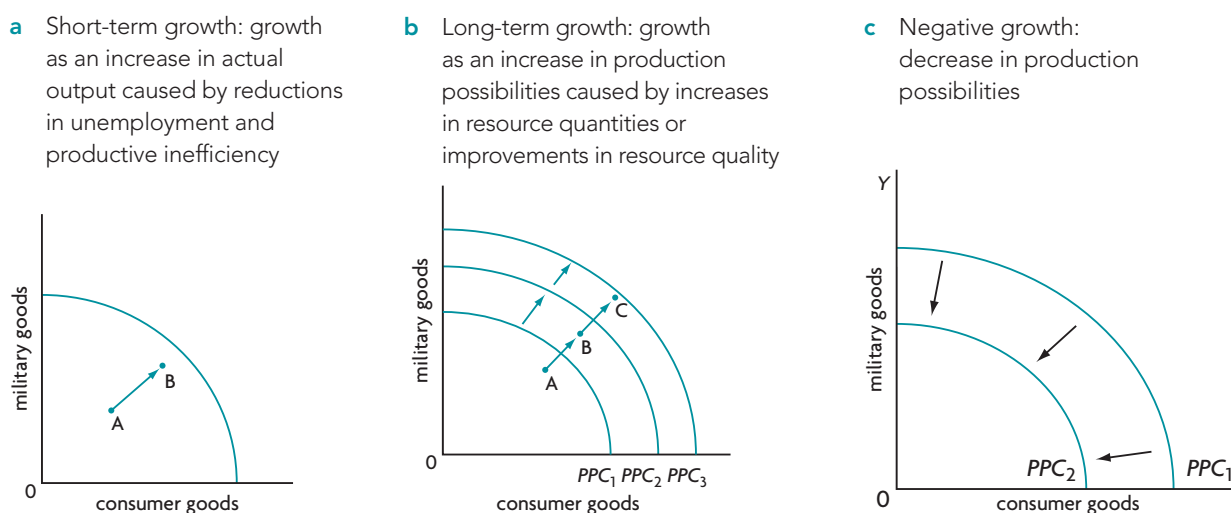


Figure 11.4: Using the production possibilities model to illustrate economic growth

TIP

Part (a) illustrates short-term growth, shown by actual growth in the *PPC* model. Part (b) illustrates long-term growth, shown by growth in production possibilities in the *PPC* model. Part (c) shows negative long-term growth through a decrease in production possibilities.

Chapter 12 Economics of inequality and poverty

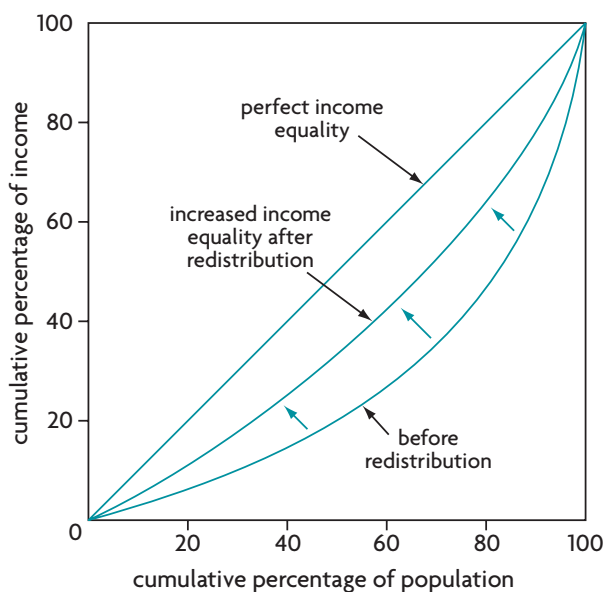


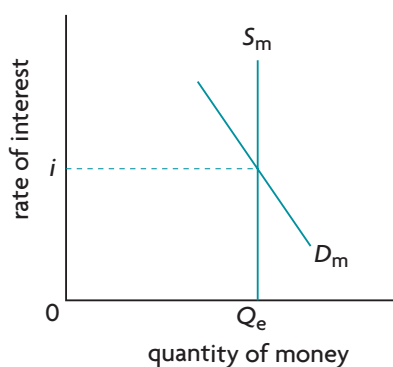
Figure 12.4: Lorenz curves and income redistribution in favour of greater income equality

TIP

This figure shows two Lorenz curves and how they change due to changes in the distribution of income in favour of greater income equality.

Chapter 13 Demand-side and supply-side policies

a Equilibrium rate of interest



b Changes in the supply of money cause changes in the equilibrium rate of interest

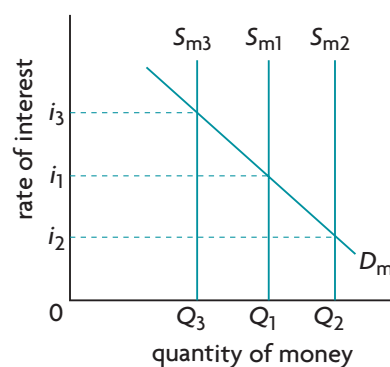
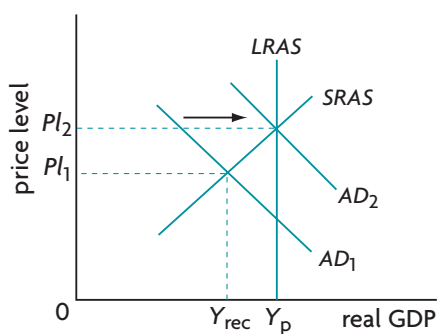


Figure 13.1: (HL only) The money market and determination of the rate of interest

TIP

This figure shows how the rate of interest rate is determined by the interactions of the supply and demand for money.

a The monetarist/new classical model



b The Keynesian model

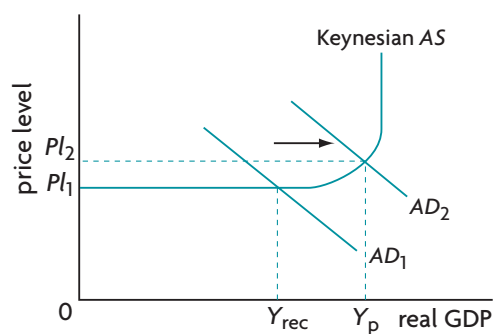
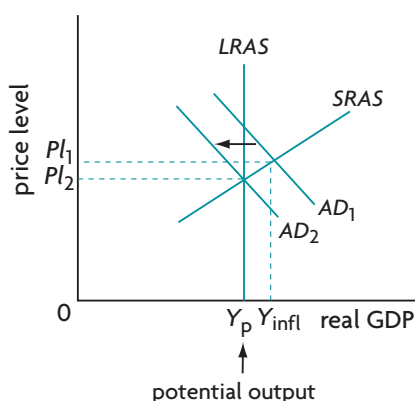


Figure 13.2: Effects of expansionary policy: eliminating a recessionary/deflationary gap

TIP

This figure shows how expansionary monetary and fiscal policy work to eliminate a deflationary or recessionary gap. Part (a) is based on the monetarist/new classical model and part (b) on the Keynesian model. Note that the diagrams are the same for both monetary and fiscal policies.

a The monetarist/new classical model



b The Keynesian model

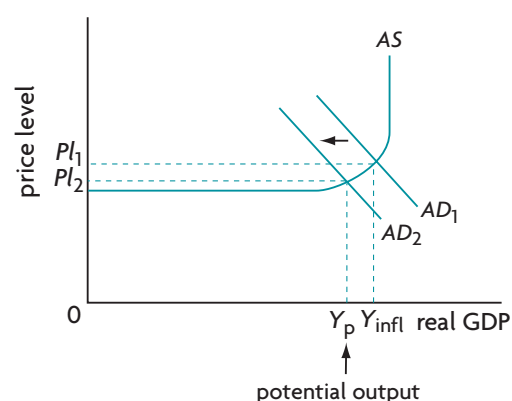
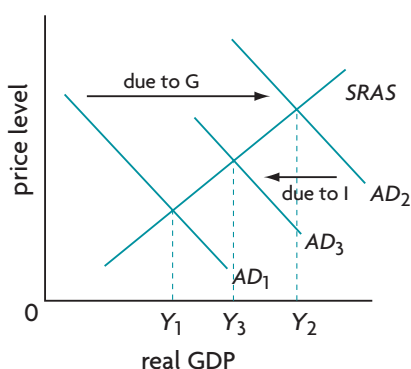


Figure 13.3: Effects of contractionary policy: eliminating an inflationary gap

TIP

This figure shows how contractionary monetary and fiscal policy work to eliminate an inflationary gap. Part (a) is based on the monetarist/new classical model and part (b) on the Keynesian model. Note that the diagrams are the same for both monetary and fiscal policies.

a Partial crowding out



b Complete crowding out

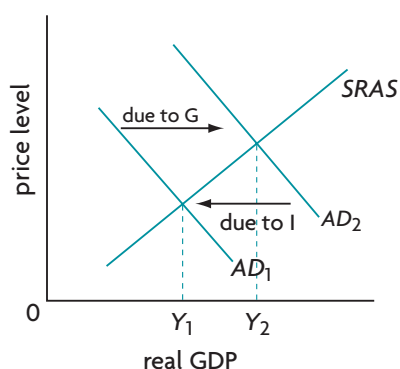
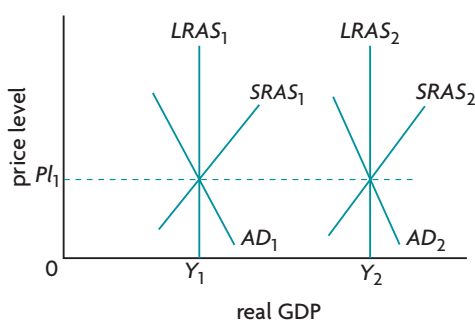


Figure 13.4: (HL only) Crowding out of private investment

TIP

This figure shows how expansionary fiscal policy based on deficit spending (borrowing by the government) may crowd out investment.

a The monetarist/new classical model



b The Keynesian model

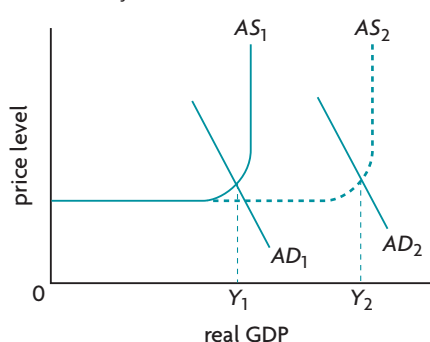


Figure 11.3: Supply-side policies and long-term economic growth: achieving potential (full employment) output in a growing economy

TIP

These two diagrams, based on the monetarist/new classical model in part (a) and the Keynesian model in part (b), show how supply-side policies aim to shift the LRAS curve or Keynesian AS curve to the right. Over the long term, the economy moves from one equilibrium to another. (This figure from Chapter 11 has been included in the material for Chapter 13 because it illustrates the objectives of supply-side policies.)

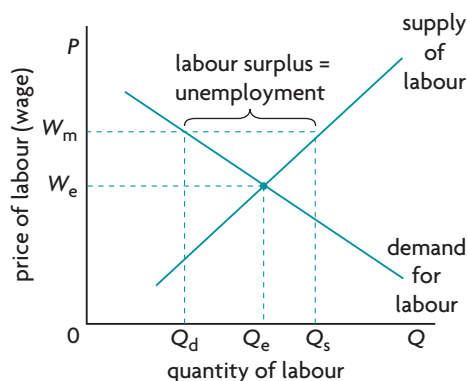


Figure 10.1b: Minimum wage legislation

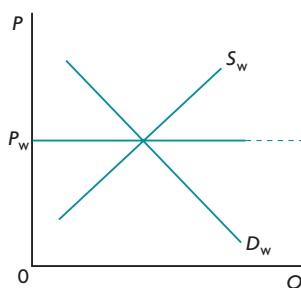
TIP

This figure, which appears under Chapter 10, shows how eliminating or reducing the minimum wage is expected to result in reduction of structural unemployment caused by minimum wage legislation. (Reduction of minimum wages is a supply-side policy.)

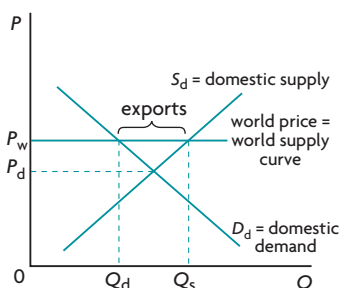
Unit 4 The Global Economy

Chapter 14 International trade: Part I

a World market price for bindles



b Bindle exports under free trade



c Bindle imports under free trade

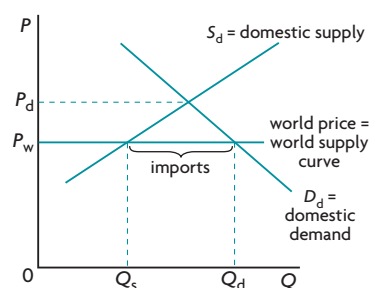


Figure 14.1: Using diagrams to illustrate free trade

TIP

Part a shows how global demand and global supply of a good determine its equilibrium world price. Part b shows that if the world price is greater than a country's domestic price, that country will export the good because it has a comparative advantage in its production. Part c shows that if the world price is lower than a country's domestic price then the country will import the good as it has a comparative disadvantage in its production.

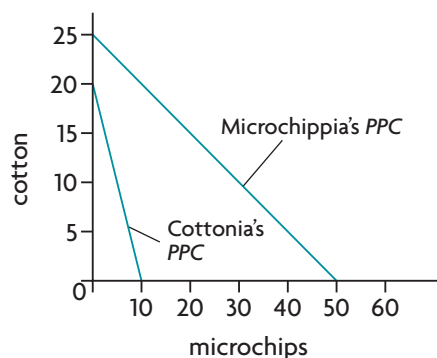
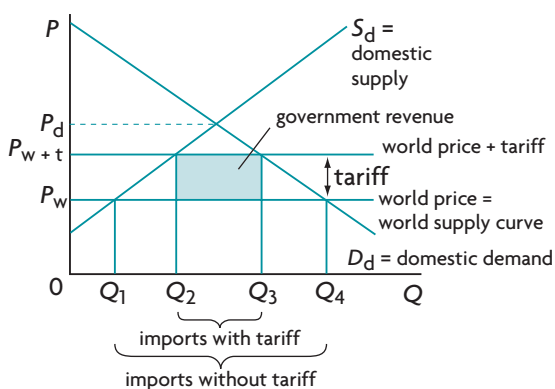


Figure 14.4: (HL only) Comparative advantage

TIP

This figure illustrates comparative advantage of the country that has lower opportunity cost in producing a good. The country with the flatter PPC has a comparative advantage in the good measured on the horizontal axis (therefore Microchippia in microchips).

a Effects on imports



b Effects on welfare

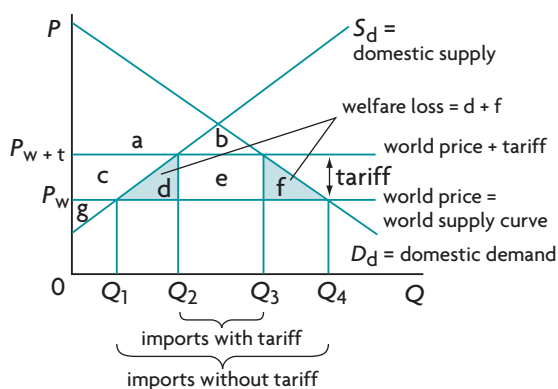
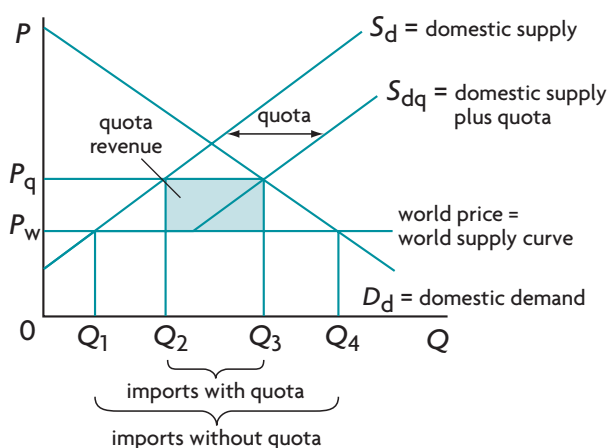


Figure 14.6: Effects of a tariff

TIP

The two figures are used to illustrate the effects of a tariff on price, quantity produced, quantity consumed, quantity of imports, producer revenues, import expenditures and welfare.

a Effects on imports



b Effects on welfare

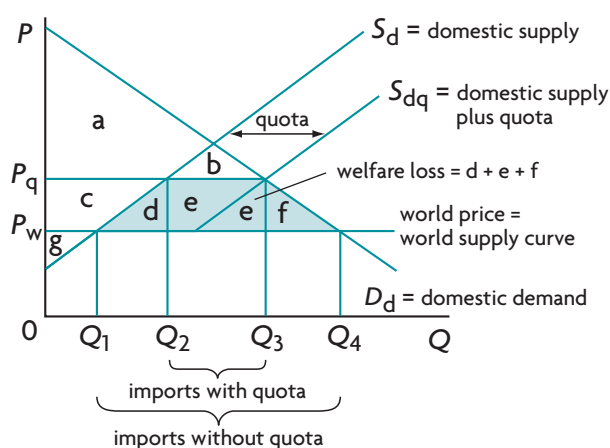


Figure 14.8: Effects of a quota

TIP

The two figures are used to illustrate the effects of a quota on price, quantity produced, quantity consumed, quantity of imports, producer revenues, import expenditures and welfare.

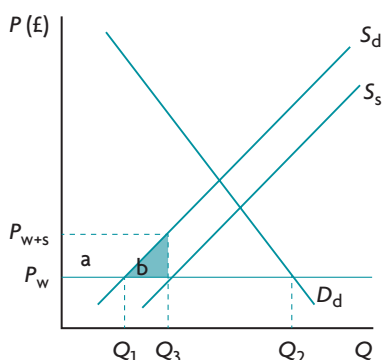


Figure 14.12a: Effects of a production subsidy

TIP

This figure is used to illustrate the effects of a production subsidy on price, quantity produced, quantity consumed, quantity of imports, producer revenues, import expenditures and welfare.

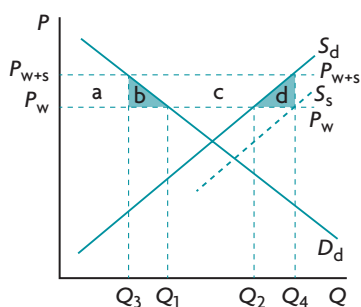


Figure 14.13a: Effects of an export subsidy

TIP

This figure is used to illustrate the effects of an export subsidy on price, quantity produced, quantity consumed, quantity of exports, producer revenues, export revenues and welfare.

Chapter 16 Exchange rates and the balance of payments

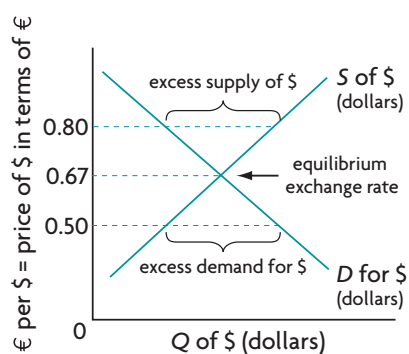
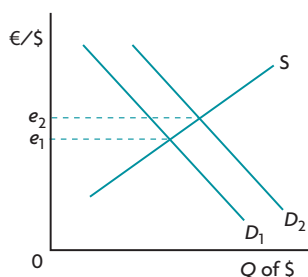


Figure 16.1a: Exchange rate determination in a freely floating exchange rate system: the market for dollars

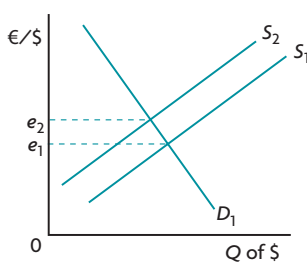
TIP

This diagram shows that the demand for a currency and the supply of a currency determine the equilibrium exchange rate in a floating exchange rate system.

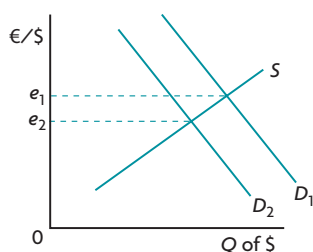
a \$ appreciation due to increase in demand for \$



b \$ appreciation due to decrease in supply of \$



c \$ depreciation due to decrease in demand for \$



d \$ depreciation due to increase in supply of \$

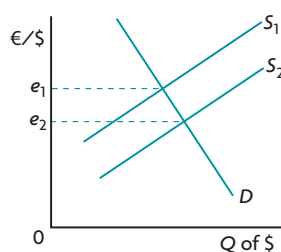
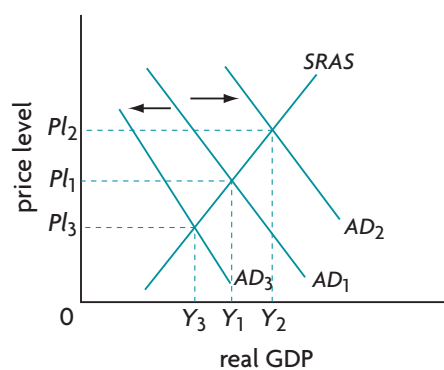


Figure 16.2: Exchange rate changes in a floating exchange rate system

TIP

These diagrams show how changes in currency demand or currency supply result in a new equilibrium exchange rate.

a Changes in aggregate demand



b Changes in short-run aggregate supply

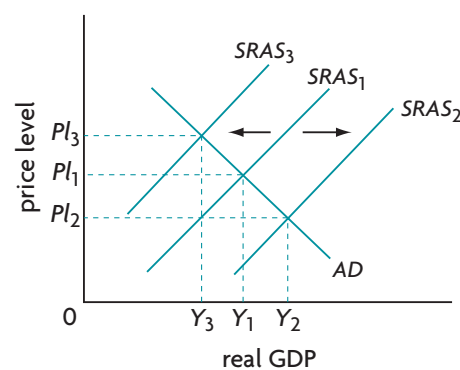
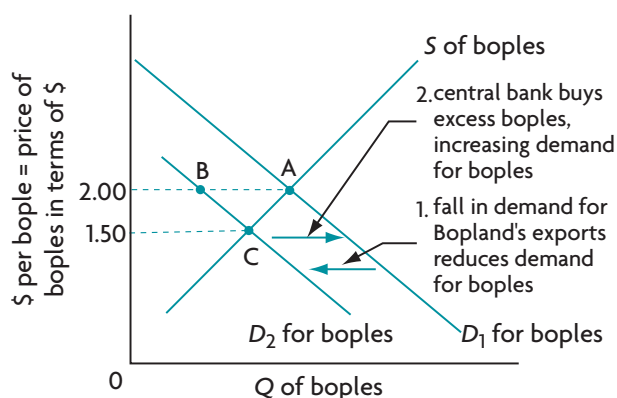


Figure 9.4: Impacts of changes in short-run macroeconomic equilibrium

TIP

Refer to this figure, which appears under Chapter 9, in order to use the AD-AS model to show consequences of changes in exchange rates. For example, currency depreciation may cause an increase in AD (through an increase in X-M), resulting in demand-pull inflation. It can also cause a fall in SRAS due to higher import costs leading to cost-push inflation.

a Shifting the currency demand curve



b Shifting the currency supply curve

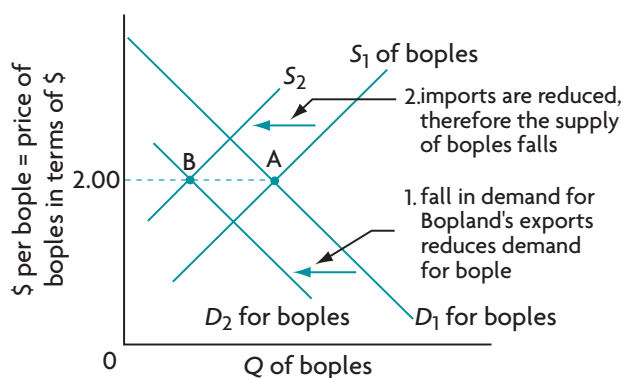


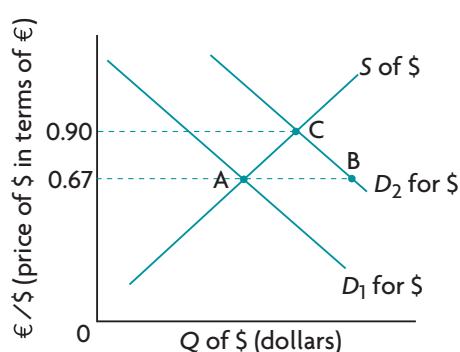
Figure 16.4: Fixed exchange rates: maintaining the value of the bople at 1 bople=\$2.00

TIP

- i In both parts, there is a fall in the demand for exports, causing a fall in the demand for boples, hence a bople depreciation. In part (a) the central bank buys boples increasing the demand for boples to its original level, hence maintaining the fixed bople exchange rate. (Increases in interest rates or borrowing from abroad could have achieved the same effect.) In part (b) the government makes efforts to restrict imports, thus decreasing the supply of boples and maintaining the fixed bople exchange rate.
- ii The same diagram can be used to illustrate managed exchange rates; the central bank or government take actions to change currency demand or currency supply in order to influence the value of the exchange rate.

Chapter 17 Further topics on exchange rates and the balance of payments (HL only)

a Current account surplus causes appreciation



b Current account deficit causes depreciation

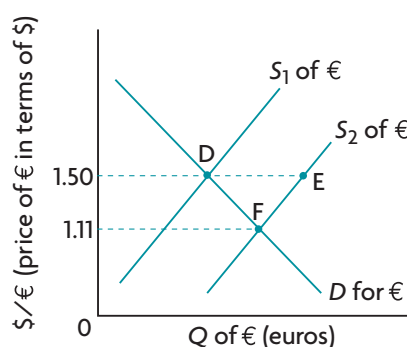
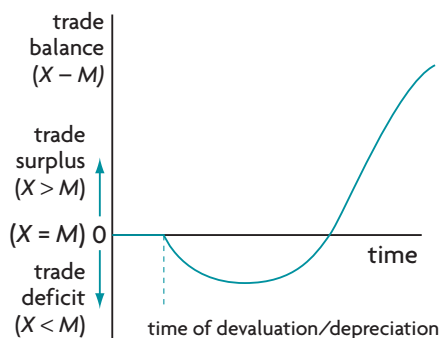


Figure 17.1: (HL only) Current account and exchange rates

TIP

Part (a) shows that when there is a current account surplus, the extra demand for the currency is likely to exert an upward pressure on the value of the currency, or appreciation. Part (b) shows that when there is a current account deficit, the extra supply of the currency is likely to cause a downward pressure on the value of the currency, or depreciation.

- a Value of exports is equal to value of imports at time of devaluation/depreciation



- b Trade deficit at time of devaluation/depreciation

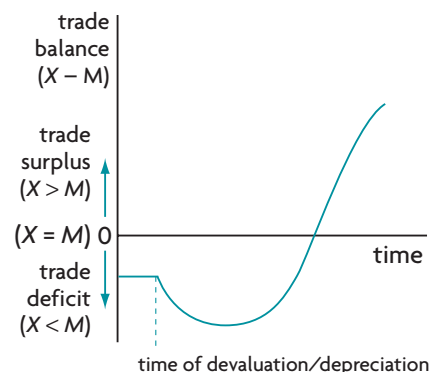


Figure 17.3: (HL only) J-curve effect

TIP

The J-curve effect follows from the Marshall-Lerner condition that is unlikely to be satisfied over short periods of time, while it is more likely to be satisfied over longer periods of time. The figure shows how a current account deficit increases following a depreciation/devaluation which over time begins to improve, turning into a current account surplus.

Chapter 19 Barriers to economic growth and economic development

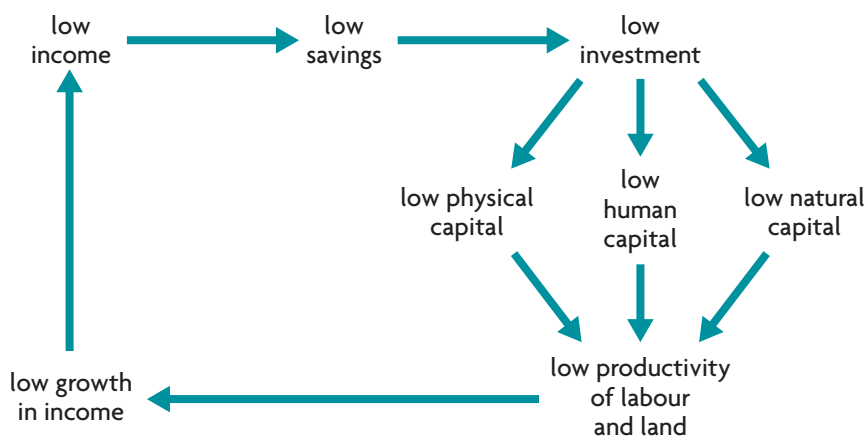


Figure 19.1: The poverty cycle (poverty trap)

TIP

This diagram shows how poverty can be a cause of poverty that is perpetuated from generation to generation.