TOPIC 2

Decision making in markets

Australia has a market-based capitalist economy, or economic system. A nation’s economy is simply an institution or organisation designed to coordinate the production and distribution of goods, services and incomes. In this system, most key economic decisions are made by the price or market system that involves buyers (consumers) and sellers (producers), rather than by government direction or planning. In this system, there is consumer sovereignty. Additionally, most businesses such as shops, farms, mines, factories and banks are privately owned, rather than owned by the government or state. In other words, we also have private enterprise or a capitalist economy.

Under market capitalism, rising or falling prices in thousands of markets, both in Australia and overseas, provide price signals or instructions to the owners of resources. Based on these signals, the profit-seeking private owners of resources can make three key economic decisions (i.e. decide what and how much to produce, how to produce and for whom to produce). The information is designed to help them maximise their profits and incomes. But before we get ahead of ourselves, we need to have a clearer picture in our minds about what markets looks like and how they operate. Essentially, this is the main focus of topic 2.

Originally, markets usually took place in a particular location where buyers and sellers would meet face to face and negotiate prices through a process of offer and counteroffer. This fruit market is very typical of this type of market. However, increasingly, markets are conducted online and may not involve direct contact between buyers and sellers.

2.1 The meaning and nature of markets in Australia

There are literally thousands of individual markets scattered across the country. For instance, there are markets for property, beauty products, labour, shares, music, cars, money capital, education, health, international currencies or foreign exchange, fish, aviation, telecommunications, education, vegetables, sport and many more. Given the importance of the market in most countries like Australia, a closer examination is a necessity.
What exactly is a market?

A **market** is simply an institution or organisation where buyers (who create a **demand** for the item) and sellers (who control the **production** or **supply** of the item) of a particular good or service negotiate an agreeable price. Often this process involves some haggling or bargaining with offer and counteroffer. This is because buyers want to purchase at the lowest price and sellers want to receive the highest price. However, despite these common features of all markets, there are some differences. For example:

- There are open or free markets, as well as black markets (e.g. for illegal production like non-prescription drugs).
- Some markets can involve face-to-face contact between consumers and producers at a particular location (e.g. the Queen Victoria Market in Melbourne). Increasingly, however, due to the rapid growth of the internet and improvements in telecommunications, individuals participating in a market may never see each other, may live in different countries and may even use different currencies.
- In some markets, the level of business competition or rivalry is strong with hundreds of sellers of a single product (i.e. pure competition), while in others it is very weak with only one seller (i.e. pure monopoly).

### Market structure and other features of markets

**Market structure** is a term that is mainly used to describe the type of competition found in different **markets**. As shown in figure 2.1, there are **four** main types of market structure found in Australia, each with unique features:

1. **Pure competition.** At one extreme, some markets are characterised by **pure competition**. Here, there is strong rivalry between perhaps hundreds of firms selling an identical product. Individual producers are unable to set their own prices and have little or no **market power** and so are called **price takers**. This is common in the markets for agricultural commodities like beef, wheat and apples.

2. **Pure monopoly.** At the other extreme to pure competition, there are markets involving **pure monopolies**. Here a single firm controls the output of an industry. These firms have **much** market power and are able to set or influence prices. They are called **price makers** and might include the markets for some utilities like water, the only general store in a small town or perhaps even your school canteen!

**MARKET STRUCTURES**

<table>
<thead>
<tr>
<th>Stronger competition (little market power)</th>
<th>MARKET STRUCTURES</th>
<th>Weaker competition (much market power)</th>
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<tbody>
<tr>
<td><strong>Pure competition</strong></td>
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<td><strong>Pure monopoly</strong></td>
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<tr>
<td>- Many buyers and sellers in the industry (perhaps hundreds)</td>
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<td>- Strong competition</td>
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<td>- Firms are ‘price takers’ with little market power to set their prices</td>
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<td>- No brand names, since the product is identical</td>
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<td>- Perfect knowledge of market conditions exists</td>
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<tr>
<td>- Ease of entry and exit by new firms because there are few barriers like high start-up costs or government regulation</td>
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<td>- Good examples: some primary products or rural commodities, the share market and property market</td>
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<tr>
<td><strong>Monopolistic competition</strong></td>
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<td><strong>Oligopoly</strong></td>
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<td>- A moderate number of sellers in the industry (perhaps 30 or 40), each selling similar but not identical products to satisfy the same type of want</td>
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<td>- Quite strong competition</td>
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<td>- Product or brand name differentiation is important, as is advertising (e.g. style, design, colour, service and image)</td>
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<tr>
<td>- Quite good knowledge of market conditions</td>
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<tr>
<td>- Moderate ease of entry and exit by new firms because there are few barriers or restrictions</td>
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<td></td>
</tr>
<tr>
<td>- Good examples: clothing manufacturers, retail trade, furniture, and restaurants</td>
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<tr>
<td><strong>Oligopoly</strong></td>
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<tr>
<td>- Relatively few (usually up to 8 or 10) but large sellers control the industry, with some potential for collusion and abuse of market power. Sellers often watch their rivals when setting prices.</td>
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<tr>
<td>- Brand and product differentiation are quite important ways of selling, using advertising and the development of a certain image</td>
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<tr>
<td>- Fairly difficult entry and exit for firms due to high start-up costs and the barriers operated by already well-established companies</td>
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<td>- Good examples: supermarkets, banks and oil companies</td>
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**FIGURE 2.1** The four types of market structure reflect the level of competition and other features.
3. Monopolistic competition. Monopolistic competition involves quite a few firms, perhaps 40 or even more, operating in a single industry. However, each firm uses its unique brand name and different product features to sell its items. An example might be the clothing industry or restaurants.

4. Oligopoly. An oligopoly exists where several large firms control the output of an industry. Here, selling often depends on brand names and there is the potential for producers to collude in an attempt to limit competition and fix prices (although this is illegal under the Australian Competition and Consumer Act, 2010). However, of these four types of market structure, many economists argue that perfect or pure competition is the ideal. As we shall soon see in more detail, this is because strong competition can result in lower prices, better quality goods and superior service for consumers; greater efficiency in using or allocating our scarce resources; higher levels of production and national output (GDP); and generally better material living standards.

**Assumptions or preconditions needed for pure competition in a market**

Given that purely competitive market is often seen as a good thing, the question is ‘what are the preconditions that must be met for this type of market to exist’?

- **Strong competition.** There should be strong or pure competition between sellers and buyers in the market, as is found among fruit and vegetable producers. Also, on the producers’ side, no individual supplier should be in a position to actually fix prices and all producers must sell their identical products without product differences. With perfect competition, firms are simply price takers in the market. Of course, in the real world, pure competition does not always exist because of powerful monopolies (i.e. one firm more or less controls an industry — for example, Australia Post or Melbourne Water), oligopolies (e.g. cardboard packaging, oil, banking, supermarkets, aviation and power companies) and monopolistic competition.

- **Ease of entry.** There is limited competition in monopoly or oligopoly-type markets because there are barriers to entry that restrict the setting up of new competing businesses. A common reason for this is that existing firms are large and well established. New businesses would find start-up costs expensive. In addition, in some industries, other barriers exist like government red tape, safety requirements, licensing and paper work. By contrast, it is generally cheaper and easier for new firms to gain entry into purely competitive markets.

- **No product differentiation (homogenous product).** Competition is usually more intense when producers are selling identical products not distinguished by brand names, advertising, product appearance or special packaging. That is, the market is for a ‘homogeneous’ product. Hence, pure competition is more likely to exist in the wheat or wool markets than in the market for designer clothes, petrol or cars.

- **Consumer sovereignty exists.** Consumer sovereignty is where the particular types of goods and services produced closely reflect what consumers purchase, rather than this decision being made through government regulation or controls.

- **Absence of government controls and restrictions.** The price system generally works best when there are no government regulations or restrictions affecting prices or limiting competition in an industry. To be competitive, markets must usually be free or deregulated.

- **Good or perfect knowledge of the market.** Clearly, the price system can work properly only when both buyers and sellers are fully informed and knowledgeable about current trends in market prices, and the features of the products involved. This is because price signals coming from the market are used to transmit the decisions of consumers to sellers who then produce or supply those goods and services that are wanted. A lack of good information by consumers results in poor decisions being made and resources being misallocated.

- **Firms try to maximise their profits.** It is assumed that business decisions are mainly motivated by self-interest and a desire to maximise profits and incomes. Hence, in purely competitive markets, the owners of resources should shift their resources from one use to another, in order to reflect changing prices and fortunes in different industries and changes in consumer demand. This requires that there be no major barriers to the entry or exit of firms into or out of an industry. In addition, resources need to be mobile so they can be redirected to areas of highest profitability.

- **Consumers behave rationally.** In a purely competitive market, it is believed that buyers will behave in an financially rational way to promote their own self-interest, by being attracted by low prices for finished products and discouraged by high prices.

In Australia, it is fairly obvious that most of our markets fail to fully satisfy all these preconditions required for pure competition to exist. However, perhaps the best examples of almost pure competition in Australia are the markets for fruit, vegetables and some rural products, shares and property. However, pure competition does not exist in markets involving steel, chemical, banking and finance, petroleum, shipping and transport, groceries, cardboard packaging, glass, postal and water supply. Here, monopolies and oligopolies are more common. Even the general store in isolated small country towns or your own school canteen, can face little competition in their respective markets.
Coles supermarkets advertise to say that their retail prices are going down, down, down so the consumer supposedly gets a better deal as a result of competition between supermarkets. However, some people believe that Coles have also used their market power to put enormous pressure on their suppliers and local producers, including farmers, paying them lower prices. If this is the case, it may lead to lower profits for producers and thus, eventually, business closures for some supermarket suppliers.

The effects of market structure and market power

Market structure has many important impacts for all Australians. For example, the level of market power or competition between business rivals can have the following effects:

- **Competition means higher efficiency in allocating resources.** Where competition is weak among firms selling in a market, there is often less need to use resources efficiently or keep production costs low in order to survive. By contrast, when there is strong rivalry, businesses are usually lean and are forced to cut their costs and organise production as efficiently as possible. An exception to this general rule is when having a monopoly operating in a single market allows for mass production. Here, some variable costs per unit of output produced can be lower and spread over higher production volumes. Bigger firms can achieve higher efficiency and gain economies of large-scale production.

- **Competition results in lower prices and greater purchasing power of incomes.** When there are monopolies and competition is weak in various markets, often prices are higher since there is little rivalry between businesses. In addition, firms in an oligopoly-type market are sometimes tempted to collude and use anti-competitive behaviour. This restricts competition, pushes up prices and rips off customers. In turn, higher prices reduce the purchasing power of our incomes and lower our material living standards. In reverse, when there is strong competition between firms battling to survive by improving efficiency, consumers usually enjoy lower prices and improved purchasing power.

- **Competition means better quality goods and services.** Strong competition in a market usually means that to survive, sellers are forced to ensure that the quality of their goods is equal to or better than those offered by competitors. By contrast, when there are monopolies and oligopolies, customers have little or no choice of products. They must purchase whatever is available and even put up with poor service and reduced customer satisfaction. However, there may be an exception in a situation where a large monopoly producer uses its size and financial strength to put money into product research and development (R&D) that would otherwise be beyond the reach of small firms. In this case, customers may benefit from weaker competition.
Competition often lifts material wellbeing and living standards.

- Competition improves international competitiveness of local firms. Given that weak competition often leads to lower efficiency and higher prices, it is easy to see how this would undermine the international competitiveness of local firms selling their products both here and overseas. In turn, this would tend to decrease Australia’s exports and, as a result, reduce our levels of national production and income.
- Competition often lifts material wellbeing and living standards. If weak competition and market power lead to lower efficiency, higher prices, inferior international competitiveness, reduced levels of national production (GDP) and incomes, and hence economic wellbeing, it is likely that strong competition should help raise our average material living standards.

**CHECK YOUR UNDERSTANDING**

1. What is meant by a market? Give three important examples of markets found in your town or city.
2. Explain what is meant by the term market structure or market power.
3. Identify and outline the main features of each of the following types of market structure:
   a. Pure competition
   b. Monopolistic competition
   c. Oligopoly
   d. Pure monopoly.
4. Identify and outline three important effects of each of the following types of market structure:
   a. Pure competition
   b. Pure monopoly.

**APPLIED ECONOMIC EXERCISES**

Apply your understanding of this subtopic by accessing and completing the Applied economic exercise(s).

- School-assessed tasks > Applied economic exercises > Question 1

2.2 The big picture — the role of markets in our economy as a way of making key economic decisions

Australia has a contemporary market-based capitalist economy or economic system. Among other things, this means that most important economic decisions are made through the free or unregulated interaction of individual buyers and sellers of goods and services in thousands of markets, 24/7 (rather than generally relying on government regulation as still occurs in a few countries like North Korea).

There are three key economic decisions or questions that are largely answered through the operation of our market-based economy:

1. The ‘what and how much to produce’ question. The market is used to make most decisions about the specific types and quantities of each good (for example, chocolate bars, tourist accommodation, butter, guns) or service (e.g. education, health, financial, entertainment) that are to be produced. The general rule is that only profitable things are made — unprofitable production is abandoned.
2. The ‘how to produce’ question. The market helps to make decisions about the specific production methods to be used by a business (e.g. the combinations of labour and capital equipment) in order to make each particular good or service. Generally, businesses use the most efficient, lowest cost and most profitable methods to produce goods and services.
3. The ‘for whom to produce’ question. The market helps to make decisions about how the nation’s goods, services and incomes that have been produced, will be shared or divided between members of society. Here, people’s incomes and their purchasing power largely depend on the value of their economic contribution, as valued by the market.
In order to get a grasp of the big idea, figure 2.2 seeks to step through how the market system operates to make these key economic decisions.

**Step 1** Because of scarcity, people cannot have all the goods and services they would like. This forces them to choose between satisfying competing wants. In a market-based economy, these choices or decisions are made through the operation of the price system (also called the market mechanism) that involves the forces demand and supply.

**Step 2** Together, consumers or buyers (demand) and producers or sellers (supply) negotiate the equilibrium market price of each good or service, similar to what occurs in an auction. This establishes relative prices — the price level of one good or service compared with that of another. However, when the non-price conditions affecting buyers (i.e. demand) and/or non-price conditions affecting sellers (i.e. supply) change in the market so there is either a market glut or a market shortage, this causes the equilibrium market price to either rise or fall, thus creating price signals. These signals provide information or instructions to the owners of resources, helping them to make key economic decisions guided by self-interest and their desire to maximise profits.

**Step 3** Profit-seeking owners of natural, capital and labour resources watch these price signals and use them to help make key decisions about how they should allocate resources. The signals help them to select the type and quantity of particular goods or services to produce (‘What and how much to produce?’). They also help them to decide the cheapest, lowest cost and most profitable production methods (‘How to produce?’), as well as deciding how the goods, services and incomes should be shared or distributed (‘For whom to produce?’).

- If there is a rise in the market price for a particular good or service, relative to the price of other items, the production of this product usually becomes relatively more profitable, thus attracting more resources into this type of production (assuming that firms’ production costs or the prices paid for resources have not changed, especially in an upwards direction). In turn, higher profits lead to higher levels of production and income for those in this industry.
- If there is a fall in the final equilibrium market price of a particular good or service, relative to that for producing other items (assuming there is no change in firms’ production costs or prices paid for resources, especially not downwards), the production of this item becomes relatively less profitable. This tends to repel resources and cut production, along with the incomes of those connected with this industry.

**FIGURE 2.2** How Australia’s price or market system makes key economic decisions and allocates resources

With this general background in mind, we are ready to drill deeper into our study of microeconomics. Microeconomics looks at how the smaller units like consumers, producers or firms, an individual market, and an industry making up our overall economy behave; what motivates their choices and what are the effects of their decisions. So our study of microeconomics will involve a closer look at areas like the following:

- buyers and the law of demand
- sellers and the law of supply
- market equilibrium
- changes in market equilibrium due to non-price conditions of demand and supply affecting decisions
- the allocation of resources.

Some of our analysis will involve the use of demand–supply diagrams. These are a type of tool used to represent a particular market, and allow us to visually illustrate the effects of changes in the way buyers and sellers behave.

**eBookplus**

Weblinks The weblinks in these activities are available in this topic’s student resources tab.

- The market economy
- What is a market economy?

**CHECK YOUR UNDERSTANDING**

1 Given the problem of scarcity, what are the three main economic questions or decisions that must be answered in any economy?
2 Outline the three main steps whereby Australia’s market-based system operates to allocate resources between competing or alternative uses.

**APPLIED ECONOMIC EXERCISES**

Apply your understanding of this subtopic by accessing and completing the Applied economic exercise(s).

- School-assessed tasks > Applied economic exercises > Question 2
2.3 Looking at how buyers and sellers behave in the market using demand–supply diagrams

Another way to look at how a competitive market makes decisions and allocates resources is through the use of demand–supply diagrams. Each diagram represents a market for a single good (e.g. sunglasses) or a specific service (e.g. live entertainment). These diagrams or graphs are especially useful when analysing the impact of price and non-price factors or conditions affecting buyers (i.e. demanders) and sellers (i.e. suppliers), on market prices.

In Australia’s market economy, demand and supply help determine prices that, in turn, signal to owners of resources how those productive inputs should be used.

No doubt you are keen to see what these diagrams look like. First, however, let’s look at the influences affecting buyers and sellers in the marketplace.

The law of demand and the demand line — how buyers behave in a market

Buyers or consumers are a really important group in any market. Demand in a market occurs when buyers use their income to purchase a particular quantity of a good or service. They demand or want to purchase various goods and services. This group might include consumers like you or me, businesses or even governments. Perhaps the most important thing to notice is that buyers in a market are more willing to purchase a good or service at a lower price, rather than at a higher price. The price of a product is an important factor affecting how much consumers are prepared to buy. This observation is expressed in the law of demand.

The law of demand (how changes in price cause a movement along the demand line)

The law of demand simply states that the quantity of a particular good or service that buyers are prepared to purchase varies inversely (in the opposite direction) with the change in price. Hence:

- As the price increases, there is a contraction in the quantity demanded, causing a movement upwards along the demand line.
- As the price decreases, there is an expansion in the quantity demanded, causing a movement downwards along the demand line.

It is hardly surprising that consumers or buyers behave like this, causing the quantity demanded to contract or expand with a rise or fall in price. For example, demand contracts as the price rises because the good or service becomes less affordable for most of us and thus fewer people have the necessary money or desire to spend in this way. By contrast, as the price decreases, demand expands because it is more affordable and tempting for more people.
So what would a demand line (representing how consumers respond to price) look like if plotted on a graph where price is located on the vertical axis and quantity on the horizontal axis?

Imagine there was a competitive market for bananas. Using hypothetical data from the table, figure 2.3 graphically illustrates the relationship that exists between the quantity of bananas demanded and the price. For now, we will assume that the change in the price is the only factor affecting the quantity demanded. In other words, all other non-price factors remain constant.

<table>
<thead>
<tr>
<th>Price per kg of bananas</th>
<th>D₁ = Original quantity of bananas demanded each year ('000 kg)</th>
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</thead>
<tbody>
<tr>
<td>$1</td>
<td>5</td>
</tr>
<tr>
<td>$2</td>
<td>4</td>
</tr>
<tr>
<td>$3</td>
<td>3</td>
</tr>
<tr>
<td>$4</td>
<td>2</td>
</tr>
<tr>
<td>$5</td>
<td>1</td>
</tr>
</tbody>
</table>

**Figure 2.3** The demand line showing the law of demand for bananas where the quantity demanded varies inversely with price.

Notice that when we plot the quantity demanded at each possible price on a graph (see figure 2.3), the resulting demand line drops down and to the right. It thus has a negative slope and visually illustrates the law of demand.

- A move downward along the demand line from point A to point B is called, an expansion in demand. This movement is only caused by a fall in price. In this situation, demand expands from 2000 kg per year at the price of $4 per kg (point A) to 4000 kg at the lower price of $2 per kg (point B).
- In reverse, a move upwards along the demand line from point B to point A is called a contraction in demand and is caused only by a rise in the price of bananas. In this case, demand contracts from 4000 kg per year at a price of $2 per kg (point B) to only 2000 kg per year at a higher price of $4 per kg (point A).

Here it is really important that students understand that these movements along the demand line (called an expansion or contraction in the quantity demanded) are caused solely by a change in price. As mentioned previously, we have assumed that all other non-price factors have remained constant. We will look at these other conditions shortly. It is also worth pointing out that just for simplicity the demand line for bananas has been drawn as a straight line, even though in the real world it would usually be a concave curve (called a demand curve).

While our example here has been the demand for bananas, the same sort of buyer behaviour could be expected for any other good (such as grapes, hot dogs, soft drinks, mobiles, wheat or iron ore) or service (such as financial, medical, ski instructor, gardening or entertainment) in a fairly competitive market.

**The law of supply and the supply line — how sellers behave in a market**

Sellers or producers are also a really important group in any market. They supply or sell goods and services, and this group might include both small and large businesses. Perhaps the most important thing to notice is that sellers in a market are more willing to supply a good or service at a higher price, rather than at a lower price. The price of a product affects how much businesses are prepared to sell. This observation is expressed in the law of supply. Again for now, we will assume that the change in the price is the only factor affecting the quantity supplied and that non-price influences are constant.

**The law of supply (how changes in price cause a movement along the supply line)**

The law of supply simply states that the quantity of a particular good or service that businesses are prepared to supply varies directly (in the same direction) with a change in its price. Hence:

- As the price increases, there is an expansion in the quantity supplied causing a movement upwards along the supply line.
- As the price decreases, there is a contraction in the quantity supplied causing a movement downwards along the supply line.
It is hardly surprising that businesses or suppliers behave like this where the quantity supplied contracts or expands with a decrease or an increase in price. This is because it becomes less profitable for producers to sell their product or service at a low price, rather than selling it at a high price.

So what would a supply line (representing how sellers respond to price) look like if plotted on a graph where price is located on the vertical axis and quantity on the horizontal axis?

Again, imagine there was a competitive market for bananas. Using hypothetical data from the table, figure 2.4 graphically illustrates the relationship that exists between the quantity of bananas supplied and the price, remembering that we have assumed that all other non-price factors that might also influence supply are held constant.

<table>
<thead>
<tr>
<th>Price per kg of bananas</th>
<th>S1 = Original quantity of bananas supplied each year ('000 kg)</th>
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</thead>
<tbody>
<tr>
<td>$1</td>
<td>1</td>
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<td>$2</td>
<td>2</td>
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<td>$3</td>
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<td>$4</td>
<td>4</td>
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<td>$5</td>
<td>5</td>
</tr>
</tbody>
</table>

Notice that when we plot the quantity supplied at each possible price on a graph (see figure 2.4), the resulting supply line slopes up and to the right. It thus has a positive slope and visually illustrates the law of supply.

- A move upward along the supply line from point A to point B is called an expansion in supply and is only caused by a rise in price. Looking at this line, the quantity supplied expands from 2000 kg per year at the price of $2 per kg (point A) to 4000 kg at the higher price of $4 per kg (point B).
- In reverse, a move downwards along the supply line from point B to point A is called a contraction in supply and is caused only by a fall in the price of bananas. In this case, supply contracts from 4000 kg per year at a price of $4 per kg (point B) to only 2000 kg per year at the low price of $2 per kg (point A).

Again it is really important that you understand that these movements along the supply line (either called an expansion or contraction in the quantity supplied) are caused solely by a change in price. Again we have assumed that all other possible non-price factors that might influence supply have been held constant. We will look at these non-price factors shortly. In addition, it is also worth pointing out that just for simplicity the supply line for bananas has been drawn as a straight line, even though in the real world this would be a concave curve (called a supply curve).

While the example we have used here has involved the supply for bananas, the same sort of seller behaviour could be expected for any other good (such as grapes, hot dogs, soft drinks, sun cream or deodorant) or service (such as financial, health, education, gardening or entertainment) in a fairly competitive market.

**Determining the market equilibrium price**

As we have seen, buyers prefer to purchase at a relatively low price, while suppliers prefer to sell at a relatively high price. This apparent conflict of interest or disagreement is resolved by negotiation and haggling — offer and counteroffer — and the operation of a competitive market. Indeed, there is only one price on which both buyers and sellers agree and are reasonably satisfied. This is called the equilibrium market price. At equilibrium, the quantity demanded exactly equals the quantity supplied.

As seen in figure 2.5 and the accompanying table, apart from the equilibrium price of $3 per kg of bananas, there is no alternate market price where this compromise can occur. Only at this price is both the quantity demanded and the quantity supplied exactly equal — both demand and supply are equal to 3000 kg per year. At equilibrium, both buyers and sellers are happy with the deal and the market is cleared so there is neither a shortage nor a surplus.
The process of actually reaching market equilibrium in a free and competitive market is a simple one:

- **Prices below the equilibrium.** At a very low price for bananas of, say, $2 per kg, equilibrium cannot occur simply because 4000 kg per year are demanded yet only 2000 kg are supplied. An exceedingly low price like this creates a market shortage of 2000 kg, making buyers very unhappy when they go away empty handed. In order for this shortage to be solved, the price of bananas needs to rise. As the price moves upwards, there is a contraction along the demand line for bananas, as well as an expansion along the supply line (the laws of demand and supply apply here) until this shortage disappears and the market reaches the equilibrium point where the quantity demanded and supplied are exactly equal.

- **Prices above the equilibrium.** Equilibrium is also not possible at high price of, say, $4 per kg of bananas. The problem here is a market surplus or glut of 2000 kg. This arises due to a demand of only 2000 kg, compared with the supply of 4000 kg at that price. Sellers would be most unhappy because they have unsold stock that would perish. In a free and competitive market, this problem would soon disappear as the market price falls. A lower price would mean that the demand for bananas would expand and supply would contract. This would restore equilibrium where the quantities demanded and supplied were again exactly equal.

In our analysis so far, we have seen that market forces involving demand and supply determine the actual equilibrium price for bananas. However, the same sort of explanation would also apply to the equilibrium price paid for any type of good or service in a competitive market. All competitive markets basically operate in the same way.

**Changes in the equilibrium price caused by changes in non-price factors or conditions**

Looking around us, we notice that the prices of most goods and services, including bananas, are always changing up and down from week to week and day to day. This is the result of changes in the level of demand and level of supply for each good or service, as both buyers and sellers react to changing circumstances or non-price conditions that also affect their economic decisions and the quantity they are prepared to buy or sell at any given price.

- **Changes in non-price demand-side conditions** can cause buyers to purchase a greater or smaller quantity of a particular good or service at all possible prices. This will either shift the position or location of the whole demand line to the right of the original line (showing an increase in the quantity demanded at all possible prices), or to the left (showing a decrease in the quantity demanded at all possible prices).

- **Changes in non-price supply-side conditions** can cause sellers to produce a greater or smaller quantity of a particular good or service at all possible prices. This will either shift the position of the whole supply line to the right of the original line (showing an increase in the quantity supplied at all possible prices), or to the left (showing a decrease in the quantity supplied at all possible prices).

By altering the position of the demand line and/or the position of the supply line, changes in the non-price conditions of demand or supply will bring about a change in relative prices (i.e. the price level of one particular good or service relative to that of another). This also has a knock-on effect and alters the relative profits of producing a particular good or service. A higher equilibrium price that makes it relatively more profitable will normally attract more resources to be allocated to the production of this product, while a fall in the equilibrium price will usually cause fewer resources to be allocated to the production of this item. In so doing, it causes scarce resources to be reallocated among competing uses by their profit-seeking owners.
Changes in non-price conditions shift the whole demand line

Figure 2.6 reveals that there are a number of common non-price conditions of demand or factors that might either increase or decrease the quantity of a particular good or service that buyers are prepared to demand at a given price. On a demand–supply diagram, these factors or conditions shift the whole demand line for a good or service to the right or to the left of the original line.

**A rise in disposable income** (income available for spending after receiving welfare and paying income tax) usually increases the quantity of a good or service demanded at a given price.

**A fall in disposable income.** A fall in disposable income usually decreases the quantity of a good or service demanded at a given price.

**An increase in population size.** Generally, a rise in population, perhaps due to immigration or higher birth rates, will increase the quantity of most goods or services demanded at a given price.

**A decrease in population size.** Generally, a decline in population, perhaps due to the ageing of the population, might decrease the quantity of some goods or services demanded at a given price (e.g. pop music).

**More fashionable and trendy.** Over time, some goods and services become more fashionable, perhaps as a result of new technology and slick advertising (e.g. the latest iPhone). This increases the quantity of most goods or services demanded at a given price.

**Less fashionable.** Over time, some goods and services become less fashionable. The quantity demanded by consumers at a given price declines (e.g. DVD players).

**A drop in interest rates paid on borrowed credit.** Some people and businesses need to borrow credit from banks and pay interest rates, in order to purchase expensive goods or services. When interest rates are lower and borrowing is cheaper, the quantity of most goods or services demanded at a given price increases (e.g. a house, car or electrical appliances, and holidays).

**Higher interest rates paid on borrowed credit.** Generally, higher interest rates will lower the quantity of most goods or services demanded at a given price.

**A substitute become dearer.** Substitutes are a particular good or service that can be easily replaced by another (e.g. margarine is a substitute for butter and cotton for wool) so the price of one affects the demand for the other. For instance, when the price of margarine becomes dearer, the demand for butter is likely to increase.

**A substitute become cheaper.** When the price of a substitute product like cotton becomes cheaper, the demand at any given price for the other product like wool decreases, as people switch between products.

**A complementary good or service becomes cheaper.** Complementary goods and services are those used or bought at the same time as another item (e.g. cars and fuel). Hence, when the price of one complement falls, the demand for the other complementary good is likely to rise (e.g. a fall in petrol prices leads to a rise in the demand for larger 4WD vehicles).

**A complementary good or service becomes dearer.** When the price of one complementary good or service rises, there is usually a decrease in the demand for the other complementary product (e.g. the price of coffee rises and the demand for sugar decreases) at a given price.

**Higher levels of consumer or business confidence.** Confidence levels relate to how households and businesses feel about their future economic situations. For instance, when households are feeling more confident or optimistic, they often purchase a greater quantity of some types of goods and services at a given price (e.g. luxury cars and holidays).

**Lower levels of consumer or business confidence.** Consumer or business pessimism about the future is often reflected in a decrease in the demand for some types of goods (e.g. appliances and beauty products) or services (e.g. entertainment and restaurants) at any given price.
The onset of summer or winter. In summer, the demand for some products at a given price increases (e.g. ice cream, surfboards and air conditioners). Furthermore, the onset of winter might see a rise in the demand for other types of goods or services at a given price (e.g. snow skis, cough medicine, doctors, electric blankets, footballs and woolen jumpers).

**New government policies.** Sometimes, new government policies can lead to a rise in the demand for particular goods or services. For instance, a rise in government transport spending might bring about an increase in the demand for building and road making materials. Sometimes, too, the government uses cash subsidies or payments to encourage households to increase their demand for socially beneficial items (e.g. solar panels and rainwater tanks).

**FIGURE 2.6** Non-price microeconomic conditions that cause the quantity of a good or service to demanded at a given price to increase or decrease, shifting the position of the whole demand line

The effect of non-price factors that increase the quantity demanded ($D_1$ to $D_2$)

When non-price conditions of demand strengthen, increasing the quantity of a particular good or service that buyers are willing to purchase at any given price, the whole demand line for the market will shift horizontally outwards and to the right of the original line ($D_1$ to $D_2$).

Let us return to the example of the banana market as shown in figure 2.7. When the demand for bananas at a given price increased due to new stronger conditions (perhaps due to more consumers wanting a healthy snack, an increase in disposable income, population growth or successful advertising by banana growers), this shifted the position of the whole demand line to the right of the original line, from $D_1$ to $D_2$. As a result there was a rise in the equilibrium price of bananas from $3$ (at $P_1$) to $3.50$ a kg (at $P_2$). As the price rose towards $3.50$, demand contracted while supply expanded (the normal operation of the laws of demand and supply) until the new higher equilibrium price ($P_2$) was reached where demand again equalled supply. Notice also that there was a rise in the equilibrium quantity from 4000 (at $Q_1$) to 4500 kg a year (at $Q_2$). These new equilibria will continue to prevail in the market, unless non-price conditions of demand again change.

**TABLE 2.1**

<table>
<thead>
<tr>
<th>Price per kg</th>
<th>$D_1 =$ Original quantity of bananas demanded each year (‘000 kg)</th>
<th>$D_i =$ New increased quantity of bananas demanded each year (‘000 kg)</th>
<th>$D_o =$ New decreased quantity of bananas demanded each year (‘000 kg)</th>
<th>$S_i =$ Original quantity of bananas supplied each year (‘000 kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0$</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>$1$</td>
<td>4</td>
<td>5</td>
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<td>2</td>
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<td>4</td>
<td>2</td>
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<td>$3$</td>
<td>2</td>
<td>3</td>
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<td>4</td>
</tr>
<tr>
<td>$4$</td>
<td>1</td>
<td>2</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

**FIGURE 2.7** How changes in non-price conditions of demand can cause the equilibrium market price to rise or fall

**How changes in non-price conditions of demand can increase or decrease the quantity demanded at any given price, shifting the whole demand line and causing the equilibrium market price to rise or fall**
The effect of non-price factors that decrease the quantity demanded (D₁ to D₀)

When the non-price conditions of demand weaken, decreasing the quantity of a particular good or service that buyers are willing to purchase at any given price, the whole demand line for the market will shift horizontally and to the left of the original line (D₁ to D₀).

Returning to the banana market and figure 2.7, when the demand decreased due to new weaker conditions (perhaps due to the onset of winter, advertising by pineapple growers, a drop in income, or poorer quality fruit), this shifted the position of the whole demand line from D₁ to D₀. As a result there was a fall in the equilibrium price of bananas from $3 (at P₁) to just $2.50 a kg (at P₀). This fall in the equilibrium price was necessary to clear the market glut or surplus (see the triangular area shaded green, where the quantity supplied exceeds the quantity demanded) that would otherwise exist if the price had remained at $3. As the price dropped towards $2.50, demand expanded while supply contracted (the normal operation of the laws of demand and supply) until the new lower equilibrium price (P₀) was reached where the quantity demanded again equaled the quantity supplied. Notice also that there was a fall in the equilibrium quantity from 4000 kg (at Q₁) to 3500 kg a year (at Q₀). These new equilibria will prevail in the market, unless of course non-price conditions of demand again change.

Changes in non-price conditions shift the whole supply line

In the same way as buyers react to changing circumstances, sellers also respond to variations in non-price factors or conditions of supply. These might either increase or decrease the quantity of a particular good or service that sellers are prepared to supply at a given price. On a demand–supply diagram, these non-price conditions shift the whole supply line to the right or to the left of the original line. Figure 2.8 shows that there are a number of common non-price supply-side conditions.

Resources used by businesses become cheaper.
Businesses need to purchase natural, labour and capital resources in order to make goods and services. These represent production costs. When costs are cheaper, this makes production more favourable and profitable for businesses. It often causes firms to increase their quantity of a good or service supplied at any given price.

Increased efficiency. The use of improved technology like automated warehouses, robotics on an assembly line and online trading in an industry, often lifts efficiency, cutting unit production costs. This usually makes firms more willing and able to increase their supply at any given price.

More favourable climatic conditions. Climatic conditions affect farmers supplying crops. Favourable weather conditions means that more output per hectare can be produced, at lower unit costs. This increases the quantity of some rural commodities supplied (e.g. wheat, beef, barley, fruit and vegetables) at any given price.

Decreased efficiency. A drop in the efficiency of workers in an industry, or in the productivity of other resources used, will often lead to higher business costs. This is likely to decrease the supply of a particular good or service at any given price.

Unfavourable climatic conditions. Severe weather events, such as cyclones, floods and drought, tend to reduce efficiency and the supply of some fruit, vegetables and other crops. Floods can also hamper mining extraction operations and destroy infrastructure needed to transport minerals to terminals. This can decrease the quantity supplied at a given price.
Non-price microeconomic conditions that cause the quantity of a good or service supplied at a given price to increase or decrease, shifting the position of the whole supply line.

**FIGURE 2.8** Non-price microeconomic conditions that cause the quantity of a good or service to supplied at a given price to increase or decrease, shifting the position of the whole supply line

The effect of non-price factors that increase the quantity supplied ($S_1$ to $S_2$)

When these non-price conditions of supply strengthen or become more favourable, there is an increase in supply or the quantity of a particular good or service that sellers are willing to produce at a given price. The whole supply line for the market will shift outwards horizontally and to the right of the original line ($S_1$ to $S_2$).

Again using our example of the banana market, this is illustrated in figure 2.9. When the supply of bananas increased due to new more favourable conditions (perhaps reflecting the effects of ideal growing conditions for farmers, or lower costs and better profits), this shifted the position of the whole supply line horizontally outwards and to the right from $S_1$ to $S_2$. As a result, there was a fall in the equilibrium price of bananas from $3 (at P_1)$ to just $2.50 a kg (at P_2). This fall in the equilibrium price was necessary to clear the market glut or surplus (see the triangular area shaded green, where the quantity supplied exceeds the quantity demanded) that otherwise would exist if the price had remained at $3. As the price fell towards $2.50, supply contracted and demand expanded (the normal operation of the laws of demand and supply), until the market came to rest at the lower equilibrium price ($P_2$). In addition, the equilibrium quantity rose from 3000 kg (at $Q_1$) to 3500 kg a year (at $Q_2$). These new equilibria will continue to exist unless non-price conditions of supply again change.
The effect of non-price factors that decrease the quantity supplied (S₁ to S₀)

When these non-price conditions of supply weaken or become less favourable, this decreases the quantity of a particular good or service that sellers are willing to produce at any given price. This causes the whole supply line for the market to shift inwards horizontally and to the left of the original line (S₁ to S₀).

Let us return yet again to the example of the banana market shown in figure 2.9. When the supply of bananas decreased due to new less favourable conditions (perhaps reflecting the effects of severe drought, the effect of a cyclone or higher production costs for farmers), this shifted the position of the whole supply line from S₁ to S₀. As a result, there was a rise in the equilibrium price of bananas from $3 (at P₁) to $3.50 a kg (at P₀). This rise in price was necessary to clear the market shortage (see the triangular area shaded red, where the quantity demanded exceeds the quantity supplied) that otherwise would exist if the price had remained at $3. As the price rose towards $3.50, supply expanded and demand contracted (the operation of the laws of demand and supply), until the market came to rest at the higher equilibrium price (P₀). In addition, the equilibrium quantity fell from 3000 kg (at Q₁) to 2500 kg a year (at Q₀). These new equilibria will continue to exist unless conditions of supply again change.

Review: how changes in relative market prices help to allocate Australia’s resources

It is worth finishing off this section about the operation of the price system by again making the connection between a change in the relative price of one good or service against another, and how this affects the economic decisions affecting Australia’s allocation of scarce resources between alternative uses.

Market forces involve the operation of demand by buyers and supply by sellers. Together, these forces determine the relative market price as an indicator of the relative scarcity of each good or service, such as bananas or bottled water. In a competitive market, strong demand and/or limited supply would cause the product to be scarcer and this would be reflected in a higher price in the market.

You may recall that all economies face the basic economic problem of relative scarcity. Because not all wants can be satisfied, we must make choices and answer three important economic questions:

• ‘What’ type and quantity of goods and services should be produced?
• ‘How’ should these goods and services be produced?
• ‘For whom’ should these goods and services be produced?
As we previously pointed out, in Australia’s *market-based capitalist system*, profit-seeking owners of resources rely mainly on the operation of the price or market system to guide their decisions and allocate resources between various types of goods and services. Here market forces involving demand and supply operate to determine the relative price, at equilibrium, of one good or service against another. Over a period of time, the relative prices of each good or service change due to new *non-price conditions* affecting the level of demand and/or level of supply. In turn, changes in relative prices cause price signals. These affect the relative profitability of each area of production.

**The ‘what and how much to produce’ question**

Only some wants can be satisfied, so owners of resources naturally opt to satisfy those that are relatively most profitable or wanted.

- **A relatively higher market price.** Imagine that the equilibrium market price of ice cream *increased relative* to that for yogurt due to an increase in consumer demand for ice cream at all possible prices (perhaps reflecting the operation of non-price factors like successful advertising, population growth or a rise in disposable income) while the demand for yogurt fell (perhaps due to a non-price condition like a health scare). Here, it is quite likely that ice cream would become relatively more profitable than yogurt (assuming no other changes occurred). Higher profits in ice cream would then attract extra resources into this area of production, perhaps pulling resources out of yogurt.

- **A relatively lower market price.** Alternatively, what would happen if the equilibrium market price of ice cream *fell*, perhaps because there was an increase in the supply of ice cream at all possible prices (perhaps due to lower costs such as milk or transport) relative to its demand? In this case, it is likely that ice cream producers would face relatively lower profits against those for yogurt. This would tend to repel resources from ice cream production while encouraging more to move into yogurt.

In deciding what to produce — whether it be ice cream or yogurt, rice or wheat, cars or computers, or childcare or education — the market can usually provide the price signals or information to help owners of resources make the right production decisions that give consumers the types of goods and services they most want.

One weakness of this system, or *market failure*, is that there are situations where socially undesirable yet profitable goods and services (e.g. illegal drugs, pollution, guns and prostitution) may be overproduced, while low priced, socially desirable goods and services (e.g. affordable health care, education and housing) are underproduced. In these instances, there is a strong case for government intervention in or regulation of some markets using taxes to discourage, or government subsidies to encourage, some types of production.

**The ‘how to produce’ question**

In order to maximise profits, private owners of resources usually seek to minimise their production costs and maximise efficiency.

So, for example, if it is cheaper to produce a pair of jeans using mostly labour resources rather than capital equipment like laser-operated machines, then this would normally be the preferred method of manufacture. Again, the market system involving demand and supply would provide the necessary price information as to which production method was the *cheapest* to use. One possible reason why labour might be cheaper in this case could be that its supply is high relative to demand. This would cause wage costs (the market price of labour) to be relatively lower (against the cost or market price of machinery).

Sometimes, however, the cheap production methods used by firms could risk the wellbeing, health and safety of workers and the general community. For instance, some firms may want to cut their costs by having *dangerous working conditions* or releasing pollution, because these methods are relatively cheaper. Again, there may be a justification for having some government regulation of production methods (e.g. occupational health and safety standards) in cases where the *market fails* to make good decisions.

**The ‘for whom to produce’ question**

The matter of how goods, services and incomes should be shared or divided is also largely answered by the operation of market forces involving demand and supply.

Individuals who earn higher incomes by selling their scarcer resources can purchase more goods and services than those on lower incomes. For instance, high wages and incomes are earned by skilled surgeons, successful entrepreneurs, and well-known pop stars and sportspersons, who can sell scarce resources where there is a shortage and their supply is low relative to demand. By contrast, those with lesser skills or no reputation will usually earn lower wages and income, and be unable to purchase as many goods and services. Again the market allocates scarce resources between alternative uses.

One problem of the free market system answering the question about how to distribute incomes and goods is that there can be extreme income inequality and poverty, lowering average living standards. Again, when the *market fails* to produce fair or equitable outcomes, the government may choose to narrow the income gap between the rich and poor using heavier progressive taxes on the rich, the payment of welfare benefits to the neediest and the provision of free or cheap community services.
The market is a living, exciting and rapidly changing institution that operates around the clock. It is of enormous importance to our daily lives. As we know, Australia basically has a market-based economy (with a limited amount of government guidance in some areas).

2.4 Background for a case study of a particular market

The market is a living, exciting and rapidly changing institution that operates around the clock. It is of enormous importance to our daily lives. As we know, Australia basically has a market-based economy (with a limited amount of government guidance in some areas).

The current VCE Economics study design covering 2017–21 requires you to select one or more of the following contemporary markets for a case study that illustrates their operation as a decision maker:

- agricultural markets such as wool, wheat and beef
- other commodity markets such as minerals and energy
- community markets
- the finance market
- the share market
- the labour market
- the property/housing market
- online markets
- the health market.

It is also intended that this research should allow you to connect theory and appropriate models to different markets in the Australian and global economies. This section provides a general outline of each market, along with some questions to guide your internet research outside of this text. However, a detailed outline of how you might approach this case study research is supplied as one of the activities in section 2.5.
Agricultural or rural commodity markets

Nature

Australian farmers sell their wheat, barley, wool, canola, beef, lamb, eggs, fruits and vegetables to wholesale and retailers in rural or agricultural commodity markets both here and overseas. The price negotiated by buyers and sellers will reflect the relative scarcity of each rural commodity. Sometimes international selling is done by representative organisations. Again, the prices of agricultural commodities are determined at market equilibrium by the interaction of sellers (S) and buyers (D). The prices of agricultural commodities change to reflect new non-price conditions of demand and supply. Especially on the supply side, conditions can change as a result of both favourable and less favourable growing conditions (e.g., droughts and severe weather events).

Structure for your case study research into a selected agricultural commodity market

You might like to use the following questions to guide your research into a selected agricultural commodity market.

• What are the general features of your selected agricultural commodity market? What type of market structure is common in this industry?

• Who are the demanders, buyers or consumers of the selected agricultural commodity and what factors affect their decisions? How have non-price demand conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market demand, and the equilibrium price and quantity.

• Who are the suppliers or sellers of agricultural commodities and what affects their decisions? How have non-price supply conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market supply, and the equilibrium price and quantity.

• Because of changes in demand and supply conditions, relative market prices have moved up or down. Use internet research to locate and copy a price graph for your selected commodity over recent years, and then describe the changes in market prices in both the short and long term.
• What are the likely effects of changes in the relative market price of your selected agricultural commodity on the economic decisions (including resource allocation) made by Australian and international producers?

By way of an example, figure 2.10 below uses six graphs to show price changes to 2016 in a selection of agricultural commodity markets (usually measured in US$). You might like to start your agricultural commodity research by following the weblinks in this topic’s student resources tab.

**Weblinks**

These weblinks are available in this topic’s student resources tab.

- Australian Bureau of Agricultural and Resource Economics (ABARES)
- YQ Matrix graphs
Graph 3 — Changes in Australian beef meat prices

Weighted average saleyard price of cattle, nominal and real

Graph 4 — Changes in world dairy product prices

World dairy price projections

Graph 5 — Changes in Australian seafood prices

Average prices of key Australian species

Source: Savage & Hobsbawn 2015

FIGURE 2.10 Price changes for a selection of agricultural commodity prices (actual and forecast) (continued)
**FIGURE 2.10**

Graph 6 — How volume, price and value of selected agricultural commodities are expected to change in 2016–17

<table>
<thead>
<tr>
<th>Major Australian agricultural commodity exports</th>
<th>2016–17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Volume</td>
</tr>
<tr>
<td>Beef and veal</td>
<td>↓ 9%</td>
</tr>
<tr>
<td>Wheat</td>
<td>↑ 2%</td>
</tr>
<tr>
<td>Wool</td>
<td>↑ 1%</td>
</tr>
<tr>
<td>Wine</td>
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</tr>
<tr>
<td>Sugar</td>
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</tr>
<tr>
<td>Barley</td>
<td>0%</td>
</tr>
<tr>
<td>Lamb</td>
<td>↓ 4%</td>
</tr>
<tr>
<td>Live feeder/slaughter cattle</td>
<td>↑ 4%</td>
</tr>
<tr>
<td>Cotton</td>
<td>↑ 23%</td>
</tr>
<tr>
<td>Canola</td>
<td>↑ 8%</td>
</tr>
<tr>
<td>Cheese</td>
<td>↑ 2%</td>
</tr>
<tr>
<td>Rock lobster</td>
<td>↑ 3%</td>
</tr>
<tr>
<td>Skim milk powder</td>
<td>0%</td>
</tr>
<tr>
<td>Mutton</td>
<td>↓ 17%</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th></th>
<th>2016–17f</th>
<th>2015–16f</th>
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</thead>
<tbody>
<tr>
<td>Beef and veal</td>
<td>↓ 9%</td>
<td>↑ 5%</td>
</tr>
<tr>
<td>Wheat</td>
<td>↑ 2%</td>
<td>↓ 2%</td>
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<tr>
<td>Wool</td>
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<td>↑ 5%</td>
</tr>
<tr>
<td>Wine</td>
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<td>↑ 1%</td>
</tr>
<tr>
<td>Sugar</td>
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<td>↑ 11%</td>
</tr>
<tr>
<td>Barley</td>
<td>0%</td>
<td>↓ 2%</td>
</tr>
<tr>
<td>Lamb</td>
<td>↓ 4%</td>
<td>↑ 9%</td>
</tr>
<tr>
<td>Live feeder/slaughter cattle</td>
<td>↑ 4%</td>
<td>↑ 5%</td>
</tr>
<tr>
<td>Cotton</td>
<td>↑ 23%</td>
<td>↓ 3%</td>
</tr>
<tr>
<td>Canola</td>
<td>↑ 8%</td>
<td>↑ 3%</td>
</tr>
<tr>
<td>Cheese</td>
<td>↑ 2%</td>
<td>↑ 8%</td>
</tr>
<tr>
<td>Rock lobster</td>
<td>↑ 3%</td>
<td>0%</td>
</tr>
<tr>
<td>Skim milk powder</td>
<td>0%</td>
<td>↑ 6%</td>
</tr>
<tr>
<td>Mutton</td>
<td>↓ 17%</td>
<td>↑ 10%</td>
</tr>
</tbody>
</table>


### Mineral commodity markets

**Nature**

**Non-rural commodity markets** involve the selling and buying of raw materials and energy at a negotiated price that will reflect their relative scarcity. Firms producing or supplying commodities, sell to other firms who need these materials for making finished products that are sold to customers or buyers. Important internationally traded raw materials include oil, gold, iron, zinc, nickel, timber, diamonds and natural gas. With great emphasis on mining, it is hardly surprising that the value of Australia’s exports is greatly affected by trends in commodity prices. Indeed, the A$ is often referred to as a commodity-driven currency.
Market forces and conditions of demand and supply determine the relative prices of various mineral commodities like silver and gold, aluminium, lead and zinc. Market prices rise when demand exceeds supply and fall when supply exceeds demand. One really important condition affecting demand, and hence the price of a metal, is the global level of economic activity; while a condition of supply could be the discovery and opening up of new mines.

**Structure for your case study research into a selected mineral or energy commodity market**

You might like to use the following questions to guide your research into a selected mineral commodity market.

- What are the general features of your selected mineral commodity market? What type of market structure is common in this market or industry?
- Who are the demanders, buyers or consumers of the selected mineral commodity and what factors affect their decisions? How have non-price demand conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market demand, and the equilibrium price and quantity.
- Who are the suppliers or sellers of mineral commodities and what affects their decisions? How have non-price supply conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market supply, and the equilibrium price and quantity.
- Because of changes in non-price demand and supply conditions, relative market prices of mineral commodities have moved up or down. Use internet research to locate and copy a price graph for your selected commodity over recent years, and then describe the changes in market prices in both the short and long term.
- What are the likely effects of changes in the relative market price of your selected mineral commodity on the economic decisions (including resource allocation) made by Australian and international producers? By way of examples, figure 2.11 includes four graphs to show recent price changes in markets for a selection of mineral and energy commodities over the years to 2016. They include mineral commodities such as bulk minerals (used for manufacturing metal products, expressed in US$ per tonne), crude oil (liquid petroleum that comes out of the ground before being refined and is commonly used to fuel cars and aeroplanes and the like, usually expressed in US$ per barrel) and gold (US$ per ounce).

Notice the spectacular fall in oil prices and mineral commodity prices between 2013 and 2016. You can follow the weblinks in this topic’s student resources tab to research these and other price graphs.

**eBookplus**

**Weblinks** These weblinks are available in this topic’s student resources tab.

- Energy Information Administration
- InfoMine.com
- International Energy Agency
- OPEC
- RBA Chart Pack — mineral commodities
- World Gold Council
- YQ Matrix graphs
Graph 1 — Changes in bulk mineral commodity prices (US$ per tonne)

Bulk commodity prices
Free on board basis

Iron ore (LHS)
Thermal coal (LHS)
Coking coal (RHS)

2012 2014 2016

Iron ore (LHS)
Thermal coal (LHS)
Coking coal (RHS)

30 75 120 165

120 150 250

*Iron ore fines, Newcastle thermal coal and premium hard coking coal

Sources: ABS; Bloomberg; IHS; RBA


Graph 2 — Changes in crude oil commodity prices (US$ per barrel)

Crude oil price
51.64 USD/bbl
9 June 2016

May 22
2000
May 1
2005
May 3
2010
May 1
2015

Crude oil price (USD/bbl)

Graph 3 — How crude oil prices (US$ per barrel) react to a variety of geopolitical and economic events

Crude oil prices and key geopolitical and economic events

**Price per barrel (real 2010 dollars)**

1: US spare capacity exhausted
2: Arab Oil Embargo
3: Iranian Revolution
4: Iran–Iraq War
5: Saudis abandon swing producer role
6: Iraq invades Kuwait
7: Asian financial crisis
8: OPEC cuts production targets 1.7 mmbpd (million barrels per day)
9: 9–11 attacks
10: Low spare capacity
11: Global financial collapse
12: OPEC cuts production targets 4.2 mmbpd


**Figure 2.11** Price changes for a selection of mineral commodity prices (actual and forecast)

Community markets

Nature

Community markets involve the selling and buying of edible products (e.g. cheeses, breads, cakes, vegetables, chutneys, jams and sweets) and home crafts (e.g. jewellery, leather goods, pottery, art, plants, clothing), along with plants, antiques and collectables. These markets typically occur in suburbs like Fitzroy or Kingsbury Drive in Melbourne, in cities like Geelong and Ballarat, and in small towns like Torquay. Sometimes they run infrequently like once a month, or perhaps every week. Usually sellers produce on a small scale and their products are often unique. This can make them an attraction for buyers and, as is usually the case, prices reflect conditions of demand and supply.

Your case study of a community market might involve research and even an excursion to one of these markets. Here you may have an opportunity to chat with sellers and buyers. To find out what markets are running, follow the White Hat Guide to Sunday Markets weblink in this topic’s student resources tab.

Structure for your case study research into a selected community market

You might like to use the following questions to guide your research into a selected community market.

- What are the general features of your selected community market? What type of market structure is common in this area?
- Who are the demanders, buyers or consumers of the selected goods and services, and what factors affect their decisions? How have non-price demand conditions changed recently? Try to illustrate their effects hypothetically, using a D–S diagram showing the before and after impacts on market demand, and the equilibrium price and quantity.
- Who are the suppliers or sellers of the selected goods and services, and what affects their decisions? Have non-price supply conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market supply, and the equilibrium price and quantity.
- As a result of recent changes in demand and supply conditions, try to describe some of the trends in market prices for your selected goods and services.
- What are the likely effects of changes in the relative market price paid for your selected goods and services in the community market on the economic decisions (including resource allocation) made by producers or the owners of resources?

The stock market

Prices of shares in the stock market are nowadays displayed electronically, and can change unexpectedly up or down due to changes in the conditions of demand for and or supply of shares. In turn, price changes affect the economic decisions of investors and the allocation of resources.
Nature

The stock market allows shares (a part ownership of a business) in companies listed on the Australian Stock Exchange to be bought and sold at a price that reflects relative scarcity and the ever-changing non-price conditions of demand and supply for each stock. Often, speculative buyers will try to purchase shares at a low price and then resell them at a higher price later, in the hope of making a profit or capital gain. Sometimes shares are simply seen as an income-earning investment where shareholders receive dividends or a proportion of the profits made by the company. When companies are floated or first listed on the stock exchange, they issue or sell shares to raise finance for their business expansion. Later, however, these shares change hands, depending on whether the original buyers want to keep them or sell them. On occasion, volatile changes in the conditions of demand and supply by investors can cause share prices to change dramatically.

Structure for the case study research into the stock market

You might like to use the following questions to guide your research into the stock market.

• What are the general features of the stock market or Australian Securities Exchange (ASX)? What is the type of market structure and level of competition in the ASX or stock market?

• Who are the demanders or buyers of company stock, shares and equities that are listed on the ASX, and what factors affect their decisions (either focus on one listed company or cover shares in general)? Try to illustrate hypothetically the recent effect of factors using a D–S diagram to show the before and after situations on market demand, and the equilibrium price and quantity.

• Who are the suppliers or sellers of company stock, shares and equities listed on the ASX, and what affects their decisions (either focus on one company or cover shares in general)? Try to illustrate hypothetically the recent effect of these factors, using a D–S diagram to show the before and after situations on market supply, and the equilibrium price and quantity.

• Because of changes in demand and supply conditions, share prices have moved up or down. Use internet research to locate and copy a price graph for your selected company or for shares generally, and then describe the changes in market prices in both the short and long term (see price trends more generally using the ASX 200 or S&P 500, or take the price of a particular company’s share and study that).

• What are the likely effects of changes in share prices (perhaps for different company shares or relative to the attractiveness of other investments like housing; both here and overseas) on the economic decisions (including resource allocation) made by investors?

By way of example, figure 2.12 includes two graphs. One shows how the share price has changed for various types of companies in different sectors of industry. The other shows general trends in local share prices against those overseas. After peaks in Australian and international share prices during 2003–04, 2007–08 and 2014–15, prices generally dipped, especially following the global financial crisis (GFC) and ensuing slowdown. This inflicted much pain on investors, especially retirees. Despite some recovery in share prices after each of these falls, uncertainty remains, reflecting overseas and local concerns.

You can research these and other share price graphs by following the weblinks in this topic’s student resources tab.
Graph 1 — Trends in Australian share prices by company category

Graph 2 — Changes in indices measuring the prices of Australian and international shares

The finance market

Nature

The finance market involves financial institutions (e.g., banks, credit unions, superannuation funds). Here, borrowers (demanders) and lenders (suppliers) of credit negotiate the rate of interest — the price or annual cost of credit that is paid. Interest rates largely reflect the relative scarcity of credit and the conditions of demand and supply. Households, businesses and governments often need to borrow (demand) money to finance their purchases of goods and services, including capital equipment, property, and consumer goods. However, savers of money, including some households who do not spend all their current income, lend money to financial institutions and are rewarded by receiving interest.

Structure for the case study research into the finance market

You might like to use the following questions to guide your research into the finance market.

- What are the general features of the finance market? What type of market structure commonly exists?
- Who are the demanders or borrowers of finance, and what affects their decisions? How have demand conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market demand, and the equilibrium price and quantity.
• Who are the suppliers, sellers or lenders of finance, and what affects their decisions? How have supply conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on supply, and the equilibrium price and quantity.
• Using the internet, find and copy a graph showing changes in key Australian interest rates (the price of borrowing credit or the reward for lending credit) over the last decade to the current year. Using this graph, describe the trends in interest rates in both the short and long term.
• What are the likely effects of changes in interest rates on the finance market, and on the economic decisions (including resource allocation) made by Australian households and businesses? By way of an example, figure 2.13 uses three graphs showing recent changes in Australian interest rates or the price of credit. Notice the peak in interest rates in 2007–08, followed by a sharp fall. After another rise, most recently between 2010 and 2012, interest rates have been declining (with some plateaus).

You might like to start your research into the finance market by following the weblinks in this topic’s student resources tab.

**eBookplus**

**Weblinks** These weblinks are available in this topic’s student resources tab.
- RBA Chart Pack — interest rates
- Trading Economics

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**Graph 1 — Australian interest rates, 2008–16**

![Graph 1](https://www.tradingeconomics.com/reserve-bank-of-australia-interest-rate)


**Graph 2 — Australian housing lending rates, 1996–2016**

![Graph 2](https://www.rba.gov.au/chartpack/interest-rate-charts.html)

*Source:* Graph copied from RBA Chart Pack, June 2016.

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**FIGURE 2.13** Changes in selected interest rates in Australia’s financial market (continued)
The foreign exchange market

Nature

International financial transactions involve exports and imports of goods and services, and investment flows between countries. During this process, payments between countries must be made in the currency appropriate for each nation. For instance, Australian exporters generally want to be paid in our currency, not yen or pounds sterling. For this to occur, international currencies (e.g., the A$, US$, pound sterling, euro, rupee and yen) need to be swapped in the FOREX or foreign exchange market. The exchange rate is simply the price of one currency in terms of units of another (e.g., A$1 may be worth US$0.70). As occurs in all competitive markets, the price (in this case the exchange rate) is determined by the number of buyers versus the number of sellers. The exchange rate changes with the level of relative scarcity of each currency. In Australia’s case, sellers of our currency are often local households or firms wanting to convert our dollar into some other currency to make payments abroad. Sometimes, too, speculators want to sell off the currency, especially if they feel it is soon going to fall. However, buyers of our currency are mostly foreigners wanting to pay someone in Australia.

Structure for the case study research into the foreign exchange market

You might like to use the following questions to guide your research into the foreign exchange market.

- What are the general features of the foreign exchange market for the A$? What type of market structure commonly exists?
- Who are the demanders or buyers of foreign exchange and the A$, and what factors affect their decisions? How have demand conditions for the A$ changed recently? Try to illustrate their impact hypothetically, using a D–S diagram, showing the before and after effects on market demand, and the equilibrium price and quantity of the A$.
- Who are the suppliers or sellers of foreign exchange and the A$, and what factors affect their decisions? How have supply conditions for the A$ changed recently? Try to illustrate their impact hypothetically, using a D–S diagram showing the before and after effects on market supply, and the equilibrium price and quantity of the A$.
- Using the internet, find and copy a graph showing changes in Australia’s exchange rate over the last decade to the current year, against one or more other key currencies. Using this graph, describe the trends in the exchange rate for the A$ in both the short and long term.
- What are the likely effects of changes in the exchange rate for the A$ on the economic decisions (including resource allocation) made by Australian businesses and households?

By way of an example, figure 2.14 contains two graphs. The first shows the value of the Australian dollar against the US dollar plotted every five years from 1900 to 2015. Notice that the price or value of the A$ has fallen considerably overall during the last 115 years, despite some rise until fairly recently. The second graph covers a shorter time period and compares the Australian dollar against the euro, yen and US dollar.

Source: Graph copied from RBA Chart Pack, June 2016.
You might like to start your research into the foreign exchange market by following the weblinks in this topic’s student resources tab.

**Weblinks**
These weblinks are available in this topic’s student resources tab.
- RBA Chart Pack — exchange rates
- Trading Economics
- Westpac exchange rate converter

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**Graph 1 — The exchange rate for the A$ against the US$, 1900–2015**

Note: *What A$1 buys in terms of the US$.

**Graph 2 — The A$ against three other currencies**

*ECU per A$ until 31 December 1998

**FIGURE 2.14** There has been over a century of decline in the exchange rate for the A$ against the US$.


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**The property and housing markets (local or overseas)**

**Nature**
Residential properties and businesses in Australia are regularly bought and sold in the property market. A related market is that for rental properties, where tenants and landlords negotiate the price or cost of rent. Often these markets operate at the local level, but increasingly in capital cities the property market
involves national and international customers. The period from 1995 to 2016 saw a remarkable growth in rental costs, housing and land prices, fuelled by a buying frenzy of investors, speculators and homeowners. Population growth (immigration and natural increase) also contributed to the trends.

**Structure for the case study research into property markets**

You might like to use the following questions to guide your research into the property market.

- What are the general features of local and/or national property markets? What type of market structure commonly exists?
- Who are the demanders, buyers, consumers or renters of property, and what factors affect their decisions? How have demand conditions for property changed recently? Try to illustrate their impact hypothetically, using a D–S diagram, showing the before and after effects on market demand, and the equilibrium price and quantity of property.
- Who are the suppliers or sellers of property, and what factors affect their decisions? How have supply conditions for property changed recently? Try to illustrate their impact hypothetically, using a D–S diagram showing the before and after effects on market supply, and the equilibrium price and quantity of property.
- Using the internet, find and copy a graph showing changes in average property prices over the last decade to the current year. Using this graph, describe the changes in property prices (for renters or buyers) in both the short and long term.
- What are the likely effects of changes in the market prices of property (paid by buyers and/or rents) on the economic decisions (including resource allocation) made by Australian households and businesses?

By way of an example, figure 2.15 shows the trends in median property prices across five Australian capital cities. Again, price changes reflect the level of relative scarcity, determined by the conditions of demand and supply. After a peak in late 2007, prices fell sharply in 2008 and early 2009, following the onset of global recession and the financial crisis. Despite some recovery in 2010–11, prices again eased in 2011–12 but rose sharply in the four years to 2016, especially in Melbourne and Sydney. In recent years, record low interest rates have also helped to drive up the demand for property.

You might like to start your research into the property market by following the weblinks in this topic’s student resources tab.

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**Weblinks**

- RBA Chart Pack — household sector
- Real Estate Institute of Victoria (REIV)

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**FIGURE 2.15** Trends in average house prices ($000s) in Australia’s major cities, 2006–16

*Excludes apartments; measured as areas outside of capital cities in mainland states*

**Source:** Graph copied from the RBA Chart Pack, June 2016.
The labour market

Nature

Australia’s labour market is an institution where labour resources (the physical power and mental talents of different types of workers) are bought and sold at various prices or wages that reflect the relative scarcity of each type of worker. The sellers or suppliers of labour (S) come from the household sector and consist of around 13 million or so Australians aged 15 years and over who are able and willing to work (members of the labour force). The buyers or demanders of labour (D) are firms wanting staff to fill their job positions.

Structure for the case study research about the labour market

You might like to use the following questions to guide your research into the labour market.

- What are the general features of Australia’s labour market? What type of market structure is common in this market?
- Who are the demanders or buyers of labour and what factors affect their decisions? How have demand conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market demand, and the equilibrium price (wage) and quantity.
- Who are the suppliers or sellers of labour and what factors affect their decisions? How have supply conditions changed recently? Try to illustrate these hypothetically, using a D–S diagram showing the before and after effects on market supply, and the equilibrium price and quantity.
- Because of changes in demand and supply conditions, wages or the prices paid for labour have changed. Use internet research to locate and copy a wage–price graph, and then describe the changes in market wages in both the short and long term.
- What are the likely effects of changes in labour prices or costs on the economic decisions (including resource allocation) made by Australian households and especially businesses?

By way of an example, figure 2.16 uses three graphs to show how average wages (as the price of labour) in Australia have changed in recent years. In addition, Australian Bureau of Statistics (ABS) data is available for wages in different states, occupations, genders and educational attainment.

You might like to start your research into the labour market by following the weblinks in this topic’s student resources tab.

Weblinks These weblinks are available in this topic’s student resources tab.

- Australian Bureau of Statistics
- Australian Chamber of Commerce and Industry
- Australian Council of Trade Unions (ACTU)
- Australian Council of Trade Unions (ACTU schools site)
- Australian Council of Trade Unions (ACTU students site)
- Centrelink
- Fair Work Commission

Graph 1 — Australian average weekly wage, 2006–16

Source: www.tradingeconomics.com | Australian Bureau of Statistics

FIGURE 2.16 Changes in average Australian weekly wages in the labour market (continued)
FIGURE 2.16 (continued)

Graph 2 — Australian minimum weekly wage, 2009–16

Graph 3 — Australian average weekly wages in manufacturing, 2012–16


Weblinks

The weblinks in these activities are available in this topic’s student resources tab.

- Commodities crash explained in 90 seconds
- Commodity prices hit by China woes
- What are commodities, and what do commodity prices tell us?
- Speculation and manipulation of food and commodities
- Commodities supercycle’s end is nigh
- How the stock exchange works
- How the stock market works
- The minimum wage
- Foreign exchange (FOREX)
- Wall Street warriors
- Peak oil and possible outcome
- Commodities general introduction
- Oil prices: What’s going on?
- Why 2016 could be a turning point in the energy revolution
- $20 oil could be a reality if this happens


**CHECK YOUR UNDERSTANDING**

1. Provide a brief definition of any two of the following markets:
   - a commodity market
   - b labour market
   - c foreign exchange market
   - d stock market.

2. Identify a particular example of a market and then explain the following features of that market:
   - e The type of market structure
   - f Who are the buyers and what non-price factors or conditions affect demand?
   - g Who are the sellers and what non-price factors or conditions affect supply?
   - h How has the level of market prices changed during the last five years?
   - i What are the effects of the change in relative market prices on the economic decisions that are made by people and businesses, in that market?

**SCHOOL ASSESSMENT TASKS**

Apply your understanding of this subtopic by accessing and completing the school assessment task(s):

- School-assessed tasks > Simulation — the ASX online Schools' Sharemarket Game
- School-assessed tasks > Case studies of markets > Case study 1 — Australia’s property market
- School-assessed tasks > Case studies of markets > Case study 2 — the oil market
- School-assessed tasks > Queen Victoria Market excursion

**2.5 School-assessed tasks**

In order to satisfactorily complete VCE Economics Unit 1, area of study 2, your teacher must assess your ability to demonstrate the general achievement of the set of outcomes specified for the unit, including key knowledge and key skills for Outcome 2. You will be assessed from a selection of school-based assessment tasks. Generally, this assessment should be part of the regular teaching and learning program, and completed mainly in class and within a limited timeframe. A range of these activities has been provided in this section.

*Note to teachers*: Courses and assessments can change. Please check the latest VCAA assessment guide and various bulletins to ensure that all assessment requirements are met fully.

**Multiple-choice test questions**

*Instructions*: Using the multiple-choice answer grid available in this topic’s student resources tab, select the letter (A, B, C, D) that represents the most appropriate answer for each question by marking this with a tick (✓).

**Question 1**

Concerning different types of market structure, which statement is false?

- A Pure monopoly exists when there is a single producer or seller in a market.
- B Oligopolies exist when there are many large firms competing strongly in the market.
- C Pure competition exists when there are many rival firms, each selling an identical or homogeneous product.
- D Monopolistic competition exists when there are quite a few competing producers in a market, each selling a product differentiated by brand names and other elements.

**Question 2**

In Australia’s economy, the *market* as an institution allocates around what percentage of resources?

- A 80 per cent
- B 50 per cent
- C 20 per cent
- D 10 per cent

**Question 3**

The market or price system in Australia helps to decide or answer which of the following?

- A The particular types of goods or services to be produced
- B The volume of each type of good or service to be produced
- C How production and income will be distributed or shared between individuals
- D All of the above
Question 4
Which of the following is not a precondition of a purely competitive market?
A Many buyers and sellers competing
B The absence of product differentiation
C The use of regulations and controls by the government
D Profit maximisation and a good knowledge by buyers and sellers of changing market conditions

Question 5
Generally, firms try to maximise their profits. In general, areas of production that are most profitable are best indicated by looking at:
A the final selling price of the good or service.
B the costs or prices paid for the resources used in production of the good or service.
C the difference between the final selling price and the prices paid for resources used in the production of the good or service.
D national sales levels for the good or service.

Question 6
Which of the following best describes the market for factors of production or productive inputs?
A Where households supply labour, capital and natural resources
B Where firms purchase or demand resources
C Where the prices paid for resources used in production are negotiated
D All of the above

Question 7
For a competitive market, which of the following is most correct?
A Rising prices in a market usually indicate a growing shortage or underproduction.
B Falling prices indicate that demand exceeds supply.
C Rising prices indicate that supply exceeds demand.
D Rising prices indicate that the conditions of demand and supply are steady.

Question 8
In a free or competitive market, rising prices for toothpaste reflect:
A a glut or surplus in the toothpaste market.
B a shortage in the toothpaste market caused by a rise in the number of buyers relative to the number of sellers.
C an increase in supply because of new cheaper technology that can be used in making toothpaste.
D too many resources allocated to the production of toothpaste and overproduction.

Question 9
Underproduction and a market shortage of bubble gum would be indicated by:
A falling bubble gum prices.
B both rising and falling bubble gum prices caused by the erratic behaviour of bubble gum markets and buyers.
C rising stocks and falling sales of bubble gum.
D rising market prices for bubble gum.

Question 10
According to the law of demand, a contraction along the demand line for Coke from point A to point B (as illustrated below) is most likely to be caused by:
A a rise in the price of Coke.
B a decrease in the cost of producing Coke, such as cheaper soft drink cans.
C a disappointing advertising campaign using country singer John Williamson.
D an increase in the supply of Coke.
**Question 11**
The law of supply states that the quantity of a good or service supplied by producers varies:
A directly with a rise in price.
B inversely with a rise in price.
C proportionally with a rise in price.
D in response to changes in the conditions of demand.

**Question 12**
Which of the following *best* explains the shift in supply of yoyos from $S_1$ to $S_2$ as illustrated below?
A Falling wages for workers in yoyo factories
B Higher costs of materials (e.g. string, plastic) used to make yoyos
C A fall in the demand for yoyos
D Rising profits among yoyo producers

**Question 13**
In 2014–15, banana crops in some parts of the world were devastated by poor growing conditions (e.g. cyclones, cold weather, floods) in the tropics and the effects of disease that killed plants. Assuming a competitive market for bananas similar to that illustrated below, which of the following descriptions best sums up the effects of these events?
A The equilibrium price of bananas would fall and the equilibrium quantity would rise.
B The equilibrium price of bananas would rise and the equilibrium quantity would fall.
C The demand for bananas would fall.
D The supply of bananas would rise.

**Question 14**
Assume that the market for air tickets was a competitive one. In terms of market theory, which of the following is *unlikely* to reduce the price of Australian airfares to New Zealand?
A A lower cost of planes purchased by airline carriers
B Greater competition among airlines to operate on that route
C A rapid rise in Australian disposable incomes
D Lower aircraft landing fees in Auckland Airport

**Question 15**
Between 2002–03 and 2007–08, and again during 2009–11, general interest rates in the Australian capital market rose. In terms of market theory, which of the following does *not* provide a logical explanation for the rise in market interest rates?
A A rise in the demand for credit by households borrowing credit
B Decreased savings by households held in various financial institutions (e.g. banks)
C The failure of the government’s policies to encourage superannuation and increase domestic savings levels by households
D A fall in the level of government borrowing or demand for credit due to the federal government’s budget surplus where there was no need for the government to borrow or demand credit

Question 16
Which of the following would not explain the recent fall in world wool prices paid to Australian growers?
A A fall in local production costs for wool growers
B A fall in the demand for wool, both in Australia and overseas
C A rise in the world’s supply of wool
D The replacement in fashion of the famous ultra-skimpy mini-skirt that uses very little wool, with longer maxi-skirts that use more wool in manufacture

Question 17
In a free or purely competitive market for sunglasses, equilibrium exists when:
A there is no shortage or surplus.
B the quantity supplied equals the quantity demanded.
C there is no tendency for the market price to rise or fall.
D all of the above conditions are achieved.

Question 18
In 2015–16, there was a world record crop of sugar. Prices tumbled in this competitive market. Examine the graph below representing the sugar market and then answer the question that follows.

Which change on the demand–supply diagram above best illustrates this economic development in the sugar market?
A The move from market equilibrium K to L
B The move from market equilibrium L to M
C The move from market equilibrium N to M
D None of the above

Question 19
Theoretically, which one of the following would not explain the fall in world cotton prices, assuming a competitive market existed for cotton?
A A rise in the costs of machinery for cotton farmers caused by a lower Australian dollar
B A weaker demand for cotton caused by a recession in Asia and the US
C Stronger levels of competition from easy-care synthetic fabrics
D A drop in the price of land used for growing cotton

Question 20
A rare Australian stamp was sold at public auction for $88 000. Which of the following answers offers the best explanation of why the market price for this stamp was so high?
A Buyers and sellers were misled about the collection’s value.
B The demand for these stamps by buyers was very strong.
C The supply of these stamps was fixed or limited.
D Both answers B and C help to explain the high price.

Question 21
Examine the hypothetical data contained in table 2.1 below for the new extreme form of outdoor entertainment involving ‘Wild Activities’. New venues sprang up in Melbourne and Geelong. In order to share these thrills, daily entry tickets must be purchased through the market. Assume that there is a competitive market operating for tickets.
### TABLE 2.1 The demand and supply for ‘Wild Activities’ tickets

<table>
<thead>
<tr>
<th>Price per entry ticket into ‘Wild Activities’</th>
<th>Demand (tickets per day)</th>
<th>Supply (tickets per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10</td>
<td>9000</td>
<td>5000</td>
</tr>
<tr>
<td>$15</td>
<td>8000</td>
<td>6000</td>
</tr>
<tr>
<td>$20</td>
<td>7000</td>
<td>7000</td>
</tr>
<tr>
<td>$25</td>
<td>6000</td>
<td>8000</td>
</tr>
</tbody>
</table>

Which of the following statements about the ticket market for ‘Wild Activities’ is false?

A The demand for tickets contracts as the price rises.
B The supply of tickets expands as the price falls.
C There would be a market glut of tickets equal to 2000 per day if the price was fixed at $25 per ticket.
D In a free market, the equilibrium price of tickets would be $20 per ticket.

**Question 22**

In the Australian economy, which of the following is most correct?

A Decisions are made mostly by the government and there is private ownership of most resources and businesses.
B It is through the operation of the market system that some decisions are made about how to allocate resources.
C The government owns most of the means of production.
D Demand and supply operate to create price signals to the owners of resources to help them answer the three basic economic questions, and there is a dominance of private enterprise or capitalism.

**Question 23**

The demand line for fresh tomatoes will normally shift to the left of the original demand line if:

A the incomes of consumers increase.
B the price of a complement like lettuce rises.
C if there is successful advertising for a complementary good.
D tinned tomatoes became dearer.

**Question 24**

Examine the graph below showing the recent world trend in the price of gold (US$ per ounce).

![Gold Price Graph](image)

Theoretically, which one of the following would not explain the spike or peak in the gold price in 2011–12?
A  There may have been an increase in the demand for gold at a given price, perhaps driven by global economic uncertainties.
B  There may have been a decrease in supply of gold at all given prices.
C  There may have been an increase in the demand for gold combined with a decrease in supply.
D  There may have been an increase in the demand for gold combined with an increase in supply.

Question 25
Which of the following statements about market structure is most correct?
A  Inflation is generally higher when there is pure competition in most markets.
B  Product quality and customer service are generally poorer, and industry output is lower, when there is pure monopoly in a market.
C  In general, takeovers and mergers of firms tend to reduce market power.
D  Material living standards are generally higher when firms are price makers.

**Terminology revision**

**Activity 1**
Use the Puzzlemaker weblink in this topic’s student resources tab to construct a terminology crossword. Using the key words from the list below, you will need to write out definitions for the clues across and down (Hint: You can use the definitions found in your Economics dictionary as the clues.)

### Weblinks
- Puzzlemaker

| allocation of resources | equilibrium | monopolistic competition |
| competition | expansion in demand | monopoly |
| conditions of demand | expansion in supply | non-price conditions |
| conditions of supply | market | oligopoly |
| consumer sovereignty | market economy | price maker |
| contraction in demand | market equilibrium | price taker |
| contraction in supply | market glut | pure competition |
| decision maker | market shortage | supply |
| demand | market structure |  |

**Activity 2**
Match the correct terms below to complete the definitions that follow. You may use each term only once.

<table>
<thead>
<tr>
<th>The law of demand</th>
<th>The law of supply</th>
<th>An increase in supply</th>
<th>A decrease in demand</th>
<th>The conditions of demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equilibrium</td>
<td>A market shortage</td>
<td>A market glut</td>
<td>The market</td>
<td>The equilibrium quantity</td>
</tr>
</tbody>
</table>

1. . . states that the quantity of a product that firms are willing to make available expands as the price rises.
2. . . occurs when buyers are prepared to purchase less of a product at each possible price.
3. . . is when the quantity of a product demanded exceeds the quantity supplied in a market at a particular price.
4. . . is where the quantity demanded and quantity supplied at a particular price are equal.
5. . . states that the quantity of a good or service which consumers are prepared to purchase contracts as the price increases.
6. . . represents an institution used for decision making where buyers and sellers negotiate prices.
7. . . are affected by changes in disposable income, advertising and other non-price factors affecting buyers.
8. . . causes the price in the market to fall towards the equilibrium level.
9. . . may be the result of firms supplying more at a given price.
10. . . exists when the quantities demanded and supplied are exactly equal.
Activity 3
Complete the crossword below about the nature and operation of markets.

Across:
3. An ......................... is where the demand for a product grows as the price falls.
6. A ......................... is a term used to describe a situation in the market caused by prices being too low to create equilibrium.
8. A ......................... market is where there are no restrictions on the movement of prices up or down.
10. Resource ..................... is how inputs are used and what types of products are produced from the limited resources available.
11. A ......................... is a term used to describe a situation in the market where the quantity supplied exceeds the amount demanded for a product.
13. ......................... is the amount of a product that producers are prepared to make available at each possible price.
14. A ......................... product is where items are not differentiated by advertising or other features.
16. ......................... is a non-price condition of demand that affects the amount of a product demanded at a given price.
19. An ......................... is where several large producers control the supply of a product or industry.
20. ......................... represent products that go with another item so they have linked demands.
21. The ......................... represents the price where the quantity of a product demanded equals the quantity of that product supplied.
22. ......................... is where there are many buyers and sellers competing strongly against each other in a market.

Down:
1. A ......................... is where the demand for a product shrinks as the price rises.
2. ......................... represents the amount of a product that buyers are prepared to purchase at each possible price.
4. ......................... represent products where buyers can switch between similar items depending on relative prices.
5. ......................... are what owners of resources seek to maximise by allocating resources appropriately.
7. ......................... is a condition that reduced the supply of some agricultural products in 2002–03 and 2006–08, and again in 2010–15.
9. ......................... represent supply conditions that affect how much of a product firms produce at a given price.
12. ......................... are defined as factors that alter the amount of a product demanded or the amount supplied at a given price.
15. ......................... represents a demand factor or condition that affects the amount of a product purchased at a given price.
17. ......................... is where there is one seller controlling a market.
18. ........................., where there is a rise in the amount of a product demanded or the amount supplied at a given price.


**Applied economic exercises**

*Instructions:* Complete a selection of the following short-answer questions.

**Question 1**
A Define what is meant by the term *economic system*.
B What type of *economic system* do we have in Australia? Describe the two key features of this system.
C Define what is meant by the term *market*. Name six different examples of individual markets found in most cities like Melbourne, Ballarat, Bendigo, Hamilton or Geelong.
D Explain what is meant by the term *market structure*.
E Copy table 2.2 and outline five important differences between pure competition, oligopoly and pure monopoly, providing one example of each type of industry.

<table>
<thead>
<tr>
<th>TABLE 2.2</th>
<th>Features of different market structures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pure monopoly</td>
</tr>
<tr>
<td>Some features of a particular market</td>
<td>e.g.</td>
</tr>
<tr>
<td>1. Level of competition or number of firms</td>
<td>...........</td>
</tr>
<tr>
<td>2. Level of product differentiation</td>
<td></td>
</tr>
<tr>
<td>3. Level of influence over prices</td>
<td></td>
</tr>
<tr>
<td>4. General level of efficiency</td>
<td></td>
</tr>
<tr>
<td>5. Likely level of market prices</td>
<td></td>
</tr>
</tbody>
</table>

F Below is a list of single industries or markets found in Australia. Select (and if need be research) any three of these, and then describe the four most important distinguishing features of each market.

(i) Apples at the farm gate
(ii) Banking
(iii) Beef cattle
(iv) Broadband network
(v) Cinema
(vi) Container shipping
(vii) Labour
(viii) Lawyers
(ix) Medical treatment
(x) Petrol
(xi) Rental property
(xii) Restaurants
(xiii) Retail groceries
(xiv) Shares
(xv) Telecommunications
(xvi) Water
(xvii) Wheat
(xviii) Your school’s canteen

G List and explain one advantage and one disadvantage of each of the following market structures:

<table>
<thead>
<tr>
<th>Market structure</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pure competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pure monopoly</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

H The Australian aviation market is an oligopoly, with considerable barriers to entry by new rival firms limiting the level of competition. Entry is difficult. Explain what is meant by *barriers to entry* and give examples of the types of barriers applicable to the aviation industry.

I Australian clothing manufacturers operate in a monopolistically competitive market. What is meant by the term *monopolistic competition*? What is the significance of *product differentiation* in this industry and how might this be promoted by manufacturers of swimwear?
J Canola producers attempt to use resources in ways that maximise their profits. Explain what is meant by the term profit maximisation.

K It is possible to get products like snowboards and clothing cheaply using online markets such as eBay. This partly due to strong competition among sellers. In this market, can you think of one precondition that is normally required for buyers in a purely competitive market that may not be fully met using eBay or other online markets?

L In general, it is claimed that strongly competitive markets in an economy are most likely to help maximise society’s material living standards. Explain why this may be the case.

**Question 2**

A In Australia’s economy, there are three basic economic questions that need to be answered. Giving specific examples, explain what is meant by each of these questions:
(i) What and how much to produce?
(ii) How to produce?
(iii) For whom to produce?

B As we now know, the price or market-based system decides how most resources are used or allocated in Australia’s economy. Given the problem of relative scarcity, explain, step-by-step, how the operation of the market determines relative prices and allocates resources among competing wants to areas of relatively highest profit or value.

**Question 3**

A Price greatly affects the quantity of an individual good or service that buyers are prepared to purchase or demand, and sellers are prepared to make available or supply.
(i) What is the law of demand and how would it apply to avocados?
(ii) What is the law of supply and how would it apply to childcare?

B Non-price conditions or factors can affect the quantity of a particular good or service demanded or supplied at a given price.
(i) For each of the following markets, list the two most important non-price factors or conditions that could change the quantity demanded at any given price, shifting the position of the demand line and therefore causing either a rise or fall in the market equilibrium price.

<table>
<thead>
<tr>
<th>Market</th>
<th>Non-price factors or conditions affecting the quantity demanded at a given price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Property</td>
<td></td>
</tr>
<tr>
<td>2. Hospitals</td>
<td></td>
</tr>
<tr>
<td>3. Surfboards</td>
<td></td>
</tr>
<tr>
<td>4. Wool</td>
<td></td>
</tr>
<tr>
<td>5. Travel</td>
<td></td>
</tr>
<tr>
<td>6. Labour</td>
<td></td>
</tr>
<tr>
<td>7. Electricity</td>
<td></td>
</tr>
<tr>
<td>8. Butter</td>
<td></td>
</tr>
<tr>
<td>9. Milk</td>
<td></td>
</tr>
<tr>
<td>10. iPhones</td>
<td></td>
</tr>
</tbody>
</table>
(ii) For each of the following markets, list the two most likely non-price factors or conditions that could change the quantity supplied at any given price, shifting the position of the supply line and therefore causing either a rise or fall in the market equilibrium price:

<table>
<thead>
<tr>
<th>Market</th>
<th>Non-price factors or conditions affecting the quantity supplied at a given price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Canola</td>
<td></td>
</tr>
<tr>
<td>2. Doctors</td>
<td></td>
</tr>
<tr>
<td>3. Iron ore</td>
<td></td>
</tr>
<tr>
<td>4. Bananas</td>
<td></td>
</tr>
<tr>
<td>5. Workers</td>
<td></td>
</tr>
<tr>
<td>6. Cars</td>
<td></td>
</tr>
<tr>
<td>7. Rental units</td>
<td></td>
</tr>
<tr>
<td>8. TVs</td>
<td></td>
</tr>
</tbody>
</table>

The quantity of a particular good or service demanded at a given price is affected by changing prices in the market for a substitute product or in the market for a complementary good or service. In other words, markets for substitutes or those for complements are linked to that of the original product or service.

(i) Explain what is meant by a substitute product.

(ii) Explain what is meant by a complementary good or service.

(iii) For each of the following pairs of markets:

(a) indicate whether the two products are substitutes or complements

(b) complete the demand diagram to show the effect of the price change for an original product on the demand line for its substitute or the demand line for the complement.

<table>
<thead>
<tr>
<th>(a) Substitutes or complements?</th>
<th>(b) Effect on the demand for the substitute or complement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butter and margarine</td>
<td>Effect of a rise in the price of butter on the demand for margarine:</td>
</tr>
</tbody>
</table>

\[
\text{Price/unit} \quad \text{D}_1
\]

\[
\text{Quantity}
\]
(a) Substitutes or complements?

<table>
<thead>
<tr>
<th>Product Pair</th>
<th>Effect of a change in price on the demand for the other product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coffee and sugar</td>
<td>Effect of a rise in the price of coffee on the demand for sugar:</td>
</tr>
<tr>
<td>Petrol and cars</td>
<td>Effect of a fall in the price of petrol on the demand for cars:</td>
</tr>
<tr>
<td>Beef and chicken</td>
<td>Effect of a fall in the price of chicken on the demand for beef:</td>
</tr>
<tr>
<td>Coal-fired and solar power</td>
<td>Effect of a government subsidy for households installing solar panels on the price of coal-fired electricity:</td>
</tr>
</tbody>
</table>

D Complete and fully label each of the following D–S diagrams representing an individual competitive market in figure 2.17 to show the hypothetical effects of an event that alters the conditions of demand and/or conditions of supply, and hence the market equilibrium price and quantity. In most cases, you will need to add a second D line (D₂) or a second S line (S₂), along with a new equilibrium price (P₂) and quantity (Q₂). In each of these situations, explain the likely effect on relative prices, profits and the allocation of resources.
Assume the skateboard market is a fairly competitive market.

(i) Use the following data in Table 2.3 to neatly and accurately draw and label a demand–supply diagram for skateboards.

<table>
<thead>
<tr>
<th>Price per skateboard</th>
<th>Original demand (D₁) at a given price</th>
<th>Original supply (S₁) at a given price</th>
<th>New increased demand (D₂) at a given price</th>
<th>New increased supply (S₂) at a given price</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20</td>
<td>100</td>
<td>20</td>
<td>115</td>
<td>40</td>
</tr>
<tr>
<td>$40</td>
<td>80</td>
<td>40</td>
<td>95</td>
<td>60</td>
</tr>
<tr>
<td>$60</td>
<td>60</td>
<td>60</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>$80</td>
<td>40</td>
<td>80</td>
<td>55</td>
<td>100</td>
</tr>
<tr>
<td>$100</td>
<td>20</td>
<td>100</td>
<td>35</td>
<td>120</td>
</tr>
</tbody>
</table>

(ii) What is meant by market equilibrium?

(iii) What is the original equilibrium price for skateboards resulting from the impact of non-price conditions for D₁ and S₁?

(iv) What is the original equilibrium quantity for skateboards resulting from the impact of non-price conditions for D₁ and S₁?

(v) Suggest two non-price conditions or factors that might cause the increase in the quantity of skateboards demanded from D₁ to D₂.
(vi) What did the increase in demand for skateboards from $D_1$ to $D_2$ do to the market equilibrium price and equilibrium quantity assuming the supply conditions had remained steady at $S_1$? Quote actual numbers by reading these from the graph you have drawn.

(vii) Suggest two non-price conditions or factors that might cause the increase in the quantity of skateboards supplied from $S_1$ to $S_2$.

(viii) What did the increase in the supply of skateboards from $S_1$ to $S_2$ do to the market equilibrium price and equilibrium quantity assuming the demand conditions had remained steady at $D_1$? Quote actual numbers by reading these from the graph you have drawn.

F Changes in relative prices in various markets send out signals — to producers and the profit-seeking owners of resources — indicating the type and quantity of each good or service to be produced.

(i) Explain what is meant by the term relative prices, giving an example.

(ii) For each of the following, explain (giving reasons) how producers may change their use or allocation of resources and their level of output, assuming that production costs are unchanged:

(a) Canola prices rose to from $520 to $595 per tonne, but wheat prices fell.

(b) Average weekly wages for unskilled labour rose 2 per cent, compared with a 25 per cent rise for computer technicians.

(c) Most share prices fell 5 per cent, but property prices increased 10 per cent.

(iii) Figure 2.18 below shows the predicted change in relative international prices to be received by farmers for various crops during 2016–17. Assume you are a farmer and are able to use your resources to produce any of these crops.

(a) Based on this price information alone, select two crops you would produce and two crops you would not produce. Justify your choices.

(b) Suggest two likely non-price conditions or factors that might have caused the relative prices of these crops to change.

**FIGURE 2.18** Predicted changes in the relative prices received by farmers for various crops during 2016–17

*Source: ABARES 2015, *Agricultural commodities*, vol. 6, no. 1, March 2016, p. 28.*
(iv) Farmers use resources to produce various agricultural products including crops. These resources are purchased in markets for resources (e.g. seed, water, pesticides, fuel, fertiliser, farm labour, tractors, fencing wire) or factors of production. The production of various crops may involve some differences in the cost or price of the resources used. If the production costs or prices involved in the production of alternative crops per hectare of land were as shown below, explain how this price information may influence your choice of crop and your answer to the ‘what and how much to produce’ questions.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Total cost or price of resources used for producing the crop (per hectare)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$356</td>
</tr>
<tr>
<td>B</td>
<td>$490</td>
</tr>
<tr>
<td>C</td>
<td>$339</td>
</tr>
</tbody>
</table>

**Question 4**

The price or *market-based system* decides how most resources are used or allocated in Australia. This question looks at the operation of demand and supply in a hypothetical competitive market for chocolate bars.

A. Buyers and sellers both respond to changes in prices. Examine table 2.4 below showing the quantity of chocolate bars demanded and supplied.

<table>
<thead>
<tr>
<th>Price per chocolate bar ($)</th>
<th>Quantity of bars demanded per year at a given price (D&lt;sub&gt;1&lt;/sub&gt;)</th>
<th>Quantity of bars supplied per year at a given price (S&lt;sub&gt;1&lt;/sub&gt;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.50</td>
<td>600</td>
<td>200</td>
</tr>
<tr>
<td>1.00</td>
<td>500</td>
<td>300</td>
</tr>
<tr>
<td>1.50</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>2.00</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>2.50</td>
<td>200</td>
<td>500</td>
</tr>
</tbody>
</table>

Using table 2.4, neatly plot a fully labelled graph showing only the demand line for chocolate bars (D<sub>1</sub>). Assume that non-price factors remain fixed.

(i) According to the law of demand for chocolate bars, how does a rise in price affect the quantity of chocolate bars demanded? Illustrate your answers by quoting figures from the table.

(ii) According to the law of demand, how does a fall in price affect the quantity demanded? Illustrate your answers by quoting figures from the table.

B. Using table 2.4, neatly plot a second fully labelled graph showing only the supply line for chocolate bars (S<sub>1</sub>). Assume that non-price factors remain fixed.

(i) According to the law of supply for chocolate bars, how does a rise in price affect the quantity of chocolate bars supplied? Illustrate your answers by quoting figures from the table.

(ii) According to the law of supply, how does a fall in price affect the quantity supplied? Illustrate your answers by quoting figures from the table.

C. Using table 2.4, plot a third graph showing both a demand line (D<sub>1</sub>) and a supply line (S<sub>1</sub>) to represent the market for chocolate bars. Ensure that you label the following features — the graph’s title, names and scales for each axis, D<sub>1</sub>, S<sub>1</sub>, and points E<sub>1</sub>, Pe<sub>1</sub>, and Qe<sub>1</sub>. Assume that non-price factors remain fixed.

(i) Define *equilibrium price*. From your diagram, what is the equilibrium price level of chocolate bars (Pe<sub>1</sub>) in this free or competitive market? Explain how you arrived at your answer.

(ii) From your diagram, what is the equilibrium quantity of chocolate bars (Qe<sub>1</sub>) if there is a free or competitive market?

D. One day, the government decided to *regulate* the price of chocolate bars.

(i) Explain what problems would occur in the market in each of the following instances:

(a) The government passed a law fixing the maximum and minimum price of chocolate bars at a low $1 each. There was no longer a free market.

(b) The government fixed the price of chocolate bars at a high $2.50 each.

(ii) In the above two cases, how would the problems be solved if there were a return to a free or unregulated market for chocolate bars?
E In free markets, the equilibrium price may rise and fall if new non-price conditions cause the demand line to increase or decrease.

(i) On a fully labelled D–S graph, show the effect of an increase in the demand for chocolate bars at every possible price by 100 bars per year (i.e. demand increases from $D_1$ to $D_2$). Assume no change in the conditions of supply (the original supply line, $S_1$, remains). Your new graph should label the title, axes, $D_1$, $S_1$, $P_e_1$, $Q_e_1$, $D_2$, $P_e_2$ and $Q_e_2$.

(ii) Use your diagram to estimate the new equilibrium market price (i.e. $P_2$ in dollars), and new equilibrium market quantity (i.e. $Q_e_2$ in hundreds), following the increase in the demand line from $D_1$ to $D_2$.

(iii) List three hypothetical but likely non-price conditions or factors that could increase the quantity of chocolate bars demanded at each possible price by 100 bars per year, shifting the demand line from $D_1$ to $D_2$.

F In free markets, the equilibrium price may also rise and fall if new non-price conditions cause the supply line to increase or decrease.

(i) On a fully labelled D–S graph, show the effect of a decrease in the quantity of chocolate bars supplied at every possible price by 100 bars per year, shifting the supply line from $S_1$ to $S_2$. This time, assume no change in the conditions of demand (the original demand line, $D_1$, remains unchanged). Your new graph should label the title, axes, $D_1$, $S_1$, $P_e_1$, $Q_e_1$, $S_2$, $P_e_2$ and $Q_e_2$.

(ii) Use this diagram to estimate the new equilibrium market price (i.e. $P_3$ in dollars), and new equilibrium market quantity (i.e. $Q_e_3$ in hundreds), following the increase in the supply line from $S_1$ to $S_2$.

(iii) List three hypothetical but likely non-price developments or factors that could increase the quantity of chocolate bars supplied at every price by 100 bars per year, shifting the supply line from $S_1$ to $S_2$.

G Assume that the actual retail price of chocolate bars increased by 10 per cent. However, at the same time, the production cost of making chocolate bars (i.e. for resources including wages, cocoa beans, silver foil, wrappers and machinery) rose by 50 per cent.

(i) Explain what would probably happen to the quantity of resources allocated to the production of chocolate bars. (In your answer, consider the effects of price and cost changes on the profitability and incomes of producers, and the number of firms remaining in the industry.)

(ii) Suggest what might happen to the resources that were previously used for making chocolate bars.

**Question 5**

Wages represent the market price of labour. Examine figure 2.19 showing approximate hourly wage rates in different countries. Assume that labour markets in the following countries are reasonably free or competitive affairs.

<table>
<thead>
<tr>
<th>Country</th>
<th>Hourly wage rate (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>15.58</td>
</tr>
<tr>
<td>France</td>
<td>12.83</td>
</tr>
<tr>
<td>Ireland</td>
<td>12.14</td>
</tr>
<tr>
<td>United States</td>
<td>7.25</td>
</tr>
<tr>
<td>Spain</td>
<td>5.85</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.18</td>
</tr>
<tr>
<td>Russia</td>
<td>0.93</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.69</td>
</tr>
<tr>
<td>India</td>
<td>0.31</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.29</td>
</tr>
</tbody>
</table>

**FIGURE 2.19** Approximate average hourly wage rates in selected countries (continued)
Ever wished that you could try your hand at buying and selling shares but lack the money to do so? Well, your wish has just come true! A fantastic way to get firsthand experience of how the stock market works, and

**Background**

Assume that the federal government decided to remove the 10% per cent seller or producer’s tax. Label all data on this diagram (i.e. D1, S1, P1, Q1, the names and units of the axes, and an appropriate title). On this D–S diagram, show the likely effects on the location of the supply line after the removal of this tax. Again, ensure that all new data on this diagram are labelled (show S2, P2, Q2).

**Question 6**

A Explain what is meant by a country’s labour market.

B In terms of demand–supply theory (as applied to deciding wage levels in the labour markets for these countries), identify and explain the likely reasons why wage rates for workers in some countries are higher than in others.

C Try to draw a demand–supply diagram which shows, hypothetically, the main reason for low manufacturing wages in India relative to high wages in Germany. (Hint: On a single demand–supply diagram, you may find it useful to have one set of demand–supply lines or conditions for Germany and a second set for India, so four lines in total.)

D Given the wage differences illustrated in figure 2.19, what types of goods and services would not be made competitively in Germany as opposed to India?

E If the government of India set a minimum wage of $2 per hour to lift wages and protect low-income earners from exploitation by profit-hungry firms, outline the likely economic effects (good or bad) on workers, labour markets and the economies of India and Germany.

**Simulation — the ASX online Schools’ Sharemarket Game**

**Background**

Ever wished that you could try your hand at buying and selling shares but lack the money to do so? Well, your wish has just come true! A fantastic way to get firsthand experience of how the stock market works, and how share prices provide signals to investors that influence decisions about resource allocation, is to actually
trade shares online, by entering the Australian Securities Exchange’s (ASX) Schools’ Sharemarket Game. It is
free, it runs twice yearly and, perhaps best of all, there are even money prizes for the most successful investor
syndicates!

The aim of the game
After your teacher has completed the online registration of your trading syndicate, each group starts with a
hypothetical $50,000 and your aim by the end of the 10-week game is to increase your money or wealth as
much as possible. If you are fortunate, you may be able to make money by buying shares in companies when
they are relatively cheap and selling them at a higher price. This requires that you research the listed com-
panies (using the online databank) to find out more about their future prospects, profits or losses, share prices,
dividends and returns, and so on, before you decide to trade. The game’s winner is the syndicate that makes
the most money by the closing date.

Additional follow-up research and case study of the stock market
Playing the ASX Schools’ Sharemarket Game would be a good introduction to further case study research.
The following headings may be the basis for preparing a brief report into the stock market. Here you may
examine the following:
• General description of the share market’s nature and features
• Who are the demanders or buyers of shares and what affects their decisions to buy?
• Who are the suppliers or sellers of shares and what affects their decisions to sell?
• The structure and level of competition in the share market (including the issues of insider trading,
  misleading reporting practices by some companies and auditors)
• Price and yield trends in the share market and how these are measured
• The recent causes of trends in the share market
• The good and bad impacts of changes in the share market for individuals, and the effect on economic
decisions and the allocation of resources
• What you learned from playing the ASX Schools’ Sharemarket Game (including some mention of your
  best and worst decisions, and how you would vary your strategy if you played again)

Presentation
Your case study research could be completed in groups, syndicates or individually, and delivered as a written
report, oral presentation to the class or PowerPoint slide show.

References
You can find out more about the nature and operation of the stock market by following the weblinks in this
topic’s student resources tab.

Case studies of markets
Markets are exciting institutions and we rely greatly on them to make key economic decisions. They are full
of surprises and are ever changing. As mentioned previously and outlined in the new VCE course of study, you
and your teachers are encouraged to look at markets by taking a case study approach. For example, depending
on local interests and circumstances, one of the following may provide an appropriate focus:
• agricultural markets such as wool, wheat and beef
• other commodity markets such as minerals and energy
• community markets
• the finance market
• the share market
• the labour market
• the property/housing market
• online markets
• the health market.
It is hoped that this case study will bring market theory to life so that you gain a firsthand understanding of
how the operation of markets affects our daily lives and the economic decisions we make.
One possibility is for you to present your research as an interesting PowerPoint presentation where you demonstrate the required knowledge and skills, including the linking of theory with the real-world operation of markets. In particular, the market case study is intended to help you research and better understand the recent factors affecting relative prices and economic decision making through the operation of markets.

A possible schematic layout of the six major sections covering your case study, might look something like that shown in figure 2.20.

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By way of example, two market case studies are provided to help generate some ideas for teachers and students.
Case study 1 — Australia’s property market

The task and its presentation

Australia’s economy is based on private enterprise or ownership of property (i.e. land, houses, businesses and other assets) where people are free to buy or sell, and make profits if they choose. Your task here is to find out more about the nature and operation of the Australian property or real estate market. The following headings and notes may provide some guidance for your written report, oral presentation to the class or an ICT-based (e.g. using PowerPoint) data slide show.

1. Background and introduction. Australia’s property market involves thousands of regional or individual markets. It is up to you how broad or narrow your study becomes. For example, you may choose to look at property in general throughout Australia; compare capital cities (e.g. Sydney and Melbourne); study Victoria; look at Melbourne, Geelong, Torquay and the Surf Coast, Mildura, Hamilton, Bendigo, Ballarat or Sale; or closely examine buying and selling in your suburb (e.g. Flemington, Essendon, Mentone, Newtown, Ringwood, Norlane) or perhaps even in your street block.

2. The general features of the property market. Provide a definition of the property market that highlights its key features or the nature of the market.

3. Who are the demanders or buyers of property and what affects their decisions? What are the factors that influence the decisions of buyers in the market you have chosen? What aspects of a property are attractive for buyers, and what things are a turn-off for buyers?

4. Who are the suppliers or sellers of property and what affects their decisions? What are the factors that affect the level of supply of property put on the market for sale? What are the backgrounds or motives of the sellers?

5. The structure of and level of competition in the property market. Is the property market a purely competitive one or is it restricted by collusion among sellers? Are sellers price makers or price takers? What practices does the unscrupulous seller use?

6. Trends in property market prices. Graph and compare trends in property prices over the past one to ten years, and provide a brief commentary summarising your findings. What are your predictions for future price trends and on what assumptions are these based? If you were fortunate enough to have $500 000 to invest, how would the recent trends in the property market affect your decision about the allocation of your resources?

7. What are the alternative areas of investment? How would the gains or returns compare over the past two to ten years in each area? Would these past trends have tended to attract or repel resources? What factors would affect your decision about getting into the property market? What are the hidden costs in each area of investment?

8. The good and bad effects of changes in property market prices on our economic decisions and resource allocation. Who are the people that have gained from recent price trends in the property market? How have they gained? Which groups have suffered as a result of recent property trends? In what ways have they suffered?

Case study 2 — the oil market

The task and its presentation

Oil has sometimes been referred to as ‘black gold’. Dirty as it may be, it has brought some countries and individuals great fortune. For rich Western countries, access to cheap energy is critical to economic progress, low inflation and high material living standards. Your task here is to find out more about the nature and operation of the international oil market. The following notes may provide some guidance for your written report, oral presentation to the class or an ICT-based data slide show (e.g. using PowerPoint).

1. Background and introduction to the nature and operation of the international oil market. Provide:

   • a general definition of the oil market
   • background information about the international oil market.

   For example, is it a purely competitive market, or one where there is collusion among cartel members to create a monopoly? What is the role of OPEC and who are the members?

2. Who are the demanders and buyers of oil internationally and locally, and what affects their decisions? What are the uses of oil and what drives demand? Perhaps include a map or pie chart showing which countries are the main buyers or importers of oil. What are the price and non-price factors that influence the decisions of buyers in the oil market?

3. Who are the suppliers producing and selling oil internationally, and what affects their decisions? Include a map of the world showing OPEC producers and their share of market supply. What are the factors that affect the level of supply in the oil market? What are the motives of the sellers?

4. Trends in the international market price of crude oil. Graph and compare trends in international crude oil prices over the past 5 to 30 or more years and provide a brief commentary summarising your findings and relating them to changing demand and supply conditions.
5. **The wholesale and retail market for petrol in Australia.** You might also look at wholesale and retail petrol prices in Australia by considering the following issues.

- What type of market is there?
- Why are sellers under the scrutiny of the Australian Competition and Consumer Commission (ACCC)?
- Are sellers price makers or price takers? (Note the daily price variations each week between weekends and other days.)
- What practices might unscrupulous sellers use to affect prices?
- Why has the number of independently owned petrol stations fallen, and what effect might this have on competition and prices paid by consumers?

6. **The microeconomic and macroeconomic effects of changes in the market price of oil and petrol.** How might price changes affect:

- the allocation of resources towards oil exploration
- the development of alternative energy
- energy efficiency in cars and our decisions as consumers of energy
- Australia’s trade balance
- the inflation rate or general level of prices for the consumer goods and services we all buy
- the unemployment rate
- the sustainable rate of economic growth
- our natural environment?

### Queen Victoria Market excursion

A two to three hour excursion to the Queen Victoria Market (QVM) can be fun and help to clarify how a local market might operate. You can find a map of the market by using the Queen Victoria Market weblink in this topic’s student resources tab. The questions that follow may help to focus student research. Teachers, however, need to be mindful that there are plans to redevelop this area.

**eBookplus**

**Weblinks** These weblinks are available in this topic’s student resources tab.

- Queen Victoria Market

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1. Describe the general atmosphere of the QVM. What types of economic groups (think of the circular flow model) are found there?
2. Politely try to interview a stallholder who does not seem too busy. What is the most common form of business ownership operating at the QVM (e.g. sole trader, partnership, franchise, company)?
3. Describe the four key features or characteristics of the most common type of business structure operating at the QVM.
4. Use the table below to estimate the number of sellers, and then rank the level of competition (i.e. level of market power) in each of the following areas in the QVM:

   - **strong competition** among sellers
   - **moderate competition** among sellers
   - **weak competition/near monopoly** among sellers.

<table>
<thead>
<tr>
<th>Item</th>
<th>Level of competition</th>
<th>Item</th>
<th>Level of competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit and veg</td>
<td></td>
<td>Clothing</td>
<td></td>
</tr>
<tr>
<td>Meat and fish</td>
<td></td>
<td>Plants</td>
<td></td>
</tr>
<tr>
<td>Livestock</td>
<td></td>
<td>Deli</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
<td>Hardware</td>
<td></td>
</tr>
</tbody>
</table>

5. What are the main observable signs of strong competition between different sellers of the same types of product at the QVM? Explain, giving reasons for your answer (think of the preconditions for a purely competitive market).

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6. Try to conduct an in-depth interview with a stallholder covering the following matters. If successful, don't forget at the end to thank them for their time and help.
   • How many years have they operated the store at the QVM?
   • From a seller’s point of view, what are the main attractions of running a store at the QVM?
   • Would they consider running a store elsewhere, other than the QVM?
   • Do strong competition and low prices make it more difficult to make a reasonable living from selling at the QVM?
   • Is the rent expensive for their site?
   • From where do they buy most of their produce?
   • How do they set their prices (e.g. cost plus a mark-up of, say, 30 per cent; watching the prices charged by their business rivals next door)?
   • What do they do if the store next to them drops its prices by, say, 10 per cent?
   • If applicable, explain how their prices are influenced by seasonal factors/conditions and the time of the day?
   • Recently the Melbourne City Council released a new development plan for the QVM to improve the appearance and attractions of the market. What do they think about this?
7. Copy and complete the table below to compare trends in market prices at the QVM from 1995 to the current year. Use your data to calculate the general price rise during this period in the basket of items purchased at the QVM.

<table>
<thead>
<tr>
<th>Product</th>
<th>Your estimate of the number of sellers</th>
<th>Prices in 1995 ($)</th>
<th>Current prices ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oranges/kg</td>
<td></td>
<td>0.80</td>
<td></td>
</tr>
<tr>
<td>Pineapples, each</td>
<td></td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Tomatoes/kg</td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Avocados, each (large)</td>
<td></td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Rump steak/kg</td>
<td></td>
<td>5.99</td>
<td></td>
</tr>
<tr>
<td>Flounder/kg</td>
<td></td>
<td>6.00</td>
<td></td>
</tr>
<tr>
<td>CD in top 10</td>
<td></td>
<td>12.00</td>
<td></td>
</tr>
</tbody>
</table>

8. ‘Prices at the QVM are generally lower than those elsewhere in Geelong, Ballarat or Melbourne.’ Suggest two reasons for this observation.

9. How might you tell if market prices at the QVM for a particular item were too high or too low? What would you expect to notice or see?

**An essay**

You may like to select one of the following topics and write a 600-word revision essay.

A Referring to recent trends in the prices received by grain, cattle or wool farmers, explain how the free operation of the price system should work well to allocate Australia’s scarce resources between alternative uses.

B In the absence of government intervention in these primary commodity markets, what problems may arise for farmers, and for the Australian economy generally, when there is a change in relative prices?

**Analysis of visual evidence — a cartoon**

There are many cartoons in this topic that can be used to extend your understanding of economics. Examine the cartoons using the following questions as a guide.

• What is the economic concept being presented in the cartoon?
• What is the main message of the cartoon?
• What is your reaction to the cartoon? Do you agree with what it is saying?
• Is the message of the cartoon politically or economically biased or distorted in some way? Explain your answer.
2.6 Review

Summary

Distinctive features of Australia’s economic system

- Australia has a market-based capitalist economy. This involves the dominance of the market or price system in decision making and a system dominated by private enterprise and ownership of assets.
- Ownership of resources and businesses. Our capitalist ownership system relies mostly on private enterprise or ownership of resources, businesses or the means of production. Private owners normally make economic decisions so that they maximise their profits. Nevertheless, there are still some small areas of government enterprise, despite privatisation.
- Decision making. Our system of decision making relies on the price or market system, which reflects consumer sovereignty rather than government sovereignty. This is summarised in figure 2.21. Here, relative market prices move up and down due to new conditions of demand by buyers or supply by sellers. Changes in relative prices create signals for profit-seeking owners of resources to indicate which particular types of goods or services are wanted or have been under- or overproduced. Owners of resources will follow these price signals, since they want to maximise their profits and incomes. As a decision maker, the market works as shown in figure 2.21.
  - In economics, we all face the problem of relative scarcity.
  - We cannot have all the goods and services that we want.
  - Decision or choices have to be made about how limited resources are to be used or allocated (i.e. answer the ‘what, how and for whom to produce’ questions).
  - Australia has a market-based capitalist economic system.
  - The market is an institution that involves buyers and sellers who negotiate relative prices at equilibrium for each good or service.
  - With capitalism, most resources and businesses are owned by private individuals who make key economic decisions based on their desire to maximise their profits and incomes.
  - Generally, only the most profitable types of goods and services are produced, using the cheapest or most efficient production methods.
  - Over time, relative prices change as a result of new non-price conditions of demand and supply.
  - A change in relative prices alters the relative profitability of one good or service against another.
  - Profit-seeking owners of resources respond to these price signals, by changing the type and quantity of goods and services they produce, how they produce them, and for whom they are produced.

The nature of markets in Australia

Markets make up the main decision-making institution in the Australian economy and, hence, we have a market-based system. There are thousands of markets scattered around the country. They allocate around 80 per cent of our resources.
- Markets bring buyers and sellers together where they negotiate prices. Prices for resources are negotiated in factor or resource markets, while prices for finished goods and services are negotiated in final markets.
- Market structure (or market power) is a term that describes the type and level of competition between sellers. At the extremes, there is pure competition (many sellers, strong rivalry and sellers are price takers) and pure monopoly (only one firm controlling the market and it is a price maker). Between these extremes are monopolistic competition and oligopoly.
- Purely competitive markets involve special preconditions or features (e.g. strong competition between sellers, no product differentiation, no government controls or regulations, good knowledge of market trends, profit maximisation and rational behaviour by buyers and sellers). In reality, pure markets are less common than monopolistic competition, oligopolies and monopolies. Because competition constrains personal greed, the Australian Competition and Consumer Commission (ACCC) helps to promote competition among rival sellers, and outlaws anti-competitive behaviour through the Competition and Consumer Act (2010).
- Markets tell us what types of things and how much to produce, and how to distribute production and incomes. They do this through the price system. In turn, relative prices affect whether a particular good or service is profitable. Rising prices usually signal to profit-seeking owners of resources that there has been underproduction and that output needs to be lifted. Falling prices in the market signal that there has been overproduction and that output should be cut by diverting resources to other purposes.
Looking at markets using demand–supply diagrams

The price or market system plays a vital decision-making role in our economy. Economists often use demand–supply diagrams to illustrate how various markets work. Several points can be made about these diagrams:

- **The demand for goods and services.** The demand line in figure 2.22 below shows that the quantity demanded by buyers (D) contracts (from Q₂ to Q₁) as the price rises (from P₁ to P₂), and the quantity demanded expands (from Q₁ to Q₂) as the price falls (P₂ to P₁). This is the law of demand.

  ![Demand Line Diagram](Figure 2.22)

- **The supply of goods and services.** The supply line in figure 2.23 shows that the quantity supplied by sellers (S) expands (from Q₁ to Q₂) as the price rises (from P₁ to P₂), and the quantity supplied contracts (from Q₂ to Q₁) as the price falls (P₂ to P₁). This is the law of supply.

  ![Supply Line Diagram](Figure 2.23)

- **Market equilibrium.** The free market always tries to move to a position of equilibrium (E₁) as shown in figure 2.24. Only at this point do buyers (D) and sellers (S) reach an agreement about the actual market price (at Pₑ) and market quantity (Qₑ). Here, S equals D. At prices above equilibrium, there will be a glut (overproduction) in the market where S > D. Here, prices will be forced down towards the equilibrium level (i.e. at Pₑ). However, at prices below equilibrium, there will be a shortage (underproduction) in the market, pushing prices up to the equilibrium level (at Pₑ).

  ![Equilibrium Diagram](Figure 2.24)

- **Changes in market equilibrium due to new non-price conditions of demand and supply.** Once an equilibrium market price is established for each item, these prices are unlikely to remain steady for long because buyers and sellers are continually reviewing their decisions and changing their behaviour as a result of non-price factors. Buyers may choose to demand an increased or decreased quantity of a particular good or service at any given price, while sellers may also choose to supply an increased or decreased amount of a particular good or service at any given price.
• The equilibrium market price can be affected by changes in the non-price conditions of demand. These conditions of demand (the quantity demanded at a given price) can change due to changes in advertising, disposable income, tastes, fashions, weather conditions, government taxes, and the prices of complementary and substitute products.
  – Using diagram 1 in figure 2.25 below, these new stronger demand conditions can cause the demand line to move and increase from $D_1$ to $D_2$, causing a rise in the equilibrium market price from $P_1$ to $P_2$.
  – Alternatively, using diagram 2 in figure 2.25 below, new weaker demand conditions can cause demand at a given price to decrease from $D_1$ to $D_0$, causing the equilibrium price to fall from $P_1$ to $P_0$.
• The equilibrium price can also be affected by changes in the non-price conditions of supply. These conditions of supply (the amount supplied at a given price) can change due to changing seasonal factors, production costs such as wages, interest rates, altered profitability, tax rates on firms and government assistance to producers.
  – Using diagram 3 in figure 2.25 below, these new stronger conditions can cause the supply line to move and increase from $S_1$ to $S_2$ resulting in falling prices from $P_1$ to $P_2$.
  – In reverse, using diagram 4 in figure 2.25 below, new less favourable conditions can decrease supply from $S_1$ to $S_0$ resulting in rising prices from $P_1$ to $P_0$.
• In response to rising or falling market prices, owners of resources and businesses increase or decrease their allocation of resources to produce particular types of goods or services. They follow these price signals to help maximise their profits and incomes. That is, self-interest causes firms to follow price signals and to produce the things consumers want to buy.

**Background for case studies of markets**

Given the importance of markets in the Australian economy, you should take a case study approach to illustrate the theory of the market studied earlier. One of the following markets (or others listed in the course) may provide the focus for a case study:
  • *agricultural markets* — institutions where the prices of rural commodities like canola or wheat are set by buyers and sellers
  • *markets for mineral commodities* — institutions where the prices of commodities like oil and gold are set by buyers and sellers
  • *housing and property markets* — institutions where land and real estate prices are determined by buyers and sellers
  • *labour market* — an institution where buyers and sellers of labour negotiate wages and conditions
  • *share market* — an institution where share prices are determined in the stock market by buyers and sellers
  • *foreign exchange market* — an institution where the rate at which the A$ is swapped for other currencies is determined by buyers and sellers
  • *finance market* — an institution where borrowers and lenders of credit or money determine interest rates.
Key terms

The **community market** is a local institution, perhaps in a suburb or small town, where buyers and sellers of crafts, foods, used wares and plants meet to negotiate prices.

**Conditions of demand** are the non-price influences on the quantity of a particular good or service that buyers are prepared to purchase or demand *at a given price*. When demand conditions change, this shifts the whole demand line to the right (an increase in the quantity demanded at a given price) or left (a decrease in the quantity demanded at a given price) of the original demand line, thereby affecting the equilibrium price.

**Conditions of supply** represent the influences on the quantity of a particular good or service that sellers are prepared to produce or sell at a given price. When supply conditions change, this shifts the whole supply line to the right (an increase in the quantity supplied at a given price) or to the left (a decrease in the quantity supplied at a given price), thereby affecting the equilibrium price.

**Consumer sovereignty** is where the particular types of goods and services produced reflect what individual consumers purchase, rather than this decision being made through government planning.

**Demand** for a particular good or service represents the amount of a good or service that consumers are prepared to purchase at a given price.

**Demand–supply diagrams** are used to illustrate, hypothetically, how buyers (demanders) and sellers (suppliers) of a particular type of good or service help determine the market price at which the item sells.

**Economies of large-scale production** are reductions in per unit production costs that are gained when a firm’s fixed costs (e.g. for product design or advertising) can be spread more thinly across a larger level of output.

**Equilibrium** is the natural situation towards which all free and competitive markets tend to move. It exists only when the quantity demanded exactly equals the quantity supplied, and there is no market glut or shortage.

**Equilibrium price** is the unique price for a particular good or service that is determined in a market when the quantity demanded is exactly equal to the quantity supplied.

The **finance market** is an institution where buyers (borrowers) and sellers (lenders) of credit or finance negotiate a price that is called the rate of interest.

The **foreign exchange market** is an institution where buyers and sellers of international currencies exchange or swap currencies at a price that is called the exchange rate.

**International competitiveness** relates to whether a business or country is able to sell its goods and services profitably at prices that are below those for similar goods or services abroad.

The **labour market** is an institution where buyers and sellers of labour resources (i.e. physical power and mental talents of workers) negotiate a price that is called a wage.

The **law of demand** states that as the price of a particular good or service rises, the quantity demanded contracts, whereas if the price falls, the quantity demanded expands.

The **law of supply** states that as the price of a particular good or service rises, the quantity supplied expands, whereas as the price falls, the quantity supplied contracts.

A **market** is simply an institution or organisation where buyers (who create a demand for the item) and sellers (who control the supply of the item) of an individual good or service negotiate an agreeable price.

A **market capitalist economy** is the type of economic system found in Australia and many other countries.

Here, most decisions about the allocation or use of resources are made by consumers through the market or price system, while most businesses or the means of production are owned by private individuals (i.e. capitalism or private enterprise).

**Market power** exists when a firm has much control or influence in a market (it is a price maker) because competition is limited and it has a monopoly or is an oligopoly.

**Market shortage** occurs at a price that is below the equilibrium price, where the quantity demanded is greater than the quantity supplied.

**Market structure** refers to the nature and level of competition that exists in particular markets (e.g. pure competition, monopolistic competition, oligopoly and pure monopoly).

**Market surplus or glut** occurs at a price that is too high and above the equilibrium price. Here the quantity demanded is less than the quantity supplied.

**Material living standards** refer to how well off an individual or society is when measured in terms of its income, production or consumption levels of goods and services per person per year.

**Monopolistic competition** occurs when there are quite a few sellers of each product. These products are similar but not identical, since each seller’s product is differentiated from that of its rivals by particular features including brand names and design.

**Non-rural commodity markets** are institutions where buyers and sellers of raw materials extracted from the ground negotiate prices.

An **oligopoly** exists when the level of competition is limited because a few large firms control the output of an industry.
Price makers refer to markets where firms face little or no competition and can set their own prices. Price takers are those firms operating in strongly competitive markets where there is strong competition and firms have no power to set the prices they receive.

The property market is an institution where buyers and sellers of land, houses, units and industrial sites (property) negotiate a price. Purchasing power refers to the quantity of goods or services that can be bought with each dollar of income. It is affected by prices and inflation.

Pure competition exists when there are many sellers of a good or service in a market and each seller has little market power. A pure monopoly occurs when competition in a particular industry or market is weak, and a single firm controls the output of an entire industry.

Relative prices is a concept that compares the price level of one good or service against another. Relative profits is a concept that compares profits gained from producing one particular good or service against those gained from producing another.

Rural or agricultural commodity markets are institutions where buyers and sellers of farm produce (e.g., grains) negotiate prices. The stock market is an institution where buyers and sellers of company stocks negotiate share prices.

Supply of a particular good or service represents the amount of a good or service that sellers are prepared to produce or sell at a given price.