Chapter 2
Consumers and Business

2.1 The traditional economic viewpoint of consumer behaviour

Economists are concerned with understanding how economies work and determining what motivates people in the economic aspects of their lives; however, people and the economies they inhabit are immensely complex. Therefore, in order to develop theories capable of explaining and predicting various economic phenomena, economists must make simplifying assumptions. Such assumptions enable economists to focus on what is most important. The resulting theories can provide economists and other policymakers with powerful insights that can be used to improve people's material and non-material living standards. In reality, though, no single theory is infallible or indeed capable of explaining everything.

The traditional economic viewpoint of consumer behaviour has a long history and is a useful starting point for analysing how consumers behave in markets. However, in more recent years a group of economists have questioned the assumptions that underpin the traditional economic viewpoint. These economists, called 'behavioural economists' and have used findings from the field of psychology to improve our understanding of consumer behaviour.

Study tip

The traditional economic viewpoint is the dominant model for explaining and predicting consumer behaviour. However, it is not the only model. Behavioural economics arose from the desire to explain the way consumers actually behave, as opposed to the way the traditional economic viewpoint assumes they behave.

In order to better understand these new theories of 'behavioural economics', it is important to first consider what is meant by 'traditional' economic thinking about consumer behaviour. At the centre of the traditional view of consumer behaviour is the theory of the 'representative consumer', known as **Homo economicus** or 'rational economic man'. The traditional view of consumer behaviour is based on a set of assumptions about the behaviour of this representative consumer

Rationality

According to the traditional economic viewpoint of consumer behaviour, consumers motivated by self-interest carefully weigh up the expected costs and benefits of each and every decision with the objective of maximising their utility. **Utility** is a term used by economists to describe satisfaction or well-being. This assumption implies that consumers are never instinctive or emotional when making decisions and will only buy goods or services when they consider that the benefits of the purchase outweigh the costs. A related assumption is that consumers act as isolated individuals when making their decisions, uninfluenced by the decisions made by those around them, such as their peers or the 'herd'.

Ordered preferences

The traditional economic viewpoint of consumer behaviour assumes that consumers are able to rank their **preferences** over all goods and services, and make choices based on these rankings in order to maximise their utility. These preferences are 'revealed' when consumers act on their preferences by spending their income. There is also an assumption that preferences are consistent over time.

Informed decision making

It is also assumed that consumers have access to relevant and accurate information to make rational decisions. This is known as 'perfect information'. This enables consumers to calculate or weigh up the expected costs and benefits of every possible decision, to rank them from most preferred to least preferred and to make choices that maximise their utility.

Study tip

Preferences are consumers' likes and dislikes, and are entirely subjective, whereas 'revealed preferences' are consumers' actual choices that involve purchasing decisions.

Marginal benefits from consumption

In Economics, the **law of diminishing marginal utility** states that each additional (or marginal) unit of a good or service that is consumed generates less utility (satisfaction) than the previous one. According to this theory, the second unit of something consumed provides less satisfaction (utility) than the first, and the third unit less than the second, and so on. Therefore, **total utility** *grows less rapidly* with each additional unit consumed. For a numerical and graphical representation of the law of diminishing marginal utility refer to the pizza example below. In the example, the utility gained from the pizza slices has been calculated using 'Utils' – a theoretical measure of utility (satisfaction) gained from consumption.

Pizza Example

Table 2.1: Marginal and total utility of pizza consumption

Pizza	Marginal utility (Utils*)	Total utility (Utils)
1st Slice	**10**	10
2nd Slice	**8**	18
3rd Slice	**5**	23
4th Slice	**3**	**26**
5th Slice	**2**	28
6th Slice	**1**	29

**Utils are a theoretical measure of utility*

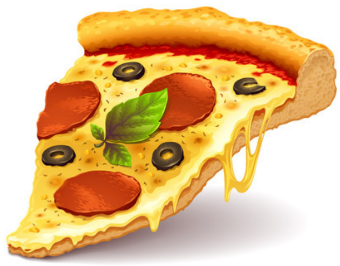


Chart 2.1: Marginal and total utility

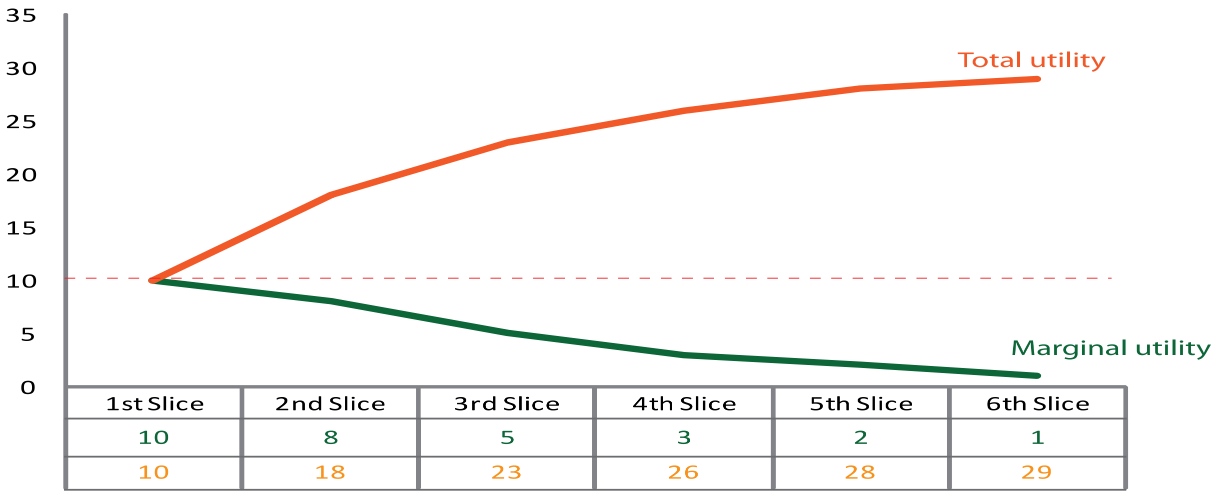


Table 2.1 and Chart 2.1 highlight that the first slice of pizza that is consumed will provide a relatively high level of satisfaction (utility) for the average person. This makes sense because the first slice is the most 'enjoyable' or 'pleasurable'. The second slice will be slightly less enjoyable and so on, until we eventually get to a point (perhaps after slice 6) where another slice of pizza provides us with no additional satisfaction at all. In other words, the marginal utility (extra satisfaction gained) continues to fall towards zero.

Given that consumers experience diminishing marginal utility, they will seek to consume goods and services in different combinations in order to maximise their total utility over time. For example, when buying 'take-away food' over the course of a week or month, a person is likely to 'mix it up' and visit different fast food outlets, perhaps purchasing pizza one day, sushi the next, and fish and chips the night after. This variety will typically lead to a higher overall level of utility or satisfaction compared to one where a person purchases the same take away food.

A practical application of the law of diminishing marginal utility are sales promotions run by service stations where they offer their customers a 50 per cent discount on the purchase of a second chocolate bar or bag of chips. Given that consumers derive less utility from the second confectionary bar, the price discount is used to entice them to purchase an additional chocolate bar. This pricing strategy is often used in a range of markets, including retail clothing, health products and perfumes.

The law of diminishing marginal utility is one of the theoretical underpinnings of the downward sloping demand curve (see Chapter 3).

Review Questions 2.1

1. Explain why economic theories contain assumptions.
2. Identify and outline the three assumptions that underpin the traditional economic viewpoint of consumer behaviour.
3. Explain the law of diminishing marginal utility and outline how it can affect consumer decisions. Use an example to illustrate your explanation.
4. Explain how a person increases their total utility from the purchase of goods and services by 'mixing it up' and buying a variety of goods or services.
5. Provide an example of how businesses can apply the law of diminishing marginal utility to increase their sales revenue.

Application exercise 2a: Utility

Complete the data in the table below calculating the marginal utility from dumpling consumption.

Dumplings	Marginal utility (Utils)	Total utility (Utils)
First dumpling		15
Second dumpling		28
Third dumpling		37
Fourth dumpling		42
Fifth dumpling		44
Sixth dumpling		45

Questions/tasks

1. **Construct a line graph, plotting the data on marginal utility and total utility. Plot the total utility on the y-axis (vertical) and number of dumplings consumed on the x-axis (horizontal). Ensure you fully label the graph.**
2. **Describe what the graph shows. Your description should use data taken from the graph, and include economic terminology similar to that used in the earlier discussion of diminishing marginal utility.**
3. **Using what you have learned about the theory of diminishing marginal utility (DMU), explain why the data shown on the graph is likely to be an accurate representation of the average consumer's utility (satisfaction) in consuming dumplings.**
4. **Explain how the experience of DMU by consumers might influence their consumption decisions.**
5. **Imagine that you own a shop specialising in the serving of dumplings. Outline how you could use your knowledge of DMU to increase total revenue (i.e. total sales) for the shop.**

2.2 Economic factors that may influence the economic decisions made by consumers

As noted above, economists' traditional view of consumers stems from the assumption that consumers are fully autonomous rational economic actors, who will rank their consumption preferences and make fully-informed choices in order to maximise their utility.

There are, however, a number of *other factors* that may influence the decisions made by consumers and increasingly economists are recognising the importance of these factors and the way their influence challenges traditional assumptions about consumer decision making and behaviour.

Utility maximisation and budget constraints

Study tip

Is utility maximisation possible? The psychologist Abraham Maslow famously said: 'it isn't normal to know what we want. It is a rare and difficult psychological achievement'. Behavioural economists would agree with this statement.

Consumers seek to maximise their total utility (achieve **utility maximisation**) by consuming different combinations of goods and services. The decision about what combination of goods and services to consume are influenced by the **relative prices** of goods and services, individual preferences and the amount of income consumers have available to spend or their budget constraint. Given that all consumers will face a budget constraint, an increase in the price of Good A relative to Good B is likely to prompt them to allocate more of their income to Good B and less to Good A as they seek to maximise their total utility. The resulting **opportunity cost** of this decision is sometimes expressed as the amount of Good A that is foregone.

Other influences on decision making

Consumer behaviour is affected by internal and external influences. Internal influences relate to the individual such as personality type, ethics and habit. On the other hand, external influences refer to broader societal factors such as culture, marketing and government.

Internal influences

Personality types

Personality can be defined as the combination of attributes, motives, values and behaviours unique to each individual. There are numerous theories of personality types, which are beyond the scope of this course. Suffice to say, personality exerts a powerful influence over the way consumers behave and ultimately the choices they make. The following examples provide an insight into how personality can affect consumer decisions.

Some consumers place a high priority on social status or their position relative to others in society. A way of visibly demonstrating one's status is through the consumption of expensive goods such as designer handbags and exotic sports cars. We might refer to these people as 'status seekers' –those who gain satisfaction from being seen consuming such goods by other people. The term **conspicuous consumption** is often used to describe this sort of behaviour.

An early observer of this phenomenon was the economist, Thorstein Veblen in the late 1800s. In his book *The Theory of the Leisure Class* Veblen reported that as the prices of certain goods increased beyond a particular level, the quantity demanded increased too. He argued that high net worth individuals or the 'leisure class' demanded greater quantities of such goods because of their 'snob value'. That is, these individuals are prepared to buy more of these goods as their price rises because, by consuming them, they effectively signal their high standing relative to others. These goods are called **Veblen goods** after their namesake. The terms **status goods** and **positional goods** are also used to describe these types of goods. Veblen goods are a special category of goods because they are an exception to the **law of demand**, which states that there is an inverse relationship between the price of the good and the quantity demanded (see Chapter 3). In the case of a Veblen good, the quantity demanded actually increases as the price increases.

Conspicuous consumption is by no means a new phenomenon. Peter Acton in his book *Poiesis: Manufacturing in Classical Athens*, describes how conspicuous consumption became increasingly common in fourth century BCE Athens. The evidence he provides includes: 'Some couches and tables were highly ornate and inlaid with gold or silver' and 'Men and women wore jewellery of outstanding craftsmanship and decorative ceramics or silverware for festivals might take several years of work.'

Another example providing insight into the effect of personality on consumer decision making relates to *self-control*. The traditional economic viewpoint assumes that consumers have complete control over their appetites and urges. That is, people are coolly rational like Mr. Spock from the sci-fi entertainment franchise Star Trek. However, behavioural economists beg to differ. They argue that people can have problems stopping themselves from doing things they know they'll regret. In other words, they can suffer from a lack of *willpower*. For example, people often succumb to the urge for immediate gratification, without giving too much thought to the problems this might cause in the future. When people end up regretting their choices, they have overvalued the present and undervalued the future. This is known as **present bias** or **time-inconsistent preferences.** There are many examples of this type of decision making error or bias such as overeating, spending too much on credit, not saving enough for retirement, problem gambling and illicit drug taking.

Over-confidence is one factor that accounts for present bias. That is, people are often over-confident about their ability to control themselves in the future. This explains why, in the pursuit of the 'Great Australian Dream' of home ownership, some people over-extend themselves by taking on large mortgages, naively thinking that they'll be able to cope with the heavy repayments over the term of the loan.

Study tip

The traditional economic viewpoint of consumer behaviour operates on the assumption of 'perfect information', which implies that consumers have access to the best possible information in order to make rational decisions. However, in reality information can be incomplete, misleading and confusing. Moreover, consumers have so many options to choose from that processing all the relevant information can result in cognitive overload, making rational decisions almost impossible. Additionally, acquiring information is often costly in both a monetary and non-monetary sense. These 'non-monetary costs include the time devoted to researching products online, browsing through catalogues, reading consumer magazines such as 'Choice' and visiting shops to obtain product information from salespeople. Even then salespeople can bombard consumers with minor but technical details to distract them from more important considerations. Therefore, collecting information beyond the point where the additional (marginal) cost of acquiring exceeds the additional (marginal) benefit isn't worth it.

Another factor that accounts for present bias is *procrastination,* where people put off making important decisions. This partly explains why people often delay moving a portion of their savings from a savings account to a fixed term deposit that attracts a higher rate of interest. Yet another example is where a person postpones changing health insurance providers and thus forgoes the possibility of getting better coverage (in the event of an illness requiring medical treatment) at a more competitive price.

Businesses have been known to exploit these problems with self-control. For example, gym memberships are designed to appear as though they are good value. This is true only if those who sign up for a membership possess the discipline to use the gym's facilities regularly for the duration of the contract. Similarly, banks will typically take advantage of the fact that many consumers have procrastination bias. The banks will ensure that they make it sufficiently difficult for mortgage borrowers (i.e. those borrowing from the bank to buy a home or property) to take their business to another financial institution. The requirement to complete lengthy and complex documents, including the need to provide proof of identity, credit details, tax records, as well as new property valuations and the likelihood of deferred establishment fees makes it very easy for consumers to 'procrastinate' given the time and energy involved in securing a 'a better deal'. In Economics, these costs are often referred to as **'transaction costs'** and they largely explain why households take a long time (if at all) to switch from one mortgage provider (e.g. a bank) to another, even though the interest rate they are paying on their mortgage (housing loan) could be lowered significantly, saving them thousands of dollars.

Mortgages will also often come with a special discounted interest rate, known as 'honeymoon' or 'teaser' rate for the first twelve months of the loan before increasing to a higher rate at the end of this period. These 'honeymoon' rates were commonplace in the United States prior to the **Global Financial Crisis (GFC).** Cheap loans fuelled demand for housing which lead to a **house-price bubble** in the U.S. property market. In fact, many **sub-prime borrowers** or **NINJAS** were offered super low interest rates before they jumped to an overly high interest rate. When interest rates increased many of these borrowers experienced mortgage distress and went into **default**. That is, they were not able to continue making the mortgage repayments. The banks had no other option but to seize these properties and put them back on the market to recover the monies they were owed, a process known as **foreclosure.** Due to the widespread nature of the defaults and foreclosures, there was an oversupply of properties, which triggered a collapse of house prices. As a result many banks along with investors who financed these loans, faced financial ruin, as they were unable to recover the monies they had originally loaned. This was just one of many factors that contributed to the onset of the Global Financial Crisis. Hence we can see that overconfidence and lack of self-control by consumers, and the exploitation of this by business, can have significant impacts on economic decision making.

Review Questions 2.2a

1. Outline what is meant by a budget constraint and explain how it can influence consumer decisions.
2. Distinguish between internal and external influences on consumer behaviour.
3. Explain what is meant by personality type.
4. Explain what is meant by conspicuous consumption and provide an example.
5. 'Veblen goods signal a person's social status.' Explain this statement.
6. Explain why the consumption of a Veblen good might create a 'feel-good' effect.
7. Compare the demand for a Veblen good with demand for other goods.
8. Explain what is meant by present bias (time inconsistent preferences) and provide an example.
9. Describe how a lack of self-control can lead to consumers overvaluing the present.
10. Analyse the relationship between overconfidence and present bias and provide a supporting example.
11. Analyse the relationship between procrastination and present bias and provide a supporting example.
12. Analyse how businesses can exploit self-control problems. Use an example to support your response.

Ethics

Ethics refer to the moral principles that guide a person's behaviour. An ethical person will behave in a manner that is acceptable and highly regarded by society. People are also consumers and ethical considerations influence their preferences and ultimately the choices they make.

For example, 'Fairtrade' goods provide consumers with peace of mind that their choices are ethical. The Fairtrade organisation uses a process of certification to signal to consumers that farmers and workers in developing countries receive adequate compensation for their labour and that the goods are being produced in an environmentally sustainable manner. Some consumers prefer Fairtrade coffee to regular coffee and thus will derive greater utility from its consumption. Some notable brands that have achieved Fairtrade certification include Cadbury confectionary, Starbuck's coffee and Kathmandu's cotton clothing.

However, purchasing ethical goods often comes at a premium, as they are typically more costly to produce and are therefore sold at a higher price. Given that all consumers face a budget constraint, it can be especially difficult for low-income households to purchase such goods. This doesn't imply that low-income households are somehow unethical – it just means that their first priority is satisfying their basic needs.

Habit

An area of interest for economists is the formation of habits and how they affect consumer behaviour. In the context of consumer behaviour, a habit is where consumers regularly purchase certain types or brands of goods or services using little or no cognitive effort. Indeed, consumers can be **'creatures of habit'**, purchasing those items that are familiar to them. This might be due to their positive experiences in the past, convenience, the influence of family and peers, geographical region, product availability or because of the strategies used by businesses to foster brand loyalty.

A recent study examined the preferences of American consumers who had relocated to another region within the United States. It focused on their preferences towards specific brands of packaged consumer goods, such as food, beverages and non-food items commonly found in supermarkets. The authors of the study concluded that preferences were dependent on where consumers had previously lived. For example, a person who was born and raised in the northeast of the United States, but who later relocated to the south, carried their preferences for particular brands with them. This same pattern was observed for consumers from other regions of the United States who had relocated.

Knowledge of habits opens up business opportunities. For example, entrepreneurs have set up special supermarkets in Singapore stocking Australia's favourite grocery brands to cater to the tastes and preferences of the large expatriate community that lives and works there.

In Victoria, **deregulation** of the utilities industry (e.g. electricity and gas industries) was expected to provide consumers with choice and lower prices. However, the policy has not been as successful as expected with many consumers reluctant to change suppliers. Barriers to changing habits include the 'hassle' of changing suppliers, or the transaction costs referred to earlier, such as identifying a new supplier and filling out the necessary forms, as well as the perceived risk that a new supplier won't be as a reliable. Nevertheless, habits can be broken, as shown in Ireland and some outlets in Australia, with the introduction of a small charge for plastic shopping bags. In response to such charges, the overwhelming majority of consumers now bring their own reusable shopping bags with them when grocery shopping in those locations.

Application Exercise 2b: Ethics & sustainability

Palm oil: The worldwide movement to make it sustainable
29 July 2016, www.abc.net.au

You have probably heard a lot about palm oil and the movement across the world to make its production sustainable.
It is considered a major environmental issue because, as an ingredient, palm oil is used in a lot of supermarket products, and its cultivation contributes to major deforestation and displacement problems. A group called the Roundtable on Sustainable Palm Oil (RSPO) is working to make its production sustainable.

So, let's take a look at what's happening with palm oil.

What is palm oil? Food Standards Australia and New Zealand (FSANZ) describe it like this: Palm oil is a vegetable fat obtained from the fruit of the African oil palm tree. It contains a high proportion of saturated fat.This is unusual as most vegetable fats do not contain high proportions of saturated fats; however there are exceptions such as palm oil and coconut oil.

How widely used is palm oil? If you eat supermarket products like margarine, biscuits, instant noodles, chocolate, or ice cream, you're probably eating palm oil. If you buy products like candles or cosmetics, you're probably buying palm oil. According to the RSPO, manufacturers of these products like palm oil because:

- It has great cooking properties. It maintains its properties even under high temperatures
- Its smooth and creamy texture and absence of smell make it a perfect ingredient in many recipes, including baked goods
- It has a natural preservative effect which extends the shelf life of food products

In addition, it is the highest-yielding vegetable oil crop, which makes it very efficient. Palm oil needs less than half the land required by other crops to produce the same amount of oil. This makes palm oil the least expensive vegetable oil in the world.

So, is 'vegetable oil' actually palm oil? Sometimes. "Vegetable oil" is a term found on many food and product labels that encompasses a lot of different kinds of oil, palm oil being one of them, but it could also refer to other varieties, including canola, sunflower or soybean. WWF said palm oil was now the most widely used vegetable oil on the planet, "accounting for 65 per cent of all vegetable oil traded internationally". The RSPO said about 50 per cent of supermarket products contained palm oil.

Melbourne Zoos are part of a movement in Australia pushing for mandatory labelling of palm oil. FSANZ is the authority in Australia that deals with food labelling. It says "under current regulations, palm oil does not have to be labelled as palm oil" and "it can be labelled using generic terms such as 'vegetable oil". "FSANZ has previously rejected an application for mandatory ingredient labelling of palm oil when used in food products because the application was about environmental concerns."

What's the problem exactly? The RSPO says "in some regions, oil palm cultivation has caused — and continues to cause — deforestation". "This means that land, which was once predominantly covered by primary forest ... never before touched by man or which housed protected species and biodiversity, was cleared in order to be converted into palm oil plantations," it says. "Likewise, some palm oil plantations were developed without consulting local communities over the use of their land. Some have even been responsible for forcibly displacing people from their land. Violations of workers' rights to fair payment and safe working conditions and other malpractices have also occurred." Zoos Victoria estimates 1,000 orangutans die each year as a result of their habitat being destroyed through unsustainable palm oil production.

Is there a solution? Firstly, replacing palm oil production and use in manufacturing with another vegetable will reportedly create similar — if not worse — environmental and social problems. The RSPO says: "The best solution is to ensure you buy products that contain sustainable palm oil." The roundtable says sustainable palm oil production helps to keep millions of farmers and families who work in the sector out of poverty.

So, when you're shopping, the advice is to look for labelling that talks about sustainable palm oil production.
It is often marked by the acronym CSPO, meaning Certified Sustainable Palm Oil.

Questions

1. **Identify some of the products that contain palm oil.**
2. **Explain, using economic reasoning, why palm oil is popular among consumers and producers.**
3. **Explain why palm oil is considered to be a major environmental issue.**
4. **Describe some of the possible solutions to the issue of palm oil. In your response, outline the role of the 'ethical consumer'**

External influences

Culture

According to the economist Lawrence Harrison, **culture** can be defined as '…the body of values, beliefs, and attitudes that members of a society share; values, beliefs and attitudes shaped chiefly by environment, religion, and the vagaries of history that are passed on from generation to generation chiefly through child rearing practices, religious practice, the education system, the media and peer relationships.'

Culture can exert a powerful influence over consumers' choices. For example, smoking is frowned upon in modern day Australia. However, this wasn't always the case. In the past, films and television portrayed smoking as a glamorous and fashionable habit. Over time Australian society's values, beliefs and attitudes have changed as a result of comprehensive research into the health effects of smoking which have been widely disseminated through education campaigns. Smoking is now overwhelmingly seen as a 'bad' habit and a harmful addiction. This explains the declining number of people taking up the habit and the increasing number of people attempting to quit. According to the most recent figures from the Australian Bureau of Statistics in 2014-15, 14.5% of adults aged 18 and over were daily smokers, down from 16.1% in 2011-12. This continues the trend over the past two decades.

The big tobacco companies have responded to the dwindling number of consumers for their products through controversial innovations such as the production of e-cigarettes. Another example of culture influencing consumption decisions is the consumption of certain products during certain periods of the year. In the lead up to Good Friday, many people flock to Melbourne's Queen Victoria Market to purchase seafood, as tradition dictates that people eat fish or shellfish, or both, on this religious holiday. Indeed, it is the strength of demand for such items that accounts for the spike in seafood prices in the days leading up to Easter each year. This is despite the fact that fewer people are practising Christians in modern day Australia. This shows how powerful the role of culture can be in influencing the decisions that consumers make.

Marketing

Marketing is an important business function, covering those activities directed at attracting customers to a business's products. Promotional activities such **advertising** aim to persuade consumers to purchase a business's products. Advertising can be a powerful form of business communication. Smart advertisers know that the way they frame their message can influence the choices that consumers make. **Framing** is about how options or propositions are presented.

Consider the following example relating to an expensive permanent hair removal treatment. The advertiser can frame the likely outcome of this treatment in two ways.

Frame 1: The success rate for such a treatment is 80%.
Frame 2: The treatment has a failure rate of 20%.

Both propositions are statistically equal, but they are framed differently. However, consumers are less likely to pay for a treatment with a 20 per cent failure rate compared to a treatment with an 80 per cent success rate. In other words, people can react differently to the same propositions, depending on how they are framed.

Framing is also used in advertising to induce consumers to make decisions on an emotional rather than rational basis. It often preys on people's vulnerabilities and emotions by making unspoken links between the product and some attractive situation or emotion. For instance, an advertisement for a brand of margarine might depict a happy, healthy and active family. The message being communicated here is that, by buying the product, *you* can have a happy, healthy and active family too.

The traditional economic viewpoint of consumer behaviour implies that because people are rational, framing should not affect the choices they make. That is, they can see 'beyond' the frame. However, behavioural economists argue that the way consumers react to situations or propositions are heavily dependent on the way they are framed or the context in which they are presented. This suggests that consumers can make choices they later regret. In other words, framing can lead to poor decisions that compromise a consumer's utility.

Application Exercise 2c: framing

The explanation of framing above includes two examples of framing techniques used by advertisers to sell goods and services: statistical and emotional.

In pairs:

- Research at least one other technique used in framing.
- Watch a number of television commercials and identify one commercial for each framing technique: statistical, emotional and the one you have researched.

For each commercial:

1. Identify the framing technique.
2. Explain whether you think the use of the framing technique was effective. Justify your conclusion.

As a group, prepare a five minute presentation to report your findings to the class.

Advertising can also be used to develop **brand loyalty**. Indeed, smart advertisers and/or an effective marketing department can create an impression in the minds of consumers that substitute products are somehow inferior and are not viable alternatives. This is also a type of framing in action. Over time, it can make consumers less responsive to price changes, giving businesses a degree of **market power** or the ability to raise **total revenue** (and profits) by actually raising prices. For example, the watch manufacturer, Rolex, has been able to generate significant brand loyalty over many years. As a consequence, it is able to raise the price of watches by perhaps 10% in the knowledge that this price rise is likely to trigger a decrease in the quantity demanded of much less than 10%. Similarly, businesses such as Apple Inc. can charge a premium for their products, such as the iPhone, in part due to their customers' loyalty or attachment to their products.

Study tip

In Economics, the responsiveness of consumer demand to a change in price is referred to as the price elasticity of demand (PED). The PED for products such as Rolex watches, for example, is likely to be relatively low. Knowledge of PED is not required in the VCE Economics Unit 1 course, and is instead covered in Unit 3.

Application exercise 2d

Assume that you have been appointed the marketing manager within a relatively small corporation specialising in the production sporting equipment and attire. The company is planning on raising the profile of one its brands, let's say Brand Z, as it believes that the building of brand loyalty will help it earn greater revenue and profits. Your research indicates that a successful advertising campaign, combined with an effective overall marketing strategy, will enable the company to raise the average price of Brand Z products without a significant negative impact on the total demand for Brand Z products. To convince management of the financial impact of your proposal, you present the following table to highlight the potential benefits for the company.

Brand Z: Estimated market movements over next three years

Time period	Price (P)	% change in price from 2017 price	Quantity demanded (QD) ('000)	% change in quantity demanded ('000) from 2017 level	Total revenue ('000) [P X Q]	Change in total revenue ('000)
2017	$100	-	100	-	$1000	-
2018	$110	10% increase	95	5% decrease	$1045	$45 increase
2019	$125		90			
2020	$150		85			

Questions/tasks

1. **Use a calculator to complete the table above.**
2. **Describe how the responsiveness of consumer demand to higher prices will change over 2018-2010 according to the calculations.**
3. **Explain why total revenue is estimated to increase over the relevant period.**
4. **Based on the figures in the table, explain why attempts to build Brand Z can benefit the company. In your answer, refer to the change in total revenue over the period.**
5. **Describe a possible advertising or marketing strategy that might help you to achieve the above results.**

Critics of advertising argue that it deliberately sets out to manipulate consumer preferences and tastes and in doing so undermines the principle of **consumer sovereignty**. So rather than consumers determining what is produced in an economy, it is businesses who answer this basic economic question. If these critics are correct, this challenges the idea that the economy serves the interests of consumers that populate it. Another argument against advertising is that it contributes to widespread materialism and a culture of conspicuous consumption on a planet of finite of resources and vast inequalities between different regions of the world.

On the other hand, advocates of advertising point out that it plays a vital role in conveying important information to consumers such as the price, quality, and other attributes of a product, enabling them to make product comparisons and informed, rational decisions.

Government

Governments use their control over the tax system and their considerable spending power to influence the decisions that consumers make. They can also seek parliamentary approval for new laws to mandate or even prohibit the consumption of certain goods. Ultimately, governments create both **positive and negative incentives** to help ensure that consumers make 'the right choices' when purchasing goods and services. [The ways consumers and workers might respond to positive and negative incentives more generally is covered later in this chapter.]

Study tip

Externalities are sources of market failure. Market failure describes a situation where the pursuit of self-interest by consumers and businesses results in an inefficient allocation of resources, which compromises the living standards or economic welfare of all members of society. The belief that markets can 'fail' is a justification for government intervention in markets through the use of taxes, subsidies, laws and other policies. Externalities and market failure are covered in greater detail in the VCE Economics Unit 3 course. Our focus in Unit 1 is on the ways in which the existence of a number of other influences on consumer decision making contradicts the traditional economic viewpoint of consumer behaviour.

Governments seek to encourage the consumption of goods and services that generate positive spillovers or **externalities**. A **positive externality in consumption** occurs when the consumption of a good or service confers a benefit on a third party or bystander. This means that someone who did not pay for the good or service receives part of the benefit from that good or service. For example, when a person pays for a flu vaccination, society benefits too. Indeed, the benefits to society are greater than the benefits to the individual. This is because an individual's decision to get vaccinated not only protects them from catching the flu but others too, namely those people who haven't been vaccinated. The government recognises that it is in society's best interest for more people to be vaccinated, as it raises the level of immunity among the population (referred to as 'herd immunity' by doctors). Moreover, there are many other related benefits from vaccinations such as fewer working days lost and fewer people presenting ill at hospitals and clinics, resulting in cost savings for the healthcare system. Also, the general misery of being bed-ridden for days is likely to be kept to a minimum.

For all of these reasons, the government creates **positive incentives** by subsidising the cost of vaccinations or providing them free-of-charge to encourage more people to get vaccinated. In the absence of government intervention, too few resources are allocated to goods and services that generate positive externalities as people aren't compensated for the benefits they provide to the rest of society. In other words, 'good deeds' such as being vaccinated are under-valued by the market.

Sometimes the government can resort to more punitive actions (which can be viewed as **negative incentives**). For example, on 1st January 2016, the federal government's 'No Jab, No Pay' legislation came into effect. Under this legislation, parents who don't vaccinate their children against common childhood illnesses will no longer receive benefits such as the childcare rebate, which covers a portion of the fees charged by childcare centres. These laws are likely to encourage parents to vaccinate their children as losing such payments can be a significant financial penalty.

Education also provides positive externalities for society as a whole. For example, a better educated population is likely to:

- generate higher levels of productivity
- lead to more innovation resulting in higher levels of economic growth
- create a more tolerant and harmonious society

- result in less crime
- mean more informed citizens, resulting in better quality government

For these reasons, the government mandates a minimum school leaving age of fifteen and provides education free-of-charge through public schools. In the absence of direct provision by the government, too few resources (such as labour and capital) are likely to be allocated to education, as the cost of educating a child for most parents would be just too prohibitive.

On the other hand, a **negative externality in consumption** occurs when the consumption of a good or service imposes a cost on a third party or bystander. In the absence of government intervention too many resources are allocated to goods and services that result in negative externalities because people neglect to factor in the harmful effects of their consumption on third parties when making decisions about what to buy. That is, they only consider the costs to themselves, while ignoring the costs that 'spill over' to others.

For example, the consumption of cigarettes results in negative externalities, as non-smokers can develop smoking-related illnesses from inhaling second-hand smoke (i.e. passive smoking). To curb the consumption of cigarettes, the government creates negative incentives by levying an **excise tax** on tobacco. In the 2016-17 Budget, the federal government announced its intention to raise the excise tax on tobacco by 12.5% each year for the next four years, which follows 12.5% annual increases in the preceding years. The tobacco companies generally pass on any increases in the excise tax to consumers in the form of higher prices, which provides the negative incentive to consumption intended by the government. The increase in the price of a packet of cigarettes leads to a decrease in the quantity of cigarettes demanded. However, because tobacco is an addictive substance, any percentage change in price results in a much smaller percentage change in the quantity demanded. [A World Bank study showed that a 10% increase in the price of cigarettes reduces consumption by about 4% in developed countries and 8% in developing countries.]

The government can also use other policies to create negative incentives to smoke. Australia's plain packaging laws prohibit tobacco companies from adorning cigarette packets with appealing graphics and prominent brand names. These laws also require cigarette packets to display confronting images of the health effects of smoking accompanied by jarring health warnings such as 'smoking kills'. The aim of such laws is to decrease the demand for cigarettes. Plain packaging laws are also backed up by anti-smoking campaigns in the mass media. For example, QUIT Victoria regularly runs TV advertisements aimed at persuading people to give up smoking. Moreover, laws prohibit smoking in public places such as restaurants, bars, shopping centres and sporting venues. All of these measures are designed to combat the negative externalities associated with the consumption of tobacco.

Study tip

The imposition of a tax on products like cigarettes (or fuel and alcohol) helps to create negative incentives for consumers to smoke. However, the fact that these goods are either addictive or necessities means that the taxes also raise significant revenue for the government, just like a higher price for Rolex watches can raise revenue for Rolex (as we saw earlier).

Another example of a negative externality in consumption is problem gambling. Problem gambling not only exacts a heavy toll on the gambler, but also affects their family, friends and society. As noted earlier in this chapter most people have a self-control problem in some aspects of their life. For instance, problem gamblers find it hard to control the amount of money they spend on gambling. Governments have considered 'pre-commitment' schemes to enable gamblers to set time limits and spending limits before commencing a gambling session. Such schemes use smart card technology. They require the gambler to insert their smart card into an electronic gaming machine (EGM) and once they reach their pre-determined limits, they are automatically prevented from placing any more bets. It is based on the principle that decisions relating to expenditure should be made in a state of non-emotional arousal and that the set limits should be adhered to. The aim of such a scheme is to limit the amount of money a gambler can lose in a session.

Governments can also use more subtle approaches to influence consumer behaviour. Behavioural economists, Richard Thaler and Cass Sunstein, in their book *Nudge*, show how governments can **nudge** or subtly coax people towards making more sensible decisions. The nudge approach aims to bring about change in people's behaviour *without* resorting to heavy financial incentives or sanctions. According to these economists, the ability to use these 'nudges' comes about because of flaws in how individuals make decisions. They have turned on its head the traditional view of the rational individual economic decision maker put forward by many economists. They argue that people often make economic decisions in a way that is flawed and these flaws can be exploited to influence people's decision making.

Behavioural economists use the term **choice architecture** to describe the context in which options are presented. They argue that the context can have a significant influence over the choices that consumers make. A related idea is the **choice architect**, who is responsible for creating the context in which people make decisions. Choice architects are typically policy makers such as benevolent or well-meaning government officials who use the insights of behavioural economics to 'steer' consumers into making better choices.

A practical illustration of a nudge in action is former First Lady, Michelle Obama's anti-obesity campaign in the United States. This involved an arrangement with the popular children's TV program *Sesame Street*, where they televise their much-loved characters eating healthy foods in a fun way. Evidence showed that associating *Sesame Street* characters with a piece of fresh fruit or vegetable increases the likelihood that children will eat these foods. It also makes them feel that they taste better. In this example, the choice architecture is *Sesame Street* characters eating fresh fruit and vegetables and the choice architects are the United States Government and PBS, the television station that produces and broadcasts the show.

Another related example is from the Netherlands where white bread is consumed by school-aged children at three times the rate of wholegrain bread. However, a study showed that cutting the healthier, wholegrain option into fun shapes almost doubled its consumption. Both of these examples demonstrate that children can be *nudged* into making better choices, simply by making healthy food more fun.

Some governments have heeded these lessons and are keen to explore how these subtle approaches can be used to influence people's choices in lots of different areas. The Australian Government has set up the Behavioural Economics Team (BETA) dedicated to exploring how people can be nudged into making better choices. The term **soft paternalism** has been used to describe the use of nudges to change consumer behaviour.

Application Exercise 2ei: Britain's sugar tax

The British Government has announced that it will introduce a 'sugar tax' to curb the country's childhood obesity epidemic. The tax will apply to high-sugar, fizzy drinks such as Coca-Cola and Pepsi, which are popular among teenagers. The tax will apply in two bands (categories) according to the sugar content of drinks. For drinks with a sugar content above 5g per 100 millilitres, such as Dr Pepper, Fanta and Sprite will be taxed at a slightly lower rate compared to those drinks in a second, higher band. The higher band will apply to the most sugary drinks –those with more than 8g of sugar per 100 millilitres, such as Cocoa-Cola, Pepsi and Lucozade. Experts predict the tax will add between 18p and 24p per litre to the price of such drinks. Pure fruit juices and flavoured milk will be exempt from the tax. The smallest producers of fizzy drinks will also be exempt from the scheme.

The tax deliberately targets high-sugar, fizzy drinks because of their popularity and extremely high sugar content – about nine teaspoons per can, which is more than the total recommended daily intake of sugar. Such drinks are also consumed on a daily basis, and unlike other high sugar foods such as chocolate, they are not seen as a treat. Further, they have no nutritional benefit; that is, they are just 'empty calories'.

High profile celebrity chef and restaurateur, Jamie Oliver, has been a vocal campaigner for the tax. It is expected to raise about £520m in revenue per year.

Questions

1. **Explain how the sugar tax discourages the consumption of high-sugar fizzy drinks.**
2. **Evaluate the likely effectiveness of the sugar tax. Hint: consider its strengths and weaknesses and consider what you have learned about habit, and the impact of marketing on consumer behaviour.**
3. **Explain how you believe the government should spend the revenue it collects from the sugar tax. Justify your choice – if possible with the use of economic reasoning.**
4. **Obesity has been described as 'the new smoking'. Explain this statement.**

Note: Symbols for British currency: p=pence, £=pounds

Application Exercise 2eii: Britain's sugar tax

Australia ought to follow Britain's lead and introduce a sugar tax.

Identify where you stand with respect to this proposition on the human agreement line and provide an argument to support your view, in 150 words or less.

Against For

Review Questions 2.2b

1. Define ethics and provide an example of how ethics can influence consumer decisions.
2. Define habit and outline some of the factors that influence the formation of habits.
3. With reference to habit, explain why deregulation of the utilities industry in Victoria was not as successful as expected.
4. Define culture and provide an example of how it can influence consumer behaviour.
5. Explain what is meant by framing and give an example of how it is used in advertising to generate increased sales.
6. Analyse the relationship between brand loyalty and market power. Outline the arguments for and against advertising.
7. Distinguish between positive and negative externalities in consumption, and provide examples of each.
8. Explain how the government can create positive incentives to encourage the consumption of goods and services.
9. Explain how the government can use negative incentives to discourage the consumption of goods and services that result in negative externalities.
10. Explain what is meant by pre-commitment and how this can be used to tackle the issue of problem gambling.
11. 'Cutting up a credit card is an extreme example of pre-commitment in action'. Explain this statement.
12. Explain what is meant by a nudge and provide a practical example of how it can be used to influence consumer behaviour.
13. Distinguish between a choice architect and choice architecture.

2.3 Behavioural economics: How do consumers really behave?

Behavioural economics is a relatively new field of study that seeks to incorporate the insights of psychology into economics, to enhance the explanatory power of economics. Practitioners of behavioural economics are called **behavioural economists**. They are interested observing how consumers actually make decisions, rather than assuming a theoretical model of human behaviour can fully explain economic decision making.

Behavioural economics includes three insights into human economic decision making that contradict some of the assumptions of the traditional economic view of consumers: bounded rationality, bounded will power and bounded self-interest.

Bounded rationality

Behavioural economists don't assume that people *always* act rationally, but rather look to psychology to better understand how consumers make decisions. Herbert Simon, a pioneer of behavioural economics argued that the notion of Homo economicus, which rests on the assumption that consumers are carefully calculating maximisers of their utility, is a one-dimensional view of human behaviour.

He proposed an alternative view of how consumers make decisions, based on **bounded rationality**. This is the idea that consumers' ability to make rational decisions is compromised by the availability of information, the complexity of the decision, the brain's cognitive limitations and time constraints. As a result, consumers often resort to **heuristics** or 'mental shortcuts' to help them make 'fast and frugal' decisions. These decisions are fast in the sense that consumers save time thinking about decisions, and frugal in the sense that these decisions minimise the costs of collecting the information needed to make decisions. Although these heuristics can serve consumers well, they can also lead to persistent errors or biases in the decision making process.

So rather than being rational maximisers of their utility, consumers are **satisficers**. This means that consumers do as well as they think is possible. In other words, they make decisions that are 'good enough'.

Some common decision making errors and biases that affect the ability of consumers to make rational decisions include:

Study tip

People experience cognitive overload because of the sheer volume of information they face. This is compounded by the brain's inadequate processing power. Therefore, people's ability to store and process information, let alone make lightning quick calculations of the costs and benefits attached to each possible decision is constrained.

Overconfidence bias

As discussed earlier, consumers often overestimate their ability to make good decisions. To illustrate this bias, consider the following experiment. A room of people is asked a numerical question such as the distance in kilometres between the Earth and the moon. Rather than having to give a single estimate, they are asked to give a 90 per cent confidence interval. This means they have to be 90 per cent confident that the answer falls within the upper and lower limits of the range they have given. However, rather than giving a big range, such as 1 to 1,000,000 kilometres, most people give ranges that are too small, meaning the answer falls within their intervals far less than 90 per cent of the time. This occurs because most people have too much confidence in their intuitive reasoning, judgments and cognitive abilities to make good decisions. (By the way the correct answer to this question is 384,000 km.)

As discussed earlier, the **overconfidence bias** can result in consumers taking on too much debt, a decision that they often come to regret. Share market investors can also be prone to the overconfidence bias in the sense that they have unwarranted faith in their ability to predict a 'crash' to avoid any losses from their share market investments.

The **illusion of control bias** - or the belief that consumers can control or at least influence future outcomes when they can't, contributes to the *overconfidence bias.* Consider the following experiment where a group of people is asked the following question: *When you buy a Tattslotto ticket, do you feel more encouraged about your chances of winning a prize if you choose the numbers yourself rather than letting the computer randomly generate the numbers for you?*

The two possible responses to the question are:

Option A: I'm more likely to win if I can control the numbers I choose.
Option B: It makes no difference to me how the numbers are chosen.

Statistically, it makes absolutely no difference to the odds of winning, whether a person chooses the numbers themselves or whether the computer randomly generates the numbers for them. People who select Option A are prone to the *illusion of control bias.*

The common 'rule of thumb' that 'you can't go wrong by investing in property because property values always go up' was a factor that contributed to the *overconfidence* or exuberance of property buyers in the United States in the period leading up to the Global Financial Crisis. This 'rule of thumb' was compounded by a host of other factors, which led many first time property buyers to make poor decisions. When the **house-price bubble** burst, many were left holding properties of considerably less value than the loans they initially took out to purchase them.

Vividness

Another common decision making error or bias that affects the ability of consumers to make rational decisions is what behavioural economists call 'vividness'. Consumers can place too much weight on a small number of vivid observations. To illustrate this bias, consider the example of a consumer who is thinking about buying a new car. They have a particular brand of car in mind but want to know whether it is reliable before making a decision. So they read a Consumer Report based on a survey of 1000 owners of that brand of car. Later, they run into a friend who happens to own that brand, who informs them that it's a 'lemon' (not a good car). A rational decision maker would realise that their friend's account has only increased the sample size by one, from 1000 to 1001, which does not provide much new information. However, because such accounts 'stand out' (they are 'vivid' for the consumer), consumers can be tempted to place too much importance on them and downplay other relevant information.

Study tip

Behavioural economists and Nobel laureates, Daniel Kahneman and Amos Tversky argue that the vast majority of decisions are made unconsciously, instantaneously and instinctively with consumers relying heavily on heuristics - 'mental shortcuts' or 'rules of thumb'. They also argue that a lot of these 'mental shortcuts' or 'rules of thumb' are irrational and lead to consumers making poor decisions. However, others such as Gerd Gigerenzer argue that using heuristics to make decisions has merit. For example, say a consumer is presented with a really attractive proposal such as a credit card with a super low interest rate. Their instinct might tell them that it seems dubious, which prompts them to reject the proposal. Here the consumer has employed the 'rule of thumb' that 'if it sounds too good to be true it probably is'. If the consumer investigated the proposal further by reading the fine print of the credit card contract, their initial hunch would probably be confirmed. Using this particular 'rule of thumb' has enabled them to make a 'fast and frugal' decision, which is ultimately in their best interests.

Application exercise 2f: Overconfidence bias

Conduct the following experiments on your peers who aren't studying Economics and record your findings in the table provided. For each experiment choose a sample size of 10 students. Try to use different students for each experiment.

Experiment 1

Ask your experiment subjects the following question: What is the weight of an empty Boeing 747 in kilograms? Provide a lower and upper limit such that you are 90% sure the correct answer is between the two.

(The answer to the question for the first experiment is 412,769 kg.)

Experiment 2

Ask your experiment subjects the following question: What is the average weight of an adult male sperm whale, the largest of the toothed whales in tonnes? Provide an upper and lower limit such that you are 90% sure that the answer lies somewhere between the two.

(The answer to the second experiment is 40 tonnes (1 tonne equals 1000kg)).

Once you have collected your data, you will need to analyse it. You can use the following prompts: For how many students does the answer fall within the range they have provided? Conversely, for how many students is this not the case? Summarise your findings and explain whether the experiment confirms the idea of the overconfidence bias.

Experiment 1: The weight of an empty Boeing 747				Experiment 2: The average weight of a male sperm whale			
	Response in kilograms	Answer in range (✓)	Answer out of range (✓)		Response in tonnes	Answer in range (✓)	Answer out of range (✓)
Student 1				Student 1			
Student 2				Student 2			
Student 3				Student 3			
Student 4				Student 4			
Student 5				Student 5			
Student 6				Student 6			
Student 7				Student 7			
Student 8				Student 8			
Student 9				Student 9			
Student 10				Student 10			
Total				Total			

Status quo bias

Consumers can be averse to change, and this can affect their ability to make rational decisions. The status quo bias is the tendency for consumers to stick with a particular choice even though the decision to do so is no longer in their self-interest. This partly explains why consumers are often reluctant to change their private health insurance providers or gas and electricity suppliers, even though websites such as www.iselect.com.au facilitate the easy comparison of the prices, services and deals offered by such businesses. [This also relates to the procrastination bias and the existence of transactions costs that was discussed earlier.]

Anchoring effect

Anchoring, also known as **reference dependence**, is where consumers' judgments are affected by some arbitrary starting value or 'anchor'. This bias is best illustrated by an old experiment where people are asked to estimate how many African countries are in the United Nations. Most people have no idea but if 60 is mentioned most people will seize on this number and their estimates will be in the vicinity of 60. However, when the experiment is repeated and 100 is mentioned, most people gravitate to this number and thus their estimates are considerably higher.

A practical illustration of how 'anchors' can create a bias in favour of a particular decision is in the area of new car sales. For most consumers, purchasing a new car involves parting with a relatively large sum of money. The price of a new car acts as the 'anchor' or reference point, which makes all the extras such as paint protection and extended warranties that salespeople try to convince people to buy seem relatively cheap by comparison. This explains why some consumers walk out of car showrooms purchasing all the extras rather than just a car.

Supermarkets and department stores commonly use anchoring with 10% off signs prominently displayed at the entrance to a store. Signs announcing bigger discounts of 25% are placed at strategic locations further in the store. Consumers judge all subsequent signs by the first sign, as it is the 'anchor'. This can make the 25% discount seem far more attractive, inducing consumers to spend. These discounts are also a 'rule of thumb' that consumers use to make decisions. That is, 'goods are always cheaper during sales', and therefore it is 'the best time to buy'. However, this isn't necessarily the case as the 'average' price of the good might be lower over a period of time compared to the discounts offered during a special sales period.

Another experiment involving real estate agents showed how powerful the *anchoring bias* could be. A group of real estate agents were asked to appraise the value of the same property and were provided with an apparent list price or 'anchor' (shown in the left column of the table). Their actual appraisals (shown in the right column of the table) were remarkably close. Almost 90 per cent of the real estate agents denied that the anchor affected them, which seems hard to believe in the face of the evidence.

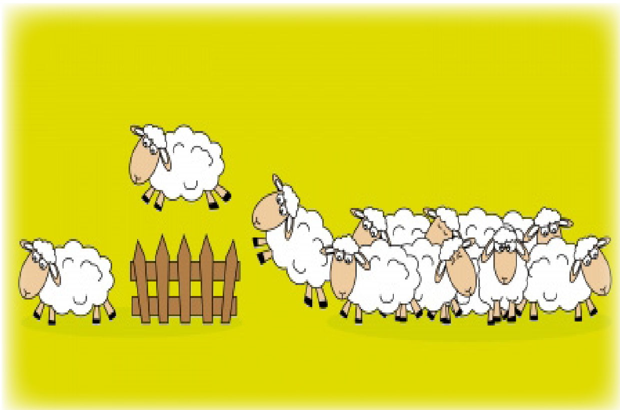
Anchoring example

Apparent list price ('anchor')	Appraised value
$119,000	$114,204
$129,000	$126,772
$139,000	$125,041
$149,000	$128,754

This example shows how businesses such as real estate agents that act on the behalf of consumers can be affected by the anchoring bias too. As a result, come auction time the consumer whose property is being sold might not get the sale price they were hoping for.

Herd behaviour

When confronted with decisions where the outcomes are highly uncertain, people can follow the crowd (the 'herd'), hoping that the crowd knows more than them. In asset markets such are shares and property, herd behaviour is a factor that accounts for the **boom-bust cycle**. Herd behaviour doesn't conform to the ideal of deliberative, rational decision making. However, people might resort to herding because they don't have access to all the necessary information to make good decisions on their own. Following the crowd can be an effective 'mental shortcut' but can also lead to errors in the decision making process.



Framing bias

The *framing bias* has already been covered in the section on marketing. As discussed, the way options or proposals are framed can affect the choices that people make and lead to irrational decisions. In the section on government it was suggested that nudges are basically a form of framing.

Bounded willpower

Bounded willpower is the idea that consumers do not possess absolute self-control when confronted with choices. They can succumb to their appetites and urges and can be emotional and impulsive, leading them to make poor decisions, which they later regret. Behavioural economists attribute these self-control problems to *present bias* or people's short sightedness. This is where people tend to overvalue the present and undervalue the future. These have already been covered in some length in the section on personality types. Common examples include overeating, spending too much on credit, not saving enough for retirement, problem gambling and illicit drug taking.

Study tip

The economist, John Maynard Keynes, who revolutionised economics in the middle of the 20th century, used the term 'animal spirits' to describe the important influence of emotions on decision making.

The Australian Government's compulsory superannuation scheme, where employers must contribute the equivalent of at least 9.25% (superannuation guarantee) of their employees' wages or salaries to a superannuation fund of their choice, is a government policy that acknowledges the fact that most people don't possess an 'iron will' to adequately save for their retirement. This policy of enforced savings aims to ensure that people have enough income to support themselves in retirement and therefore addresses the problems associated with 'present bias and bounded willpower'.

Bounded self-interest

Bounded self-interest is the idea that consumers care about fairness and aren't always driven by narrow self-interest in order to maximise their personal benefit. This idea is best illustrated with an experiment known as the *ultimatum game*, where two strangers are told that they stand to win $100 from playing a simple game. Both players are assigned specific roles: Player A's role is to propose how the $100 should be divided, while Player B's role is to decide whether to accept or reject Player A's proposal. If Player B accepts, the $100 is divided between the two players according to Player A's proposal. However, if Player B rejects the proposal, both receive nothing.[See Application Exercise 2g: Ultimatum Game experiment.]

Given that people are assumed to be rational, calculating maximisers of their personal benefit, Player A should propose a $99/$1 split. After all, it is in Player B's self-interest to accept the proposal because they have gained something from it, as they are better off by $1. However, when this experiment is conducted, Player B usually rejects a proposal that offers them $1 or any other small amount. In practice, the person in the role of Player A usually proposes a fairer division of the $100, such as a $70/$30 or $60/$40 split, which Player B usually accepts.

Study tip

The 99/1 split is known as the Nash equilibrium after John Nash, a Nobel Laureate in Economics. Australian actor Russell Crowe played John Nash in the Academy Award winning film, 'A Beautiful Mind'.

The ultimatum game lends support to the idea that consumers are driven by a sense of fairness, and will reject proposals or deals that treat them unfairly even if it is contrary to their self-interest; that is, to accept the deal would make them better off.

When businesses have a profitable year, workers will expect to receive their fair share of the profits, perhaps in the form of a pay rise or bonus. Failure to appropriately reward their workers could prompt them to punish the business through reduced effort, industrial disputation or even sabotage.

What insights does behavioural economics give us regarding actual economic decision making? Behavioural economics highlights that people often fail to maximise their utility because their decisions are rarely based on purely rational considerations. For example, when making decisions, people are prone to certain biases and errors, which can be compounded by the heuristics (mental shortcuts) they use. Further, people often fail to learn from their mistakes and, as a result, tend to repeat them. People's decisions are also affected by their emotions. Moreover, they care about fairness, casting doubt on the assumption that people are narrowly driven by the objective of maximising their personal benefit.

Application Exercise 2g: Ultimatum Game experiment

As a class, you will be conducting an experiment to test the proposition that consumers care about fairness.
The class will need to be divided into 6 groups of students.

Each group will run experiments on 10 non-Economics students to test whether they accept or reject the following proposed divisions of a hypothetical $100.

- Group I: proposes a $99/$1 split
- Group II: proposes a $95/$5 split
- Group III: proposes a $90/$10 split
- Group IV: proposes a $80/$20 split
- Group V: proposes a $70/$30 split
- Group VI: proposes a $60/$40 split

1. **Ask the participants why they accepted or rejected the proposed split and record their responses.**
2. **Collate the data collected by the class and represent it using an appropriate graph.**
3. **What conclusions can you draw from your results?**

Review Questions 2.3

1. Outline the aim of behavioural economics.
2. Outline the three elements of behavioural economics.
3. Explain what is meant by bounded rationality. In your response make reference to the idea of consumers as 'satisficers'.
4. Explain what is meant by the overconfidence bias and provide an example of how it can result in poor decisions.
5. With reference to an example, explain how the use of a 'rule of thumb' can contribute to the overconfidence bias.
6. Explain the connection between the 'illusion of control' bias and the 'overconfidence' bias.
7. With reference to an example, explain how a 'vivid' account can affect the ability of a consumer to make rational decisions.
8. Explain what is meant by the status quo bias.
9. Explain the anchoring effect and provide an example of how it can influence consumer decisions.
10. With reference to an example, explain how anchors can be used as a 'rule of thumb'.
11. Provide a reason to account for herd behaviour.
12. Explain what is meant by bounded willpower and provide some examples of common self-control problems.
13. 'Australia's compulsory superannuation is a mandatory pre-commitment scheme'. Explain this statement.
14. Explain what is meant by bounded self-interest and outline how this might affect consumer decisions.

2.4 The ways consumers and workers might respond to positive and negative incentives

The authors of *Freakonomics*, Steven D. Levitt and Stephen J. Dubner describe economics as 'the study of incentives'. An **incentive** can be defined as a benefit, reward or cost that motivates economic agents, whether consumers, workers or businesses, to make specific decisions or act in a particular way. Governments and businesses regularly use incentives to influence the behaviour and choices of consumers. Positive incentives can be thought of as a 'carrot', which encourage people to make certain decisions. While negative incentives can be seen as a 'stick', which discourage people from making particular decisions. As discussed earlier, governments use subsidies to encourage the consumption of goods and services that generate positive externalities, and taxes and laws to discourage the consumption of those items that result in negative externalities. Nudges can also be thought of as incentives.

The nature of some types of incentives can lead to unexpected results. A case-in-point is insurance, which is a product that guarantees monetary compensation in the event of a specified loss, damage, illness or death, in return for the regular payment of a premium. The protection or cover provided by insurance can create 'perverse incentives', causing insured people to behave badly. This occurs because insured people know they're protected and consequently are more likely to take risks. As a result, the insurer might receive more claims than they anticipated, resulting in a higher number of compensation payouts, forcing them to charge higher premiums for all their customers. For example, some people with car insurance might drive more recklessly in the knowledge that the insurer will bear the cost of repairs in the event of an accident, which of course has a greater probability of occurring! Economists call this phenomenon **moral hazard**. This issue arises because people who cannot be easily observed or monitored can be tempted to act in an irresponsible way if someone else is ultimately going to cover the cost of their behaviour. The description *moral* hazard is used because of the 'risk' or 'hazard' of inappropriate or 'immoral behaviour'. In contrast, those people without insurance have an incentive to be more careful because they don't have the 'peace of mind' of being compensated for any losses they incur.

Study tip

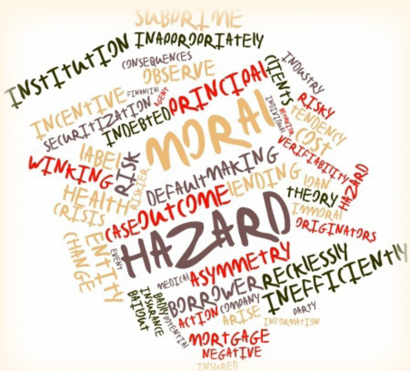
Moral hazard is a common problem in insurance markets because buyers of insurance cannot be closely monitored. It is an example of 'asymmetric information' as a market failure, an area of Economics that will be covered in VCE Economics Unit 3.

Application Exercise 2h: Moral Hazard

Most consumers participate in the market for car insurance. To insure their cars, consumers pay an annual insurance premium but also an excess when they make a claim. The excess is the contribution that they make to the cost of repairs if they are involved in an accident and it is their fault. Car insurance policies can be structured to screen buyers of insurance. **Screening** mechanisms are used to induce buyers to reveal important information in order to help sellers of insurance deal with the problem of moral hazard. A car insurance company can offer its customers the choice of two car insurance policies:

Policy No. 1: High annual insurance premium but low excess.
Policy No. 2: Low annual insurance premium but high excess.

1. **Identify which policy a risky driver would select and which policy a safe driver would select. Justify your response.**
2. **Discuss the following proposition: 'Offering its customers the choice of different car insurance policies is a clever screening mechanism.'**



Incentives can also be used to address some of the long-term challenges confronting the Australian economy such as the **ageing population**. The Intergenerational Report predicted that over the next 40 years (from 2010 to 2050), the number of older Australians (those between the ages of 65 and 85) will double. This means that, those above the age of 65 will increase from 13% of the total population in 2010 to 23% in 2050. Consequently, the percentage of the population of working age (those between the ages of 15 and 64) will fall from 67% to 60% of the population. As a result, the labour force **participation rate** is expected to fall significantly from 2020 once the bulk of the **'baby boomer'** generation exit the workforce.

Study tip

The 'baby boomers' are those people who were born in the period immediately after World War 2, roughly from about 1946 to 1964. As hope and optimism returned after the bleak years of the war, many countries experienced a sharp increase in their birth rates. The 'baby boomers' are now in their later years of life and are expected to live much longer (compared to previous generations) due to advancements in medical technology and better health education.

The ageing population has a number of long-term implications for the Australian economy, such as:

- escalating labour costs due to labour shortages
- capacity constraints resulting in slower rates of economic growth and therefore slower growth in average material living standards as measured by growth in Real GDP per capita
- increased government spending on health, aged care and pensions, coupled with declining income tax revenues, resulting in growing budget deficits and mounting government debt.

The government is using **incentives** to tackle this challenge. For example, in the 2015-16 Budget, it announced major changes to Child Care subsidies, entitling working parents to a **rebate** of between 50% and 85% on the cost of childcare depending on their income levels. Such a measure is designed to boost the participation rate by making childcare more affordable. One reason for the relatively lower rate of participation in the labour force among mothers is the high cost of childcare. For instance, if mothers are allocating the majority of their wage or salary to pay for childcare, it is typically not worth their time and effort to work. The childcare rebate aims to make work a better economic proposition. It is predicted that this initiative will incentivise participation and ultimately lift the participation rate, helping to address the looming challenge of an ageing population.

Study tip

The participation rate measures an economy's labour supply or the size of its labour force as a percentage of the working age population. It represents that portion of our potential labour force that is actually in the labour force. It is a concept that will be covered in VCE Economics Unit 3.

Another way of incentivising participation and also raising productivity is by lowering the marginal rates of personal income tax. Personal income taxes are essentially a tax on work, given that for the overwhelming majority of people most of their income is derived from the wage or salary they earn from working. Therefore, taxing income too heavily stifles the incentive to work and/or to work hard. By lowering the marginal rates of personal income tax that apply to the lower income brackets and raising the tax free threshold, unemployed people (particularly those with low skills that are only suitable for lowly-paid jobs) will have an even stronger incentive to secure work. This is because of the interaction of the tax and welfare system. Lower income taxes mean that these people get to keep more of the income they earn, which makes work relatively more attractive than remaining on welfare and receiving unemployment benefits.

Additionally, lowering the marginal rates of personal income tax on the middle and upper income brackets is likely to encourage these people to work harder and be more entrepreneurial as they get to keep more of the income they earn from their efforts.

When negotiating **enterprise agreements**, businesses and unions often include productivity clauses, which link wage increases to productivity growth. Higher productivity occurs when higher levels of output are achieved from the same inputs. For example, labour productivity increases when the hours worked (the input) are able to produce more goods and services (the output). Moreover, because productivity growth reduces a business' average costs of production, businesses can afford to pay their workers higher wages without having to sacrifice profit margins. Such schemes are designed to incentivise hard work by providing appropriate monetary rewards.

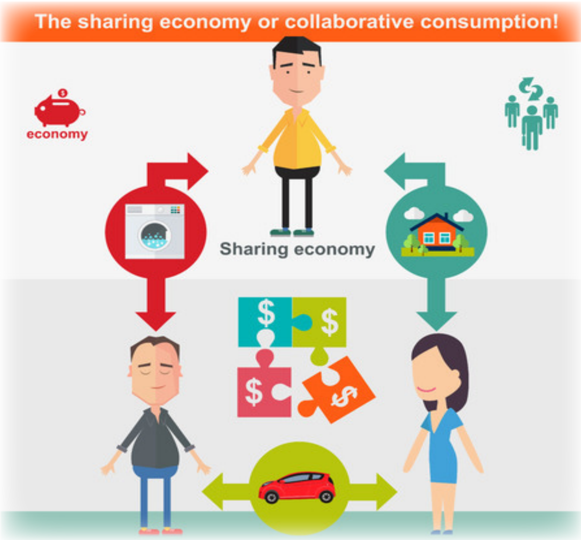
Non-monetary rewards can also be used to motivate workers to work hard. For example, many businesses formally recognise their best workers through awards such as 'employee of the month'.

Review Questions 2.4

1. Distinguish between positive and negative incentives and provide two examples of incentives.
2. Use the problem of moral hazard and insurance markets to explain the idea of 'perverse incentives'.
3. Outline what is meant by an ageing population and explain why it's considered to be a long-term challenge facing the Australian economy.
4. Provide two examples of incentives implemented by the government to address the challenge of an ageing population. The first one should focus on the participation rate and the second should focus on productivity.
5. Explain why enterprise agreements often include productivity clauses.

2.5 The effect of technological change on consumer behaviour

A game changer in recent years has been the rise of the **sharing economy** or **collaborative consumption**. This has been made possible by the ubiquitous nature of the Internet, social media and smartphone technology. Collaborative consumption is basically a peer-to-peer rental scheme, which enables people to earn extra income from expensive, often under-used assets such as power tools and cars, or even spare rooms in their homes. Such schemes mean that those who choose to rent these items don't need to spend large sums of money buying the items outright or renting them from traditional businesses such as hotels and car-rental businesses. Occasional renting from a person's peers is also often cheaper and more convenient.



As noted technology has made such collaborative consumption possible: Internet payment systems are used for billing, while social media and recommendation systems establish trust, and smartphones with maps and satellite positioning link people up with someone nearby who has an asset to rent, whether it be a spare room, car, lawnmower or anything else.

Many new businesses populate the sharing economy, such as Airbnb and RelayRides. Their role is to match up people with assets to rent with those people looking to rent assets, for a fee. Proponents of the sharing economy point to its environmental benefits such as making more efficient use of the economy's scarce resources. They also claim that the sharing economy addresses concerns about widespread materialism by allowing people to just access assets as required rather than having to buy and actually own such assets.

Internet technology has also changed the way many consumers buy goods and services. Online shopping has enabled consumers to easily gather information; in order to make comparisons and more informed decisions. It has also made finding bargains much easier. Internet technology arguably offers more convenient shopping experiences in a society where many people are time-poor, as consumers no longer need to travel to shopping centres and can easily return their products through the post or a courier service if they're unhappy with their choices.

Review Questions 2.5

1. Outline what is meant by the sharing economy or collaborative consumption and explain how technology has made it possible.
2. Explain how the sharing economy or collaborative consumption can contribute to a more efficient allocation of resources.
3. Write a paragraph accounting for the popularity of online shopping.

Application Exercise 2i: The sharing economy

Prepare a 500 word, two-part research report on the sharing economy.

Part A of the report should cover a specific business involved in the sharing economy, an explanation of the service it provides and how the business operates.

For Part B, investigate the benefits, issues and disadvantages/criticisms of the sharing economy.

Some of the business involved in the sharing economy that you can research include:

- **Airbnb**
- **Uber**
- **RelayRides**
- **Snapgoods**
- **DogVacay**
- **Taskrabbit**
- **Liquid**
- **Lending Club**
- **Stayz**

2.6 The traditional economic viewpoint of business in the economy: profit maximisation

The traditional economic viewpoint is based on the idea that self-interest is the motivating force that drives market economies. That is, consumers and businesses act purely for their own benefit. Consumers aim to maximise their utility, while businesses aim to maximise **profit**. Profit is the income earned by a business and is calculated by deducting costs of production (or expenses) from sales revenue. This income is then distributed to the business' owners or reinvested in the business.

The following extract from Adam Smith's economic treatise *The Wealth of Nations (1776)* neatly summarises the traditional economic viewpoint:

> ***'It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love (self-interest), and never talk to them of our necessities but of their advantages'.***

Adam Smith is essentially claiming that markets have a remarkable ability to coordinate the actions of millions of self-interested consumers and businesses to achieve an efficient allocation of resources. In other words, when 'left alone' (known as **laissez faire**), markets tend to produce those goods and services that consumers value most, which also happen to be the most profitable for businesses to produce.

Study tip

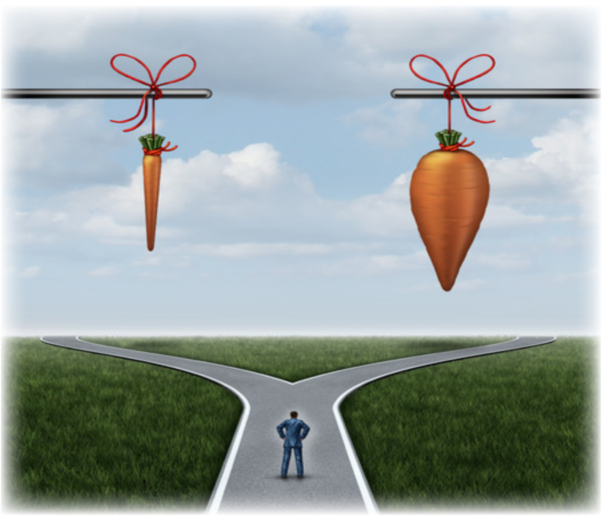
Markets develop when buyers and sellers of goods and/or services come together in exchange, where the rate of exchange is the price. Markets will be examined in greater detail in Chapter 3.

These ideas are also expressed in the notion of **consumer sovereignty**, which describes how consumers determine what and how much is produced by casting 'dollar votes'. Businesses motivated by profit respond accordingly by producing those goods and services that consumers want. Further, as consumers' preferences change businesses naturally respond by reallocating resources to the production of those goods and services being demanded.

Apart from allocating resources in accordance with consumers' wishes, businesses also seek to improve their productivity or productive efficiency to maximise their profits. As mentioned earlier, higher productivity can be achieved by increasing the quantity of output from a given quantity of inputs, or by maintaining current output levels but using a smaller quantity of inputs. Either way, higher productivity reduces a business's average costs of production, which increases their profit margins. Indeed, producing at the lowest possible cost is a major consideration for any businesses seeking to maximise profits.

How businesses might respond to positive and negative incentives

Businesses like consumers also respond to positive and negative incentives. The lure of higher profits is the ultimate incentive for businesses. For instance, an increase in consumer demand for a particular product will result in an increase in its price relative to other products. Accordingly, businesses will respond to this price signal by allocating more resources to the production of the product because of the better profit opportunities that now exist. Similarly, as the price of a product falls due to weaker consumer demand, businesses will allocate fewer resources to the product, as it is now less profitable to produce. In short, changes in relative prices result in changes to relative profitability, providing the incentive for businesses to reallocate resources to the production of those goods and services where the most lucrative profit opportunities exist.



The government can also use incentives to affect a business's costs of production and their profits. As noted earlier, profit is the difference between a business's sales revenue and its costs of production. Therefore, it follows that any changes to businesses' costs of production will affect their profits and production decisions. For example, the government can provide **production subsidies** to businesses in order to reduce their costs of production and provide them with additional incentives to produce particular goods and services. A case-in-point is the subsidies provided to farmers during droughts to support them in maintaining their presence on the land. During such adverse weather events, the carrying capacity of the land is compromised by a lack of water, making it difficult to sustain livestock and grow crops. Production subsidies can be therefore be used to buy feed to keep livestock healthy and farms viable. In the absence of such incentives more farmers are likely to leave the land, which would have negative implications for the Australian economy.

Conversely, the government can also withdraw production subsidies, which can accelerate the demise of an industry. For example, the government decided to stop 'propping up' Australia's car manufacturing industry, which was one of many factors that contributed to the decision of Ford, GM Holden and Toyota to cease all car manufacturing operations by the end of 2017. These production subsidies were essentially a 'life line' to Australia's ailing car manufacturing industry struggling to compete and remain viable as a result of a number of factors. These included the high value of the Australian dollar (exchange rate), which made imported cars relatively cheaper, and the gradual removal of tariffs over time by the Australian government, which resulted in even lower prices for import cars compared to locally-produced vehicles.

The **removal of tariffs** (taxes on imports) is also an example of how the government can use incentives to bring about change in business behaviour. Lowering tariffs is about promoting structural change to improve the economy's performance over the long run. Some commentators have equated tariff reform to Economic Darwinism or 'survival of the fittest' as the removal of tariffs lowers the price of imported goods, exposing Australia's import-competing industries to intense competition from foreign-made or imported goods. To remain viable, Australia's import-competing industries are forced to restructure their operations by implementing new technology and by adopting more efficient work practices, in order to raise productivity and lower costs of production. These cost savings can then be passed onto consumers in the form of lower prices, enhancing the international competitiveness of Australia's import-competing industries. So over time, Australia's import-competing industries should be able to compete with imported products without the need for protection from tariffs.

Inevitably, some industries won't be able to adapt to the new, highly competitive environment and thus will be forced to close down. Therefore, reductions in tariffs can also lead to a reallocation of resources to areas where Australia possesses a **comparative advantage**, such as minerals, beef, wine, education, tourism and biotech products. The theory of comparative advantage states that a country should specialise in producing those goods where its opportunity costs are relatively lower than that of other countries. This will maximise the level of output of goods and services from the economy's resources. Any surplus can then be exported and the income earned can be used to import those goods and services that Australia is unable to produce at a relatively low opportunity cost.

Sometimes the government combines **positive and negative incentives** to 'engineer' particular outcomes. In 2012 the government introduced a carbon tax of $23 per tonne of CO_2 emissions, levied on Australia's 500 biggest polluters. The carbon tax sought to alter the structure of relative prices by increasing the price of carbon-intensive production, such as energy generated from fossil fuels, relative to the price of less carbon intensive production, such as energy generated from renewable sources (e.g. wind and solar power). As the carbon tax became an additional cost of production for carbon intensive producers, it provided an incentive for them to reduce their CO_2 emissions in order to lower their production costs and remain competitive. Given that these additional costs were passed on to consumers, resulting in higher prices, consumers also had an incentive to switch to cheaper, low-emissions alternatives such as wind or solar energy. By altering the structure of relative prices, a carbon tax helped to lower the level of CO_2 emissions.

The government also pledged a proportion of the revenue generated from the carbon tax to support the development of green sources of energy, thus helping to lower production costs for energy companies seeking to develop these sources of energy. Such financial support strengthens the business case for green energy; providing energy companies with the incentive to undertake large-scale investment in renewables such as wind and solar, increasing the supply of green sources of energy over time, driving down its cost and the prices paid by consumers. For economic and political reasons the carbon tax was repealed in 2014 and replaced with a Direct Action policy to combat the effects of climate change.

These examples show how the government can harness the power of incentives to 'steer' business behaviour in a direction that is intended to provide better economic outcomes.

The government can also use **subsidies** to encourage businesses to employ people. For example, the Youth Jobs PaTH (Prepare-Trial-Hire) program announced in the 2016-17 Budget aims to encourage businesses to hire young people to tackle the scourge of Australia's relatively high rate of youth unemployment. In Stage 2 of the program (the 'trial' stage) businesses that provide internship placements of between four and 12 weeks will get an upfront payment of $10,000. In Stage 3 of the program (the 'hire' stage), businesses that offer interns ongoing jobs, will receive a wage subsidy of $6500 to $10000 over six months. The government believes these incentives will create 120 000 employment opportunities over the next four years for young people, moving them from low transfer incomes (e.g. the Newstart Allowance) to relatively higher factor incomes (e.g. wages and salaries).

In the section on consumers and incentives, the issue of moral hazard was introduced, where products such as insurance can create 'perverse incentives'. Moral hazard can also create 'perverse incentives' for businesses. For example, during the Global Financial Crisis there were rising concerns about the security of bank deposits. In response, many governments around the world, including the Australian Government, guaranteed bank deposits to reassure deposit holders and stop a potential 'run on the banks'. However, this guarantee could have encouraged some banks to take unnecessary risks with their customers' deposits, as they knew they had the backing of the government. That is, the government would come to their rescue or 'bail them out' if a bank made poor investment decisions that ultimately threatened both the value of deposits and, by extension, the viability of the banking system.

Study tip

Should we forgive third world debt? Moral hazard is also cited as an argument against third-world debt forgiveness. If poor countries know that rich countries will simply waive their debts it has the potential to make them less accountable for how they spend the money that has been loaned to them. This can result in a culture of corruption and poor governance becoming entrenched, jeopardising economic development and perpetuating the vicious cycle of poverty and underdevelopment. The issue of third world poverty, debt and debt forgiveness will be considered further in Chapter 7

Review Questions 2.6

1. Explain the traditional economic viewpoint of business in the economy.
2. Explain how markets can serve the interests of both consumers and businesses.
3. Explain what is meant by consumer sovereignty.
4. Define productivity and explain how productivity growth can help to increase business profits.
5. Explain how consumer demand influences the allocation of resources. In your response, refer to the role of price signals.
6. With reference to an example, explain how the provision of production subsidies can support businesses through difficult periods.
7. With reference to an example, explain how the withdrawal of production subsidies can affect the ongoing viability of an industry.
8. Explain the intention behind the government's decision to remove tariffs on imported cars.
9. With reference to the recent past, explain how the government combined positive and negative incentives to tackle the long-term challenge of climate change.
10. Explain how the PaTH program announced in the 2016-17 Budget uses a combination of incentives to address the issue of high youth unemployment.
11. Explain how the government's guarantee on bank deposits during the Global Financial Crisis had the potential to create a moral hazard.

2.7 The evolution of business and changing goals

Business goals have evolved beyond the narrow pursuit of profit to include sustainability, community involvement, gender equality, innovation, and research and development. One reason for this evolution is that improving business performance on these measures can be seen as ultimately supporting the profit goal, over the long term.

Sustainability and community involvement

Nobel Laureate Milton Friedman, in a now-classic article written for the *New York Times Magazine* in 1970, asserted:

> ***…there is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rule of the game, which is to say, engages in open and free competition without deception or fraud. ('The Social Responsibility of Businesses Is to Increase Its Profits')***

Friedman was dismissive of the idea that businesses had obligations to anyone or anything beyond their shareholders. In his view, business decisions should be directed at maximising returns for shareholders and increasing shareholder wealth. In other words, the sole consideration of any business is profit –referred to as 'bottom line'. However, over recent years, businesses have placed increasing emphasis on the 'triple bottom line' when making decisions. This refers to the idea that, in addition to **profit**, businesses are also taking into account the impact of their decisions on 'the **planet**' (or the environment) as a well as '**people**' (or society). This has led to many businesses embracing the concept of the triple bottom line.

Triple bottom line (3BL) = planet, people, profit

Therefore, in today's business environment, businesses must not only serve their shareholders but also be 'good corporate citizens', behaving in a way that is 'socially responsible'. In today's world it is simply too difficult for a business to make decisions that have undesirable outcomes for the environment or society. Society's expectations have changed, with businesses now being held to higher standards of behaviour. This greater accountability has been reflected in heightened media scrutiny meaning it is virtually impossible for businesses to ignore the harmful by-products of their activities such as pollution and the destruction of the natural environment, or negative impacts of local communities. Environmental groups are quick to bring bad corporate behaviour to the attention of both the public, who are much more likely to boycott the consumption of the business' products. Moreover, governments are under greater political pressure to punish poor corporate behaviour.

With respect to sustainability, this involves businesses implementing practices to minimise their environmental footprint. For example, Coca-Cola Amatil (the Australian producer of Coca-Cola) has progressively reduced the amount of plastic used in its bottles, achieving reductions of up to 42%. These bottles also contain up to 50% recycled content. They have also developed a lightweight aluminium can, reducing their use of this non-renewable resource.

In terms of community involvement, many businesses seek to give something back to the community (or broader society) from which they earn their profits. For example, the AFL is a very large business operating throughout Australia, but it also sees itself as being able to influence community attitudes and values. One of its key aims is to promote AFL football, but it is also driven by the profit motive. The AFL inaugurated the Pink Lady Match on the Mother's Day weekend in support of the Breast Cancer Network Australia (BCNA). A proportion of the proceeds from ticket sales are donated to the BCNA to provide breast cancer patients with the best possible support, information, treatment and care. In an effort to improve inclusiveness and diversity in sport and in society more generally, the AFL has also introduced the Pride Game. This game, where players and officials wear different versions of the rainbow 'pride' colours, aims to help start a conversation about the discrimination against LGBTI (lesbian, gay, bisexual, transgender and intersex) people in the community and in sport.

Many business commentators argue that socially responsible behaviour is ultimately good for a business's profits. This is because businesses that are 'good corporate citizens' generate goodwill among the community and, as a result, are likely to attract more customers, achieve greater sales and earn higher profits. In addition, businesses are also likely to attract more shareholders, providing them with the necessary funds to finance their expansion. This is because discerning, ethically-minded investors are only prepared to purchase shares in companies with a record of socially responsible behaviour, a practice known as **ethical investment**. So in many respects, socially responsible behaviour can be seen as 'enlightened self-interest' on the part of businesses.

Application Exercise 2j: Sustainability

In 2015, eleven times World Surf League Champion, Kelly Slater launched surf-inspired clothing brand Outerknown based on the principle of sustainability. It only uses suppliers who agree to abide by the Fair Labour Association's code of conduct regarding working conditions and that seek to eliminate harmful substances such as chemicals in the manufacturing process. The materials it uses in its garments are also environmentally friendly such Econyl. Econyl is a textile made from recovered fishing nets and regenerated wool which comes from collecting and recycling wool fibre discarded on factory floors during the manufacturing process. Other materials used include organic cotton and hemp, both of which have sustainable properties. In an era of eco-consciousness, sustainability is a key selling point for the fledgling brand; however, it does add to the cost of the product. Kelly Slater acknowledged that there had been some 'sticker shock' (shock at the high price) upon the brand's launch. However, he attributes that, in part, to people expecting traditional surf-label prices.

Research another business with a reputation for sustainability and prepare a short oral presentation on your findings.

Application Exercise 2k: Corporate Behaviour

Brazil prosecutors file $58 billion lawsuit against BHP Billiton-owned mining company over fatal dam spill

Federal prosecutors in Brazil have filed a 155 billion Real ($58.2 billion) civil lawsuit against iron ore miner Samarco, and its owners Vale SA and BHP Billiton, for a collapsed tailings dam that killed 19 people and polluted a major river. The 359-page lawsuit, which is also against the two states impacted by the spill and the Brazilian Federal Government, is the result of a six-month investigation led by a task force set up after the disaster .... The total damages, prosecutors said, were calculated based upon the cost of the Deepwater Horizon oil spill in the United States — BP's total pre-tax charge for that spill reached $US53.8 billion ($71.89 billion).

Prosecutors demanded an initial payment of 7.7 billion Reals ($2.89 billion). Vale and Australia's BHP both said they had not received formal notice of the claim. However, BHP said in a statement to the Australian Securities Exchange that it was "committed to helping Samarco to rebuild the community and restore the environment affected by the failure of the dam". It said that a separate lawsuit that Samarco, Vale and BHP settled with Brazil's Government in March, in which the companies would pay an estimated 20 billion reals ($7.51 billion), was the best way to repair damage caused by the spill.

Samarco's 'continual negligence'.

"We believe that the agreement (once approved by the court) provides the long-term remedial and compensation framework for responding to the impact of the Samarco tragedy and the appropriate platform for the parties to work together," BHP said. Federal and state prosecutors did not form part of that settlement, which they criticised, saying it was insufficient and lacked the legal mechanisms to ensure the companies would fulfil their obligations, making it little more than a "letter of intent". The roles of the state and federal governments were also questioned, with prosecutors accusing the state of Minas Gerais, where the spill occurred, as being guilty of negligence in the permitting and monitoring of the dam. BHP's shares slumped nearly 8 per cent to a two-week low in a broader market that was down 1.2 per cent.

Source:www.abc.net.au (extract) May 2016.

Questions

1. **Explain why the Brazilian Government is suing BHP-Billiton and Vale S.A. (the owners of Samarco). In your response, refer to the compensation being sought.**
2. **Identify how the commencement of legal action affected BHP-Billiton's share price and provide a reason why.**
3. **Explain how this article highlights the importance of social responsibility for a company's shareholders.**

Gender equality

The changing role of women in society since the 1970s (the time of the second wave of the feminist movement) has seen an increasing number of women working in paid employment. The reasons for these changes are demographic, legal, political social and economic and their full consideration is outside the realm of this topic. Nevertheless, it is important to consider how the push for improvements in gender equality has influenced the evolution of business and brought about changes in the goals of business.

> ***'Workplace gender equality is achieved when people are able to access and enjoy the same rewards, resources and opportunities regardless of gender.'***
>
> ***The Australian Government Workplace Gender Equality Agency (WGEA)***

As at August 2016, women comprised 46.2% of all employees in Australia. Just over half of the women employed in Australia work full time, while a significant minority work part time. The rate of female participation in the workforce is 59.3%, compared to the male participation rate of 70.4%. This means that, of all the women aged 15 years and over (and therefore of working age), 59.3% of them are either working or actively looking for work, compared to 70.4% of men of the same age range.

Australia has made significant progress towards gender equality in recent decades in areas such as education, health and workforce participation. However, there is still a **'gender gap'** in the Australian workforce. Some of the evidence confirming the persistence of that gap includes:

Women continue to earn less than men

The WGEA each year calculates the 'gender pay gap' – the difference between women's and men's average weekly full-time equivalent earnings, expressed as a percentage of men's earnings. The latest figures (March 2016), show that the national gender pay gap is 17.3% (having hovered between 15% and 19% for the last two decades.) This is despite the fact that women complete higher education at a higher rate than men.

Women are less likely to advance their careers as far as men

Women hold 14.2% of chair positions, 23.6% of directorships, as well as represent 15.4% of CEOs and 27.4% of key management personnel in the organisations that are required to report annually to WGEA (all non-public sector organisations with 100 employees or more). One-quarter (25.1%) all those organisations have no key management personnel who are women. Women make up only 23.4% of the directors on ASX 200 company boards, and 10% of all ASX 200 companies (Australia's largest 200 ASX listed companies) have no women at all on their board. (Although the overall trend is favourable, as only 8% of all directors were women in 2009).

Women on average accumulate less retirement and superannuation savings

Average superannuation balances for women at retirement are 52.8% less than those for men. As a result, one of the fastest growing groups of homeless people and people living in poverty in Australian is single, retired women.

Men have less access to family-friendly policies such as parental leave and flexible working arrangements that allow to share responsibilities for child rearing

Only 38% of large organisations provide any kind of secondary carers leave (for the non-birth parent), when a child is born.

The benefits of improved gender equality in the workplace

As the gender demographics of the workplace have changed over time, businesses have come to recognise that promoting workplace gender equality makes good business sense. This is because achieving gender equality isn't important just because it is the right thing to do, but also because it will help improve individual business, and overall economic performance.

As the World Economic Forum stated in its Global Gender Gap 2015 report:

> ***People and their talents are among the core drivers of sustainable, long-term economic growth. If half of these talents are underdeveloped or underutilized, growth and sustainability will be compromised. Moreover, there is a compelling and fundamental values case for empowering women: women represent one half of the global population—they deserve equal access to health, education, earning power and political representation.***

In 2009, Goldman Sachs calculated that the rise in female employment since 1974 has boosted Australian economic activity by 22%. They also estimated that a further 6% increase in the female participation rate would boost the level of GDP by 11%. According to the government's WGEA, there is significant evidence from across the globe demonstrating the positive impacts on a company's performance of female representation on boards, in executive management and senior leadership, and that increased gender diversity (i.e. more women) on boards and in senior executive positions is associated with better financial performance. Studies have confirmed that profitable firms that moved from no female leadership to 30% representation in upper management, saw, on average, a 15% increase in their net revenue margin [the percentage of revenue remaining after paying for operating expenses].

Xero general manager and former Microsoft Ventures director James Maiocco has provided his own thinking on why these occur. He has stated that executive conversations with women at the table 'tend to be more professional and have better outcomes. … With women and other diverse backgrounds at the table it brings a level of transparency and accountability.'

Another reasons to have more women (and other under-represented minorities) at the table is that diverse opinions can save a company from embarrassing PR problems that arise from decisions based on bad assumptions made by one dominant demographic.

Improving employment experiences for women in businesses can also make a company a more attractive place to work, with some workplaces consequently becoming 'employers of choice' for women. This is particularly important given that in Australia, women are increasingly more highly educated than men. Anything an employer can do to make their workplace more appealing to women is likely to improve their capacity to attract the most skilled workers. Improving the workplace for women can also reduce employee turnover, as women are more likely to stay at an organisation whose culture is perceived as fair to them. Each of these benefits contributes to a more productive workplace.

What business can do to improve gender equality in the workplace

Some of the goals to achieve improved gender equality in the workplace include:

- Workplaces to provide equal pay for work of equal or comparable value
- Removal of barriers to the full and equal participation of women in the workforce
- Access to all occupations and industries, including leadership roles, regardless of gender
- Elimination of discrimination on the basis of gender, particularly in relation to family and caring responsibilities

One of the major constraints on women's full participation in the workforce, including in seeking promotion and positions of leadership, is in accessing affordable, quality child care. Despite changing cultural norms, in many families, women still bear the primary responsibility for child rearing and other unpaid caring roles (such as looking after sick or elderly relatives). This means that a lack of affordable, decent child care restricts women's ability to fully participate in the workplace. Some businesses are choosing to provide more flexible working arrangements for people with caring responsibilities, including job sharing and part-time employment, while at the same time ensuring that women taking time off to have children and care for them does not impede women's future career advancement. Some businesses also provide free, or subsidised, on-site childcare for employees. Many companies subsidise childcare that their employees use away from the workplace, but only around three per cent of organisations in Australia have their own childcare onsite. One example is Insurance Australia Group, which in 2015 announced it was rolling out holiday childcare at no cost to staff. This would mean staff with children between the ages of 5-12 would be able to send their children to free, onsite care during the school holidays, while the parents themselves remain at work. Qantas, Optus and some universities are among the large businesses that provide onsite childcare at the workplace for pre-school age children. All of these initiatives help to increase female participation and contribution in the workplace.

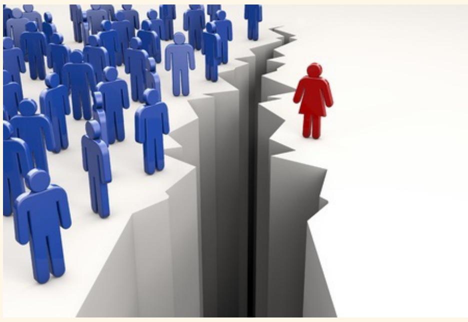
Indirect discrimination against women in the workplace is also a factor that reduces to the ability of businesses to make full use of their female workforce. This can include failing to promote women as easily as men, or unconscious bias in recruitment process. Research shows that unconscious bias is common when it comes to hiring new staff. The Australian Bureau of Statistic was concerned by the low number of women in management roles. The ABS decided to overhaul its recruitment process, concealing some of the applicants' details from the selection panel – with some revealing results. It advertised 19 senior roles. It then concealed the names, genders and other identifying details of the applicants from the recruiters. At the same time, in its advertising of the positions, the ABS emphasised family-friendly aspects of the jobs including flexible hours and work-from-home options. In the end, 15 out of 19 of the successful applicants were women, doubling the number of female bosses in just a few months.

This process is called **'blind recruitment'** - the practice of removing personally identifiable information from the resumes of applicants including their name, gender, age, education, and even sometimes the number of years of experience. The approach is gaining popularity as organisations realise that it is improving the extent to which they can appoint potential employees genuinely on merit and create a more diverse workplace by eliminating unconscious bias.

In recent years, there has been an active campaign to increase the number of women appointed to company boards- the most senior management of any organisation. An organisation called 'Male Champions of Change' – which includes the (mostly male) CEOs of some of Australia's largest companies (including Qantas, Commonwealth Bank, ANZ and Telstra) was established to focus on achieving improvement in the unacceptably low levels of women in leadership. They have committed to improving gender equality in their own organisations, and to actively pushing other business leaders to do same.

A yearly report by the Australian Institute of Company Directors (AICD) has shown that there has been a significant increase in the number of women appointed as company directors in Australia. In 2015, 42 per cent of new directors appointed to the boards of Australia's top 200 ASX listed companies were women. That compared very favourably to the 8 per cent figure when the AICD started keeping records in 2009. The AICD has a target of 30% of all ASX 200 directors being women by 2018.

Application Exercise 2I: Gender inequality



Many high school students express dismay, and sometimes disbelief, when confronted with the statistics about the continued unequal position of women in Australia's workforce. They look around their own schools and they may see a large number of very capable and senior women in their schools, and, in co-educational schools, equal numbers of boys and girls. They often raise questions like:

1. But how do we know that women earn less than men? How do we know those figures are accurate?
2. But how is there a gap between what men earn and what women earn when people don't get paid based on their gender, but rather on the job they do?
3. But how is it possible that discrimination in the employment of women exists when it's illegal to discriminate on the basis of gender when employing someone?
4. But surely all job appointments and promotions are based on merit? Maybe the women applying aren't as good as the men who apply?
5. But what about men in the workplace? Aren't they also treated poorly when they try to take time off to care for their children?
6. But how can someone be a manager or a CEO if they only want to work part-time or need to have lots of time off to have children?
7. But why do we need blind recruitment – can't we trust interview panels to select the best applicant?
8. But why should businesses pay for childcare when it is an individual or couple's choice to have children?
9. But is it possible the reason why there aren't many female board members or CEOs of large companies is because there aren't any qualified women applying?

These kinds of questions are excellent examples of students critically examining the information they receive in the classroom, but they also deserve further investigation to find out what is really going on with respect to gender inequality in the workplace.

TASK:

In small groups, choose one of the above questions, or create your own question in response to the information in this section. Undertake some research to find the answer (or rather one possible answer) to your question.

Present your findings to your peers. The presentation may encourage discussion about the issue of gender equality and its impact on business and the economy.

Some useful places to start are:

- **Australian Government Workplace Gender Equality Agency: www.wgea.gov.au**
- **Male Champions of Change: http://malechampionsofchange.com//**
- **Australian Institute of Company Directors – search for the "Myth of Merit": http://aicd.companydirectors.com.au/**
- **ABS Release 4102.0 Australian Social Trends – 2006: Trends in Women's Employment**
- **Use a search engine to find articles on 'blind recruitment and gender equality'.**
- **Use a search engine to find articles on the benefits of gender equality for the business bottom line**

Innovation and research and development

According to the Australian Government: 'Innovation generally refers to changing processes or creating more effective processes, products and ideas. For businesses, this could mean implementing new ideas, creating dynamic products or improving…existing services'.

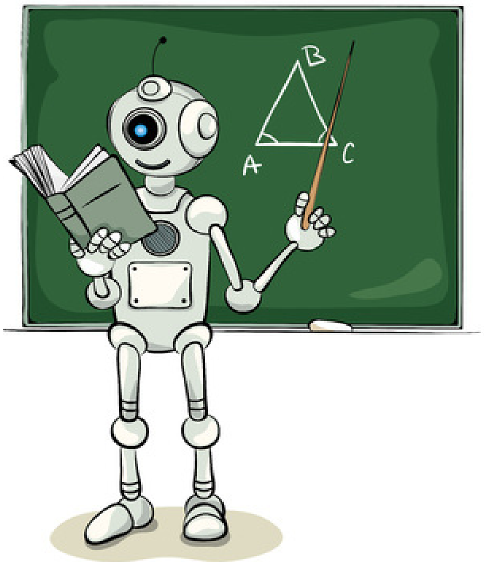
Innovation is generally driven by businesses seeking to maximise profits. There are numerous examples of innovations, such as: Cochlear's bionic ear, Ikea's flat packed furniture, Rio Tinto's driverless trucks, Pozible's crowd funding platform and Domino's plans to use drone technology to deliver pizzas. The economist Joseph Schumpeter described innovation as a process of 'creative destruction' -. businesses reap the rewards of exceptionally high profits through successful innovation, which in turn encourages their competitors to come up with even better innovations. For example, at their time of introduction mobile phones were a ground-breaking innovation but have since been superseded by smartphones.

Innovation can be a risky venture, with businesses allocating large amounts of money, time and effort into research and development (R&D) with no guarantee of success. To create an environment conducive to innovation, governments issue patents (legal protection) to businesses, which prevent other businesses from copying their **intellectual property.** Patents can last up to 20 years. This allows businesses to recoup R&D costs and earn a sizeable profit before the patent expires. When the patent expires, other businesses are permitted to copy the innovation. Patent protection provides the catalyst for R&D into new medicines by the pharmaceutical industry.

Apart from issuing patents, the government can also provide **tax concessions** to businesses that undertake R&D into new production methods and products by providing favourable tax treatment of these activities. They do this by allowing the business to 'write-off' or 'expense' a larger amount than that spent on R&D. The development of new, more efficient production methods has the potential to boost the international competitiveness of Australian businesses in an increasingly integrated and fiercely competitive global economy. Moreover, the development of new and desirable products can stimulate economic growth and job opportunities. According to the Australian Bureau of Statistics, during 2013-14, Australian businesses spent $18,849 million (almost $19 billion) on R&D.

The government also provides funding to universities and not-for-profit research institutions to conduct R&D into new products, processes and ideas. The CSIRO (Commonwealth Scientific and Industrial Research Organisation) is a government funded research body that engages in R&D. According to their mission statement:

> ***At CSIRO, we do the extraordinary every day. We innovate for tomorrow and help improve today – for our customers, all Australians and the world.***



Some of their notable innovations and commercial applications over the past 100 years include: WiFi, plastic bank notes, the Hendra virus vaccine (Equivac HeV), extended wear contact lenses, Aerogard (insect repellent), The Total Wellbeing Diet, self-twisting yarn and Softly washing liquid.

Given the vital contribution of innovation to economic growth it is something that governments of all persuasions are prepared to support through a combination of direct funding, legal protection and financial incentives.

Review Questions 2.7

1. Distinguish between the bottom line and the triple bottom line.
2. Explain why many businesses are placing increasing emphasis on the triple bottom line.
3. Compare the business goals of sustainability and community involvement.
4. Compare the participation rates of women and men in Australia's workforce, and provide some possible explanations for the difference between them.
5. Provide two reasons why gender inequality persists in many workplaces.
6. Provide two pieces of evidence that support the argument that gender equality is 'good for business.'
7. Explain two examples of how businesses can improve the level of gender equality in their workplaces.
8. Explain what is meant by innovation and why businesses pursue innovations of all kinds.
9. Provide an example of a product innovation and an example of an innovation in service delivery.
10. Explain what is meant by 'creative destruction' and its role in innovation.
11. Explain why governments support innovation.
12. Describe two ways that the government can create an environment that supports innovation.

2.8 The effect of technology on business behaviour and trade in goods and services

Businesses seek to incorporate the latest advancements in technology into the production process to increase productivity and drive down average costs of production. This enables them to pass these lower costs onto consumers in the form of lower prices, without sacrificing their profit margins on each unit of output sold. Further, the lower price raises their competitiveness in the market, helping to raise their total sales in local and overseas markets, ultimately contributing to higher profit levels.

Decisions on whether to incorporate new technologies in the production process are also influenced by relative prices. This is where businesses compare the price of technology (a capital resource) with other resources used in the production process, such as labour. For example, if the price of labour increases relative to the price of technology (or other forms of capital), businesses are likely to switch to more capital intensive methods of production to reduce costs and increase profit. [See Application exercise New Technology (driverless trucks at Rio Tinto's Pilbara mines.)]

The banking sector has made extensive use of technology in their operations in the quest for higher profits, and thus greater returns for their shareholders. For instance, telephone and Internet banking, combined with automatic teller machines (ATMs), have reduced the need to employ bank tellers in their network of branches, resulting in lower costs of production. Additionally, banks don't need to maintain as many branches. Supermarkets have also introduced self-service checkouts to reduce the number of checkout operators required.

Technology also enables businesses to better meet the needs of their customers. For example, there has been phenomenal growth in online or Internet shopping over the past decade. Many businesses have opted for an omni-channel distribution strategy, where they sell their products from a traditional bricks and mortar store (physical retail outlet) and through the Internet, to maintain and even grow their **market share.** The major supermarkets, Woolworths and Coles, offer an online shopping service to cater to the needs of their often time-poor customers.

According to NAB research, Australia's online retail spending increased to $16.6 billion over the 12 months to January 2015, a 9% increase over the period. It now accounts for 6.9% of traditional retail spending. Over the same period, retail spending in traditional bricks and mortar retail stores grew by 4.7%. Domestic retailers account for about three-quarters of online retail sales, while international online retail sales account for the other quarter.

Technology has also resulted in the demise of some businesses. For example, Internet streaming services such as Netflix and Stan have made video/ DVD rental stores a thing of the past. Similarly, music available in digital format from iTunes and Google Play has led to the closure of stand-alone music retailers such as Sanity and HMV. Even stores such as JB HiFi offer a smaller selection of CDs and DVDs, choosing to allocate far more floor-space to consumer electronics such as TVs, tablets and smartphones. Advancements in technology are inevitable, making technology an ever-present source of **structural change** in an economy.

Technology is also used by businesses to enhance the effectiveness of their marketing strategies. For example, tiny text files known as 'cookies' that are used when people visit websites, enable businesses to gather information on potential customers. These cookies collect data on customer online browsing habits in order to allow businesses to customise advertisements and sales promotions, by targeting particular ads to particular customers. This promotional strategy is known as **targeted advertising** and is more cost effective than traditional mass advertising campaigns such as TV commercials. It can also be more successful in generating sales. Supermarkets issue reward cards to their customers, which are scanned during the checkout process, enabling the supermarket to gather information on each customer's preferences. This information is used to alert customers through email or SMS when their favourite products are on special. This strategy is used to get customers to visit the supermarket to buy not only those products that are on special, but to make other incidental purchases as well.

Traditional businesses have also had to respond to the emergence of the **sharing economy** or **collaborative consumption,** which were discussed earlier in this chapter. Businesses are increasingly calling upon governments to impose the same licensing requirements, regulations and taxes on the new sharing economy businesses as those imposed on 'traditional' businesses. The existing businesses claim that failure to do so will put them at a competitive disadvantage. The taxi industry has even lobbied the government to ban altogether peer-to-peer taxi services such as Uber.

Although the sharing economy is a disruptive influence on traditional businesses, it does not necessarily spell the end for these businesses. However, it will undoubtedly shake up the way industries such as transport, tourism and equipment-hire operate into the future.

Review Questions 2.8

1. Explain why businesses seek to incorporate the latest developments in technology into the production process.
2. Explain how the relative prices of resources can influence the use of technology in the production process.
3. Describe how technology is being used in the banking and retail sectors.
4. Explain how technology is being used to enhance the effectiveness of marketing.
5. Comment on why traditional businesses might feel threatened by the emergence of the sharing economy.

Application Exercise 2m: New Technology (driverless trucks)

In October 2015, the ABC reported on a world first – Rio Tinto moving all of their iron using remote-controlled trucks at their mines in the Pilbara in far north-western Australia. The trucks are controlled from an operations centre in Perth, which is over 1,200 kilometres away.

The story reported that 22 driverless trucks were operating at a mine at Yandicoogina north west of Newman, and a total of 69 driverless trucks across three of its mines in the area. The trucks can operate 24 hours a day, 365 days a year, without a driver. This means no toilet or lunch breaks, no sick leave and no holiday pay. According to the story, each truck can save around 500 work hours a year.

Josh Bennet, the manager at the Yandicoogina mine stated, "To the naked eye it looks like conventional mining methods. I guess the key change for us is the work that employees and our team members are doing now." Mr Bennett also said the technology takes away dangerous jobs while also slashing operating costs. "We have taken away a very high risk role, where employees are exposed to fatigue," he said. "It is quite challenging to get repeatability out of a human, one of the advantages we have had with autonomous haulage particularly in the truck fleet we notice we are getting consistency in terms of the way the machines are operating."

In addition to the reduction in direct wages paid, there are also capital savings such as setting up camps for workers to live in, flying the workers in and out of the remote locations. There are, however, still substantial costs in running the mine – including running and maintaining the automated system.

Further advances in technology will allow other processes at the mines to become largely free of human labour. Rio are trialling unmanned trains and mining with robot drills. Over time, all of the company's supply chain – from the pit to loading the iron ore onto tankers at the port will be controlled remotely from Perth.
While the automation of the mine processes will result in many job losses, a number of jobs have been created in running and controlling the autonomous system.

A mining market analyst quoted in the ABC story, Giuliano Sala Tenna noted that the push for automation was necessary to improve the competitiveness of Australian producers who are competing against cheaper overseas producers. "The benefit of technology is the one to many relationship, so you can just have one individual or one full time equivalent doing the job of many people," Mr Sala Tenna said. "What they are really looking at is what is going to be required for the next decade to stay profitable and this is one of the things they need to do in order to stay profitable through the entire cycle."

However, as manual jobs in mines disappear, there will be greater need for retraining of the workforce. There will need to be many more 'maintainers' –those who can maintain the automated equipment. There will also be more jobs for those who can undertake analytical work, dealing with the data that will play an enormous part of an increasingly automated workplace.

Dr Raymond Sheh from Curtin University's Computing Department has been studying robots for more than a decade and said he believes that the innovation in robotics and automation must be exploited. "There are new jobs coming online that support these new technologies," he said. "You still need people in there to monitor where they go, to tell them where they should be going and should be doing, even though a lot of that scheduling is being done automatically."

Questions

1. **Outline the new technology that Rio Tinto has implemented at its Pilbara iron ore mines.**
2. **Outline the advantages of this new technology.**
3. **Outline other new technology that Rio Tinto is trialling.**
4. **Explain what has motivated Australian mining companies to develop new technology.**
5. **Explain how new technology creates jobs.**

Application Exercise 2n: New Technology (sharing economy and Uber)

As discussed earlier, the exponential rise of the sharing economy enabled by technological advances over the last few years, has provided benefits for consumers, and posed challenges for established businesses. Furthermore, it has raised a dilemma for governments in terms of how to respond to the new developments while also taking into account the concerns of all stakeholders. One industry that has seen major changes is that for short-term rides in vehicles. Previously, taxis were the main means of providing this service, but with the rise of smartphone and app technology, ride-sharing services have been able to provide a service that provides a similar level of responsiveness to demand as the existing taxi industry.

In August 2016, the Victorian government announced a plan to legalise Uber. The government also announced it would introduce a $2 levy per trip for all taxi and ride-booking services (including Uber).

Under the new system, there would be a single registration system for taxis, hire cars and ride-share services – including Uber. This development would mean that the previously-unregulated (and largely informal) operations of the Uber service would now become subject to the same kinds of restrictions and requirements as registered, regulated taxi services.

The government also announced it would abolish taxi licences. It would pay $100,000 for the first taxi licence and $50,000 for the second, but anyone holding more than two will miss out. The government will also provide $378 million to help existing taxi licence holders to transition to the new laws. In addition, it would establish a $75 million 'fairness fund'- to assist those experiencing immediate financial hardship, with $25 million of the funds dedicated to improving access for people living with disability. The $2 per trip levy would stay in place for eight years and the revenue would be used to fund the changes.

Victorian Premier, Daniel Andrews, cited the importance of fairness in implementing the changes. He said this is 'the fairest (approach) and it provides everyone across Victoria the certainty that there will be more choice, there will be greater value, there will be better transport options for you, because we are making sure that the law is written to take advantage of the technology that's here now and all that will come hereafter. It gives to the taxi industry what they've been calling for, the chance to compete on an even playing field.'

In response to concerns that the rise of ride-sharing services has led to less safety for consumers (since drivers don't have to be registered by the industry to provide the service), the government announced that all drivers of taxis, hire cars and ride-booking services (such as Uber) will have to pass police, driving and medical checks. Only providers with cameras and fare meters will be able to pick up passengers who hail them down, or use taxi ranks. Uber Victoria responded to the government announcement by noting that it was a positive recognition of the role of the ride-sharing service in the Victorian economy, noting that over half a million Victorians were already using Uber. It was concerned, however, that the levy could make transport more expensive for consumers, citing this as a 'bad thing'.

On the other hand, the Victorian Taxi Association welcomes the overall framework of the changes, but was waiting to see the full policy details before providing unqualified support for the reforms. The association acknowledges that their market is changing rapidly and that they need to adjust and adapt to those changes, but was also keen to see that there was fairness for all those who have invested heavily in the taxi industry. While they acknowledge that the majority of taxi licences were held by single owners, they noted that there are a number of investors who own numerous licences who may be negatively impacted by the reforms.

The Victorian Opposition's response to some of the proposed changes was very negative, stating that the levy is simply a new tax. Their largest concern was the big effect of the flat-rate $2 levy on people taking short trips, which would in effect add $4 to the cost of a round trip. Opposition spokesperson, David Hodgett said 'Daniel Andrews is basically setting up a slush fund to buy the votes of the companies that hold these taxi plates and it's Victorians that are going to pay for this with this new tax on each and every Uber ride and taxi ride for the next eight years or beyond.' Nevertheless, the Opposition did welcome the broader changes to reduce regulation from the taxi industry.

Questions

1. **Outline how technology has effectively been responsible for the changing structure within the taxi industry.**
2. **Explain how the government has responded to the taxi industry's concerns following the entry of Uber into the market.**
3. **Compare the responses of the various stakeholders to the government's proposed reforms: the taxi industry, Uber and the Victorian Opposition. Explain the likely reasons for the different stakeholder responses.**
4. **One of the reasons for the popularity of peer-to-peer ride-sharing services such as Uber is that the service has been able to provide cheaper prices for similar services, compared to taxi rides. Predict the likely effect of the changes to the industry, including the new levy, on the price of using taxis compared to the price of taking an Uber.**
5. **Predict the likely response to the proposed reforms of customers who currently use the Uber service, and drivers who currently provide rides through Uber. Explain your reasoning.**

2.9 Strategies businesses employ to increase profitability

In Economics, it is assumed that all businesses are motivated by profit. This means that, regardless of the market structure that exists, all businesses will seek to maximise revenue and minimise expenses. Every day, businesses will endeavour to increase their share of the market via the implementation of various strategies designed to boost revenue or sales. Most of these strategies are developed as part of the overall marketing plan of the business and will include the following types of strategies that have already been considered earlier in the chapter:

- Advertising particular products in the market place (such as advertisements on TV, radio, internet and in newspapers)
- Advertising the 'brand' in various ways (such as product placement in films or brand promotion on billboards)
- Positioning products in discrete locations or positions (such as confectionary companies ensuring that their products feature prominently in supermarkets)
- Locating the business in exactly the right position (such as McDonald's ensuring that their stores are positioned in high traffic areas)
- General promotion of the product or brand, such as contributions to charitable organisations, sponsorship of events or sporting teams and reward or loyalty programmes

Study tip

*The advertising/promotion of a **product** is quite distinct from the promotion of the **brand**. Apple Inc. promotes the Apple brand with the now-famous symbol of the partly-eaten Apple. Its placement in various mediums is purely designed to promote the Apple brand and remind or persuade consumers that Apple products are both available and widespread. In contrast, Apple advertises particular products, such as the iPad 3, with the intention of generating sales for that particular product.*

The strategies listed above focus on increasing sales or revenue. However, any business will also be concerned about achieving the best possible value from any expenditure it undertakes. So in its desire to minimise expenses, a business will seek to achieve the most cost-efficient method of production. This will often include the following types of strategies:

- Sourcing the highest quality supplies at the lowest cost
- Investing the optimal amount of funds in physical capital (e.g. purchasing highly efficient technology or machinery)
- Investing in human capital (e.g. training employees or employing highly skilled employees)

Strategies to boost sales and minimise expenses have the overriding objective of increasing the '**scarcity value**' of a business' products. In other words, businesses are keen to persuade or convince consumers that their product is both desirable and unique - to the point that it is better than alternative products offered by competitors. The greater the success of these strategies, the greater is the likelihood that a business is able to develop market power, thereby becoming a 'price maker' rather than a 'price taker'. At the extreme, it is possible for a business to commence operations in a competitive market, but to subsequently become so successful with profit maximising strategies, that it eliminates its competitors and enjoys the benefits of becoming a monopoly supplier in the market place.

In addition to the above strategies, businesses will sometimes employ more subtle strategies to win market share, some of which are legal and some of which are illegal under Australian competition laws. These strategies include **price discrimination** and **multiple branding**, as well as anti-competitive strategies including **predatory pricing** and **cartel conduct**.

Price discrimination

Price discrimination involves a business charging consumers different prices for the same product. It enables businesses to maximise revenue by imposing a higher price for 'high value' customers (namely those with the ability and preparedness to pay more) and a lower price to 'low value' customers (namely those unable or unwilling to pay a higher price). This strategy relies, however, on a business being able to distinguish those customers prepared to pay more from those prepared to pay less. In addition, they must be able to prevent consumers from buying at a low price and selling to other consumers at a higher price. As a result, in most cases business cannot do these things and will simply charge one price for all customers.

Study tip

In Economics, this is technically referred to as first degree price discrimination where the 'consumer surplus' is transferred to the producer in the form of an increased 'producer surplus'. However, this is beyond the scope of the Unit 1 course.

If businesses possessed perfect information, particularly about their customers' willingness to pay, the profit-maximising pricing strategy would be one where the price charged was unique for each customer, such that each customer was charged a price identical to what they were prepared to pay. In other words, each customer would pay exactly the value they place on the product and there would be no consumer enjoying the benefit of paying less than they would be prepared to pay. Instead, the benefit is absorbed by the producer who ends up receiving more than they were prepared to receive on the market.

Clearly, businesses don't possess perfect information about consumer preferences, and they find it virtually impossible to impose individually tailored prices. However, advances in technology are enabling businesses to develop consumer profiles that help them to effectively price discriminate. The more information businesses have about a consumer's income levels, their age, likes and dislikes among other factors, the greater the ability of the businesses to target consumers with specific offers. For example, a higher income earner in the middle age bracket is more likely to receive an offer to buy a product from Amazon.com at a higher price, compared to an offer to buy the same product when targeted at a lower income earner in a younger age bracket.

Examples of price discrimination in action are quite common, and include discount tickets to events offered to pensioners or students. These two groups are typically lower income earners who would be unwilling (or unable) to pay a high price. To maximise revenue, businesses will try to extract a premium from most customers by charging them full price. They will then boost this revenue with extra sales from lower value consumers, since these customers would not have been as likely to buy the product at the oroginal price. [See the case study on cinema tickets below]. Similarly, the airline industry price discriminates by offering 'early bird discounts' or 'cut price fares' on certain flights. They will do this for a small percentage of seats on those flights unlikely to be filled by full-fare paying customers. Price conscious consumers (or the 'low value' consumers with a reduced willingness or ability to pay full prices) will tend to snap up these tickets, resulting in a decreased likelihood of empty seats on any given flight. This explains why airlines will occasionally advertise domestic airfares for as low as $1. They do thisbecause it is better to earn some revenue rather than zero, particularly when the customer may purchase other goods while using the service, such food or excess baggage charges on flights, or even a return flight at a higher price.

Sometimes, price discrimination will rely on the buyer revealing their choices to the seller, making it clear that they are not prepared to pay the quoted price for the product by asking for a discount or a reduced price. In this case, the buyer is signaling that they are a 'lower value' consumer and will only purchase the product if the seller is prepared to accept a smaller 'profit'. This type of price discrimination occurs in markets and retail outlets every single day and is an effective way for consumers to 'get a good deal' at the same time that businesses maximise profit.

Review questions 2.9a

1. Explain why prices are likely to be lower in perfectly competitive markets.
2. Explain why prices are likely to be higher as market concentration increases.
3. Discuss what is meant by the 'most efficient allocation of resources'.
4. Distinguish 'benefit' from 'net benefit'.
5. Explain why competitive markets are most efficient at satisfying consumers.
6. Explain why the existence of oligopolies or monopolies can lead to 'net costs' for society.
7. Discuss three possible strategies, apart from price discrimination, that could be used by a business seeking to maximise profits.
8. Define price discrimination and discuss how it can be a profit maximising strategy.
9. Discuss how the airline companies effectively use price discrimination as a means of maximising profit.

Application exercise 2o: price discrimination at cinemas

The purchase of cinema tickets is an example often used to describe price discrimination in the real world. If we assume that a cinema has 300 seats, the cinema would love to have every one of these 300 seats filled for every movie. It could certainly achieve this if it set a very low price of $1.00 per ticket. However, this would most likely incur losses and would be a poor decision. Equally, it could charge $20.00 per ticket, which would result in less demand and perhaps a sale of 150 tickets. While this would result in significantly more revenue ($3,000 compared to $300 for the 300 seat theatre), it is still unlikely to be a profit-maximising pricing decision. The cinema operator will be aware that there are some customers who would be prepared to pay $15 or more to watch a movie and many that would be prepared to pay only $10 or less. If we assume that the cost for the cinema operator to run a movie in the cinema was $1,500 (which equates to $5 per seat), then it makes good business sense to fill the seats with as many people prepared to pay $15 and sell the remaining seats for $10. But how does the cinema operator discriminate and charge a relatively low price for one group of customers and a high price for another? The cinema operator does this through the offer of discounted tickets for pensioners and students.

To demonstrate how this maximises revenue and profit, some hypothetical figures will be used.

Price discrimination at cinemas

Strategy	Pricing	Price discriminating	Price charged (1)	Estimated demand (2)	Total revenue (1) X (2)
1	$15 per ticket	No	$15.00	200	$3,000.00
2	$10 per ticket	No	$10.00	300	$3,000.00
3	$12.50 per ticket	No	$12.50	250	$3,125.00
4	$15 per ticket (adults) $10 per ticket (pensioners/ students)	Yes	$15.00 $10.00	200 100	$3,000.00 $1,000.00 **$4,000.00**

While these are clearly hypothetical figures, they show how the principle of price discrimination works. The cinema has four pricing strategies to choose from. The **1st strategy** involves no price discrimination and a flat $15 price. This would only create demand for 200 seats and generate $3,000 of revenue. The **2nd strategy** involves a flat $10 price and is designed to generate more ticket sales. While it does create additional sales numbers, filling the cinema, it generates the same total revenue. Note that the 200 people who were prepared to pay $15 are now only paying $10. In this respect, these consumers are each gaining a $5 surplus (called a consumer surplus) and producers have forgone the opportunity to extract some, or all, of this surplus for themselves. The **3rd strategy** also involves a flat price, but one in the middle, at $12.50. This works to generate more revenue, however, it is still not the best pricing strategy because the business is not extracting all of the consumer surplus from the 'high value' consumers who were willing to pay $15 per ticket. The **4th strategy** is the best one because it enables the cinema operator to effectively separate different types of consumers and price the tickets accordingly. The full ticket price of $15 will apply to all consumers, except a lower price of $10 will apply to those who (on the face of it) have a reduced capacity to pay (or who are unwilling to pay the full price). Price discriminating in this way increases revenue significantly, from $3,125 to $4,000. The cinema operator is able to extract more of the 'surplus' that would otherwise have been received by consumers. In effect, the consumer surplus has been converted into a producer surplus.

Questions

1. **Explain how price discrimination can be applied at cinemas.**
2. **Discuss how a cinema might prevent purchasers of discounted tickets from selling them at a price above the discounted price but below the full price.**
3. **Explain how the cinema can suffer if it prices tickets at $10 and not $15, despite generating the same revenue ($3,000).**
4. **Explain how the cinema might benefit if it prices tickets at $10 and not $15. (Hint: there are an additional 100 cinema goers in the complex.)**
5. **Explain how the cinema was able to generate $875 more revenue by adopting pricing strategy 4 as opposed to pricing strategy 3.**
6. **Extension: Explain how pricing strategy 4 involves a reduction in the 'consumer surplus' and an increase in the 'producer surplus'.**

Multibranding

Multibranding is defined as individual companies marketing their products under separate and distinct brand names. There are some common examples, such as the Coca-Cola company producing numerous soft drink brands (including Coke, Fanta and Sprite), Cadbury producing a number of chocolate brands (including Flake, Dairy Milk and Roses) and Kellogg's producing various brands of cereal (including Cornflakes, Special K and Rice Bubbles).

What is the point of multi branding? Put simply, it is another effective profit-maximising strategy that is commonly employed by larger corporations. It has the key advantage of increasing the number of products that business has in any particular market, thereby making it more difficult for new businesses to enter the market. A new business will not only find it difficult to attract new customers in a market flooded with different brands, it will also find it difficult to attract appropriate shelf space on supermarkets already crammed with multiple brands. In this respect, the strategy helps to create a '**barrier to entry**' into the market, which serves to increase the market power of those businesses engaged in multibranding. It has the added benefit of catering to customers that are notorious 'brand switchers' as well as generating competition among different divisions within the company, which helps to improve both efficiency and quality.

Increasingly, businesses supplying branded products will also supply the same product to the market place 'unbranded', also known as a 'generic' form of the product. The most common examples relate to plain labeled or 'no name' food items at supermarkets. This enables the manufacturers to tap into the benefits of 'multi-branding', while at the same time, reaping some of the benefits of price discriminating. While it is true that not all plain labeled or 'no name' products are identical to their branded counterpart, there are many examples of branded products that are identical to plain brand labeled or 'no name' products, except for the label itself. The manufacturer gains in this instance because multibranding enables it to sell essentially the same product at different prices, absorbing more of the 'consumer surplus' from 'high value' customers (see the section on Price Discrimination above).

Anti-competitive strategies: Predatory pricing and cartel conduct

The government is quite active in the economy to minimise the existence of anti-competitive behaviour by businesses. The government has established competition laws that are set out in the Australian 'Competition and Consumer Act (2010)', formerly known as the 'Trade Practices Act (1974)'. The current Act is policed by the Australian Competition and Consumer Commission (ACCC) and, in short, is designed to promote competition and eliminate any behaviour that is deemed to be 'anti-competitive' to the detriment of consumers and society more generally.

While there are numerous examples of anti-competitive behaviour, we will examine two strategies that are sometimes used, particularly by businesses with market power, that are designed to minimise or eliminate competition – predatory pricing and cartel conduct. More detail about the various types of anti-competitive behaviour is available at the ACCC website: www.accc.gov.au.

Predatory pricing

According to the ACCC, **predatory pricing** occurs when a company sets its prices at a sufficiently low level with the purpose of damaging a competitor, or forcing a competitor to withdraw from the market. Once the competitor is eliminated, the company is then able to dominate the market, exercise a greater degree of market power and raise prices to the detriment of consumers and society. In effect, the company is behaving like a predator, seeking out and eliminating or devouring its competitors. In a competitive sense, this is normal profit-maximising behaviour of businesses, and would exist regularly if it were not for government intervention.

Predatory pricing can be very difficult to prove because the act of pricing in a predatory way depends on the *intent* of those in the company making the pricing decisions. For example, it is normal for businesses to compete on price, and a large corporation might seek to pass on to consumers the advantages it gains from being able to achieve bulk discounts from suppliers. They would do this in the form of lower prices. Economists refer to this as a 'scale advantage' or benefits derived from **'economies of scale'**. This strategy is simply an attempt by the company to use its buying strength to gain a competitive market advantage. However, if the decision to reduce price to a low level was a conscious decision to eliminate a competitor, then this is considered 'anti-competitive' and is illegal under Australian law.In some cases, businesses will reduce price below cost when seeking to prevent the loss of their market share. If so, it is likely to signal that the intention of the business was to eliminate a competitor. The ACCC would then be likely to launch an investigation under **section 46 of the Competition and Consumer Act.**

An example of alleged predatory pricing relates to the alleged behaviour of the dominant Australian supermarkets over recent years. Coles and Woolworths reduced the prices of bread and milk to a low of $1.00. Being everyday items for households, which are called 'staples', they are considered two of the key products attracting customers to smaller retailers, such as small supermarkets and milk bars or corner stores. The extremely low prices for bread and milk could have the effect of driving smaller retailers out of the market, enabling Coles and Woolworths to enjoy greater market dominance. If the ACCC could prove that the intent (at the time) was to eliminate competition, Coles and Woolworths would be guilty of predatory pricing and would face stiff penalties. [The ACCC eventually withdrew its allegation due to insufficient evidence.] See Application 2p which examines the 2016 changes to s46 which will make it easier for the ACCC to prosecute larger businesses engaging in predatory pricing.]

Application Exercise 2p: Changes to competition laws in 2016

Read the extract from the **Joint Media Statement: Fixing Competition Policy to Drive Economic Growth and Jobs** from the Prime Minister and Treasurer in early 2016 and answer the questions that follow.

The Turnbull Government will legislate to fix competition policy in Australia through implementation of the Harper Review's recommendation to amend Section 46 of the Competition and Consumer Act - the misuse of market power provision.

The Harper Review into competition policy - an election commitment of the Coalition Government - found Australia's current misuse of market power provision is not reliably enforceable and permits anti-competitive conduct. This slows the entry and expansion of new and innovative firms, delays the entry of new technologies into Australia and impedes economic growth in the long term. The Harper Review recommended that Section 46 be replaced by a new provision, which is better able to deal with harm to competition in Australian markets.

Following the review, and understanding of the concerns about the operation of the misuse of market power provision as well as the need to ensure the provisions enhance rather than inhibit competition, the Government undertook extensive consultation with stakeholders to soberly work through the issue. Following this rigorous process the Government has decided to repeal the current Section 46, and adopt the changes recommended by the Harper Review in full. This will result in a new provision that prevents firms with substantial market power from engaging in conduct that has **the purpose, effect or likely effect of substantially lessening competition.** [Over 2016 this was reported as the new 'effects test' giving small companies more grounds to complain against bigger rivals that hurt competition under the law. Under the 'old' version of the law, the ACCC needed to show '**intent**' on behalf of the larger businesses (i.e. their intent when reducing prices was to substantially lessen competition) which is much more difficult to prove than **the purpose, effect or likely effect** of their actions.]

The Government is committed to fixing Australia's competition policy and the amendment of Section 46 to deal with unilateral anti-competitive conduct is an important step to ensure Australia has the best possible competition framework to support innovation and boost economic growth and jobs. Conscious of the needs of business, the change is deliberately designed to reduce the uncertainty associated with amending a law. It uses existing legal concepts from within the competition law – such as 'substantially lessening competition' – and ensures the focus of the provision remains only on those firms that have substantial market power.

This reform represents a commercially and legally robust law, preventing firms with market power engaging in behaviour that harms the competitive process. It places Australia's competition law on the right footing to encourage economic growth and innovation.

An effective misuse of market power provision is an important and necessary part of competition law, particularly for Australia's more than two million small businesses which make up more than 97 per cent of all businesses. The changes the Government has announced will more effectively focus on the long-term interests of both small businesses and consumers, improving the law's clarity, effectiveness and force. ...Protecting the competitive process is unashamedly pro-competition and allows everyone to have a go.

The Government will consult on Exposure Draft legislation before introducing it to Parliament later in 2016. [At the time of writing, the Bill had not yet passed through parliament.]

Source: *https://www.pm.gov.au/media/2016-03-16/joint-media-statement-fixing-competition-policy-drive-economic-growth-and-jobs*

Questions

1. Describe how anti-competitive conduct might slow the entry and expansion of new and innovative firms, delay the entry of new technologies into Australia and impede economic growth in the long term.
2. Describe how the new provisions (if enacted) will make it easier for the ACCC to prosecute larger businesses who engage in predatory pricing.
3. Explain how the pricing decisions of large businesses is likely to change if the new provisions of s46 becomes law.
4. Explain how small businesses and consumers might benefit under the new provisions of s46.

Cartel conduct

A **cartel** is defined as two or more businesses joining forces to maximise profits. It means that they agree not to compete against each other and instead develop joint strategies to manipulate the market at the expense of consumers. Cartel conduct includes the following types of agreements.

- Agreements to fix or lift prices in unison so that consumers have fewer alternatives available when purchasing goods and services.
- Agreements to share or allocate customers and to divide the market into various areas or simply agree not to poach one another's customers, leaving consumers with less choice in the market place.
- Agreements that effectively rig the bidding process so that contracts are shared by members of the cartel. For example, both companies may agree to take it in turns, with one company bidding with an extremely high price to ensure the contract is offered to the other bidder, with 'the favour' being returned for the next contract.
- Agreements to restrict supply to the market in order to drive up prices for both businesses.

Cartel conduct will mostly occur in highly concentrated market structures, such as an oligopoly or duopoly. As you will recall, these markets involve a very small number of producers, and this would make the kind of cartel behaviour listed above more manageable. A recent high profile example relates to the alleged cartel conduct by egg producers over 2010-14. The ACCC initiated legal proceedings, alleging that producers collectively restricted the supply of eggs on the market in order to raise the price of eggs. [The case was rejected by the Federal Court in early 2016 but was subject to an appeal by the ACCC at the time of writing.]

Application exercise 2q: Predatory pricing in the airline industry?

An example of alleged predatory pricing behaviour relates to the introduction in late 1990 of the new airline, Compass, to compete in the domestic airline market. The market was dominated at the time by two airlines - Ansett and Australian Airlines. These two airlines enjoyed a cosy duopoly and were making healthy profits. The intention of Compass was to enter the market and offer a 'no frills' type of service, catering in particular to the domestic leisure traveler. It offered fares between 20% to 50% cheaper than the two existing airlines, seeking to both expand the size of the market, by luring leisure travelers away from interstate coaches and trains, and to take a small slice of the market away from Ansett and Australian Airlines. Over the course of 1991, the three airlines engaged in what became known as 'price wars', initially sparked by Ansett offering discounts of up to 60%, which were then matched by both Australian and Compass. Prices continued to fall, creating losses for all three airlines over this period, before Compass eventually pulled out of the market, unable to sustain the losses, unlike its more powerful rivals. The market therefore returned to a duopoly, permitting Australian Airlines and Ansett to lift prices once more.

The behaviour of Ansett and Australian Airlines was investigated by the Government's competition regulator at the time. It was, however, unable to prove that the two airlines had engaged in predatory pricing – to the surprise of many economists and commentators!

Questions

5. **Identify Compass' objective when entering the market in 1990.**
6. **Define the term 'price war', and provide a possible explanation for the three airlines engaging in a price war over the period discussed in the case study.**
7. **Explain why Compass was the only airline to effectively 'go broke' at this time, forcing it to exit the industry.**
8. **Provide a possible reason for the government being unable to prove that Ansett and Australian Airlines engaged in predatory pricing.**

Review questions 2.9b

1. Define the term multibranding, providing some examples to illustrate.
2. Explain how multibranding can help a company to maximise profits.
3. Explain how plain label goods are an example of multibranding in action, and discuss how the provision of plain label goods allows businesses to tap into the benefits of price discrimination.
4. Define predatory pricing and explain why it is considered 'anti-competitive'.
5. Identify the key ingredient needed to prove that predatory pricing has taken place.
6. Define a cartel and describe two ways that a cartel can effectively 'rip off' consumers.
7. Define the term multibranding, providing some examples to illustrate.
8. Explain how multibranding can help a company to maximise profits.
9. Explain how plain label goods are an example of multibranding in action, and discuss how the provision of plain label goods allows businesses to tap into the benefits of price discrimination.
10. Define predatory pricing and explain why it is considered 'anti-competitive'.
11. Identify the key ingredient needed to prove that predatory pricing has taken place.
12. Define a cartel and describe two ways that a cartel can effectively 'rip off' consumers.

2.10 Multiple-choice questions

1. Which of the following products is most likely to have the characteristics of a Veblen good?

a) Tennis racquet.
b) House.
c) Sports car.
d) Motorbike.

2. Which of the following is not considered to be an internal factor affecting consumer behaviour?

a) Habit.
b) Personality type.
c) Ethics.
d) Culture.

3. Which of the following best describes the 'triple bottom line'?

a) Planet, People and Performance.
b) Planet, People and Profit.
c) People, Profit and Policy.
d) People, Productivity and Profit.

4. Assume, that a business increases the price of its best-selling product by 10% and in response the quantity demanded decreases by 25%. Based on this information, which of the following statements is correct?

a) Consumer demand is very responsive to a price change and total revenue is likely to fall
b) Consumer demand is very responsive to a price change and total revenue is likely to rise
c) Consumer demand is very unresponsive to a price change and total revenue is likely to fall
d) Consumer demand is very unresponsive to a price change and total revenue is likely to rise

5. Which of the following would be considered a negative externality?

a) Cigarette smoke inhaled by non-smokers in public spaces.
b) The Formula 1 Grand Prix in Melbourne promoting the city of Melbourne to international tourists.
c) Beautifying your home and the benefits this provides to your neighbours, both aesthetically and in terms of their property values.
d) The research and development done by the car manufacturing industry and its dissemination to other industries.

6. Which of the following combinations are not considered to be positive externalities?

i. Abnormally high property prices enjoyed by homeowners located in the immediate vicinity of zoned, top performing public schools.
ii. The overall decline in car theft as a result of some car owners installing concealed anti-theft devices in their cars.
iii. The Formula 1 Grand Prix in Melbourne and the disruption it causes to local traffic.
iv. Loud music from a raucous party disturbing the neighbours' sleep.

a) Statements i & ii.
b) Statements i & iv.
c) Statements ii & iii
d) Statements iii & iv

7. With reference to the traditional economic viewpoint, which of the following assumptions is incorrect?

a) Consumers aim to maximise utility subject to a budget constraint.
b) Consumers seek to derive the most satisfaction from the income at their disposal by buying those goods and services that reflect their preferences.
c) Consumers act in the interests of others.
d) Consumers make rational choices.

8. Which of the following government policies is most likely to address a negative externality?

a) reduction in excise tax on petrol.
b) abolition of national park entry fees.
c) lowering rebates on the installation of solar panels.
d) increasing fees on metered car parking spaces in the city.

9. The Nash equilibrium is
- a) 99/1
- b) 80/20
- c) 50/50
- d) 0/100.

10. Diminishing marginal utility generally means that
- a) greater consumption of a good or services always yields more utility.
- b) each additional unit of a good or service consumed is a little less satisfying.
- c) the opportunity cost of extra consumption is always lower.
- d) products that are scarce will have a higher price.

11. Businesses are interested in developing brand loyalty among their customers because
- a) it keeps the marketing department busy.
- b) it makes its customers less responsive to price increases.
- c) it helps to maintain revenues at existing levels.
- d) it eliminates the need to spend on research and development to come up with new innovations.

12. Which of the following is not a response by business to a change in society's values and attitudes?
- a) An increase in the availability of fuel efficient vehicles.
- b) An increase in the use of palm oil to reduce the cost of producing food.
- c) The labelling of food with nutritional information.
- d) Safer working conditions at building sites.

13. Advances in robotics technology are likely to
- a) Increase productivity for businesses and ultimately lead to greater sales of goods or services
- b) Increase productivity for businesses and ultimately lead to lower sales of goods or services
- c) Decrease productivity for businesses and ultimately lead to greater sales of goods or services
- d) Decrease productivity for businesses and ultimately lead to lower sales of goods or services

14. Which of the following combination has the most potential to create a moral hazard?

i. The decision by the Australian Government to guarantee bank deposits in the event of another Financial Crisis.

ii. Third party car insurance, which only covers the cost of repairs to the motor vehicle of the party who was not at fault.

iii. Comprehensive car insurance, which covers the cost of repairing the motor vehicles of both parties involved in a motor vehicle accident irrespective of who is at fault.

iv. The installation of video surveillance cameras in the workplace.

- a) Statements i & ii.
- b) Statements i & iii.
- c) Statements ii & iii
- d) Statements iii & iv

15. Which of the following does not represent an increase in productivity?
- a) Output remains unchanged but fewer inputs are used up in production.
- b) Output increases but the same amount of inputs are used in production.
- c) Output remains the same but more inputs are used up in production.
- d) Output increases but fewer inputs are used up in production.

16. Which of the following markets is the least likely to be one involving the use of price discrimination?
- a) Cinemas
- b) Taxi services
- c) Airlines
- d) Amusement parks

17. Which of the following concepts is not associated with behavioural economics?
- a) Satisficing behaviour.
- b) Utility maximisation.
- c) Bounded rationality.
- d) Heuristics.

18. Which of the following provides the best definition of predatory pricing?

a) When a company sets its prices at a sufficiently low level with the purpose of damaging or forcing a competitor to exit the market

b) When a company sets its prices at a sufficiently low level with the purpose of damaging or forcing a competitor to reduce their prices

c) When a company sets its prices very high because of an absence of competition

d) When a company forces its suppliers to lower their prices in order to drive them out of business

19. Which combination of statements regarding nudges is incorrect?

i. Nudges rely on heavy financial penalties.
ii. Nudges rely on the use of sanctions.
iii. Nudges rely on the use of framing.
iv. Nudges can be described as soft paternalism.

a) Statements i & ii.

b) Statements ii & iii.

c) Statements iii & iv.

d) Statements i& iv.

20. Which of the following would not be considered to be a nudge?

a) Placing healthy foods at eye level on supermarket shelves.

b) Low-fat milk being the default option for hot beverages served at cafes.

c) TV commercials promoting physical activity.

d) A sugar tax.

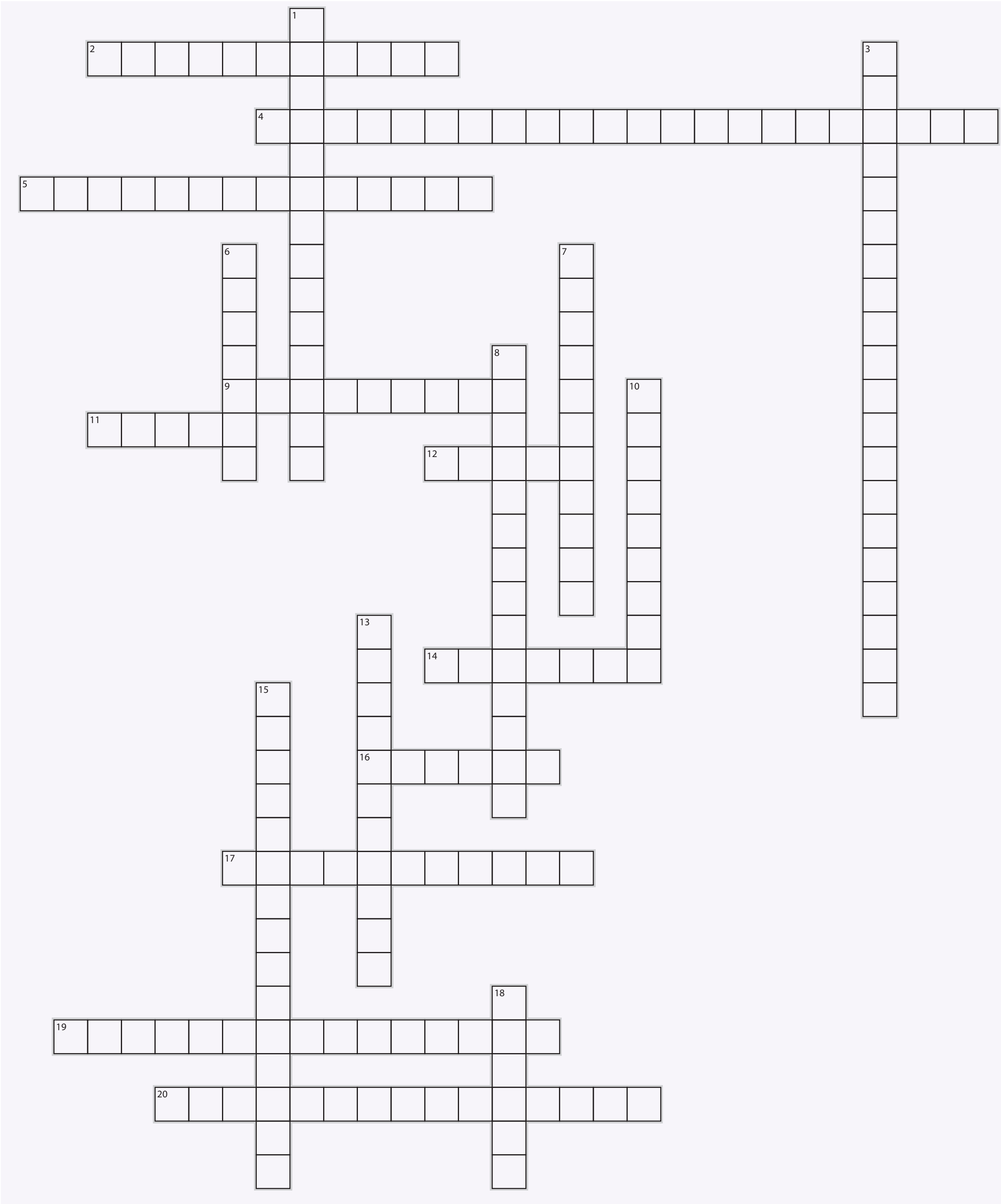
2.11 Chapter crossword puzzle

Across

2. A field of economics that seeks to incorporate the insights of psychology into economics, to enhance the explanatory power of economics
4. Where consumers purchase particular goods and services for the utility derived from the ostentatious exhibition of such 'status' goods and services
5. Peer-to-peer rental schemes made possible by developments in technology (two words)
9. Something that induces an economic agent, whether a consumer or business, to act
11. Where consumers regularly purchase certain types or brands of goods or services using little or no cognitive effort
12. Subtly coaxing people into making good choices without having to resort to heavy financial incentives or sanctions.
14. In the context of behavioural economics, how options or propositions are presented
16. When part of the original payment for a good or service is returned to the buyer. They are often a form of incentive used by the government.
17. Where consumers make decisions that are good enough
19. The satisfaction that consumers gain from consuming an additional unit of a good or service (two words)
20. A person or organisation responsible for creating the context in which people make decisions (two words)

Down

1. A latin term meaning 'rational economic man'. an assumption that states that consumers aim to maximise their utility by purchasing those goods and services that reflect their preferences.
3. A creation of the mind (two words)
6. A measure of satisfaction, happiness or well-being.
7. consumers likes and dislikes.
8. When people are able to access and enjoy the same rewards, resources and opportunities regardless of gender (two words)
10. An action taken by an uninformed party to induce an informed party to reveal information
13. Paid, non-personal communication used to persuade consumers to buy products
15. Where the government uses nudges to change people's behaviour (two words)
18. The moral principles that guide a person's behaviour and can therefore influence the consumption and production of goods and services



2.12 Chapter summary

1. The traditional economic viewpoint of consumer behaviour is based on the idea of Homo economicus or 'rational economic man'.
2. Homo economicus strives to maximise their utility (or satisfaction) given their budget constraint, preferences and the relative prices of goods and services.
3. Consumers experience diminishing marginal utility from the consumption of goods and services and, therefore over a period of time will 'mix it up' by consuming different combinations of goods and services in order to maximise their total utility.
4. Contemporary economic thinking recognises that consumers are also influenced by a range of internal factors or factors that pertain to the individual and external factors or broader societal factors.
5. Internal factors include personality types, ethics and habit. External factors include culture, marketing and government.

6. With respect to personality types some people are 'status seekers' and will demand greater quantities of certain goods as their price rises because of their 'snob value'. Other people lack will power and make choices that they later regret. This is known as present bias or over valuing the present and undervaluing the future. Common examples include overeating, spending too much on credit, not saving enough for retirement, problem gambling and illicit drug taking.
7. With respect to ethics, people's consumption decisions are influenced by ideas of what is right and what is wrong. People who are ethical will make choices that are acceptable or highly regarded by society.
8. In terms of habit, people can be 'creatures of habit' and regularly purchase the same brands of goods and services because it takes very little cognitive effort.
9. Culture also influences people's decisions. Society's shared values, attitudes and beliefs have shifted over time. For example, tobacco consumption is largely frowned upon in modern Australia.
10. Marketing can also influence people's choices. The way options or propositions are presented or framed in advertisements can ultimately influence the choices that people make. Advertising can also be used to cultivate brand loyalty to make consumers less responsive to price increases.
11. Governments can also influence people's consumption decisions through laws, taxes, subsidies and other incentives. For example, governments seek to encourage the consumption of those goods and services that generate positive externalities or confer benefits on third parties or bystanders, such as vaccinations. This can be achieved through the use of subsidies or through direct provision free of charge.
12. Conversely, governments aim to discourage the consumption of those goods and services that generate negative externalities or impose costs on third parties or bystanders, such as second-hand cigarette smoke. This can be achieved through the use of taxes or laws prohibiting consumption.
13. Governments have also drawn on the lessons from Behavioural Economics and have used 'nudges' to subtly coax consumers into making better choices, such as eating healthier foods. Nudges employ framing to accomplish this goal.
14. Behavioural economics incorporates the insights from psychology into economics to enhance its explanatory power.
15. Behavioural economics includes three insights into how people make decisions: bounded rationality, bounded willpower and bounded self-interest.
16. Bounded rationality is the idea that people are satisficers. That is, they make decisions that are good enough because of the availability of information, the complexity of decisions, the brains' cognitive limitations and time constraints.
17. Bounded willpower acknowledges that people have self-control problems in some aspects of their lives and thus can succumb to their urges, appetites and emotions when making consumption decisions.
18. Bounded self-interest is the idea that people care about fairness. That is, even though a deal or proposal might make them better off they will reject it if they perceive it to be unfair.
19. A range of decision-making biases and errors, such as overconfidence, vividness, status quo, anchoring, herd behaviour, present bias and framing, mean that people are incapable of maximising their utility. That is, they are satisficers rather than utility maximisers.
20. Consumers and workers can be influenced by positive and negative incentives. Certain products such as insurance can create 'perverse incentives' because of the problem of moral hazard. This is where the insured party is more likely to act irresponsibly or recklessly, as they know they are insured against any loss.
21. Incentives such as childcare subsidies, lower income taxes and less generous welfare payments can be used to encourage more people to participate in the labour force.
22. Monetary incentives such as pay rises linked to productivity improvements and non-monetary incentives such as the recognition of employees' achievements can be used to boost workplace productivity.
23. Technology has had a major impact on consumer behaviour from the rise of collaborative consumption to online shopping.
24. The traditional economic viewpoint of business behaviour is based on the idea of profit maximisation. That is, businesses seek to maximise their profits by producing those goods and services that consumers value most and by producing them at the lowest possible cost.
25. Businesses, like consumers and workers, respond to positive and negative incentives, such as taxes, production subsidies, tariff reform and wage subsidies.
26. In more recent times, business goals have evolved to include other objectives such as sustainability, community involvement and gender equality. These goals are reflected in the concept of the 'triple

bottom line' or 3BL. That is, the notion that businesses not only have a responsibility to their shareholders to maximise profits but also have wider responsibilities to society as a whole and the environment.

27. Advancements in technology are generally welcomed by businesses as they help to raise a business's productivity, lowering its costs and boosting its profits. It can also improve the effectiveness of its marketing helping to boost total sales.
28. However, technology can be disruptive threatening the viability of traditional business models. A case-in-point is the rise of collaborative consumption or the sharing economy.
29. Price discrimination involves a business charging consumers different prices for the same product. It enables businesses to maximise revenue by imposing a higher price for 'high value' customers (namely those with the ability and preparedness to pay more) and a lower price to 'low value' customers (namely those unable or unwilling to pay a higher price).
30. Examples of price discrimination in action are quite common, and include discount tickets to events offered to pensioners or students.
31. Multibranding is defined as individual companies marketing their products under separate and distinct brand names. There are some common examples, such as the Coca-Cola company producing numerous soft drink brands (including Coke, Fanta and Sprite), Cadbury producing a number of chocolate brands (including Flake, Dairy Milk and Roses) and Kellogg's producing various brands of cereal (including Cornflakes, Special K and Rice Bubbles).
32. The Australian Competition and Consumer Act (2010) is designed to promote competition and eliminate any behaviour that is deemed to be 'anti-competitive' to the detriment of consumers and society more generally. It is enforced by the Australian Competition and Consumer Commission (ACCC).
33. Predatory pricing occurs when a company sets its prices at a sufficiently low level with the purpose of damaging a competitor, or forcing a competitor to withdraw from the market.
34. A cartel is defined as two or more businesses joining forces to maximise profits. It means that they agree not to compete against each other and instead develop joint strategies to manipulate the market at the expense of consumers.