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' 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'. According to this view, consumers are rational, have ordered preferences, make informed decisions and experience diminishing marginal utility.

Rationality

Economists assume that consumers are rational. This basically means that they act in their self-interest to maximise their **utility** or satisfaction. Accordingly, a rational consumer will weigh up the benefits and costs of each choice, and only select those choices where the benefits outweigh the costs. That is, consumers will make decisions that yield the greatest **net benefits.** A related idea is that consumers act as isolated individuals when making their decisions, not influenced by the decisions made by others, such as their peers or the 'herd'. Of course, not every consumer behaves rationally all the time. Still, the assumption of rational behaviour can be very useful in explaining the choices that consumers make.

Ordered preferences

Economists also assume that consumers have **ordered preferences**. Put simply this means that consumers are able to rank their preferences for different goods and services based on a rational assessment of the costs and benefits. Naturally, consumers will purchase first those things that result in the greatest **net benefits**. A related idea is that consumers' preferences are consistent over time. Of course, if the price of a good or service changes (a cost from a consumer's perspective) this will result in consumers reassessing their preferences and changing their market behaviour.

Informed decision making

It is also assumed by traditional economists 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 choice, to rank these choices, and to make decisions that maximise their utility or well-being.

> **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 provides 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

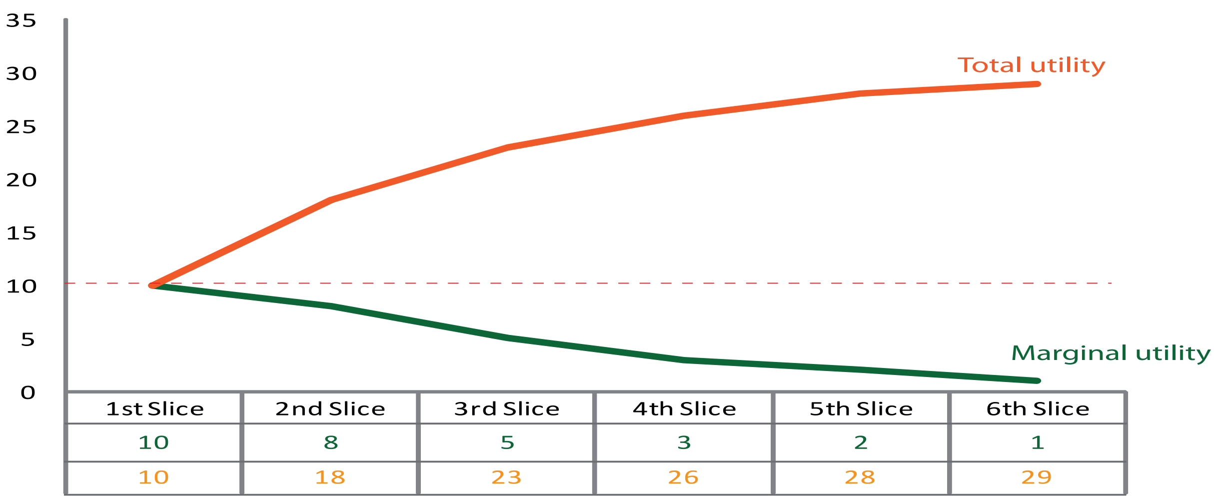


Table 2.1 and Chart 2.1 highlight that the first slice of pizza that is consumed will provide a relatively high level of satisfaction (utility) for the average person. This makes sense because the first slice is the most 'enjoyable' or 'pleasurable'. The second slice will be slightly less enjoyable and 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 each day.

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 assumptions that underpin the traditional economic viewpoint of consumer behaviour.
3. Explain how the law of diminishing marginal utility can affect consumer decisions. Use an example to illustrate your explanation.
4. 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. **With reference to the graph, explain the relationship between marginal utility and total 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. **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 discussed, the traditional view of consumers stems from the assumption that consumers are fully autonomous rational economic agents, 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.

As noted, rational consumers seek to maximise their utility. Importantly, this is influenced by the prices of goods and services and each consumer's specific **budget constraint**; that is, the amount of income they have available to spend. Given that consumers face a budget constraint, an increase in the price of a good or service will result in a decrease in the **purchasing power** of their incomes. This loss of purchasing power will prompt them to purchase a smaller quantity of that good or service. Conversely, when the price of a good or service falls, consumers will experience an increase in their purchasing power prompting them to purchase a larger quantity of that good or service. [This is covered in more detail in Chapter 3.

Other influences on decision making

Consumer behaviour is affected by internal and external influences. Internal influences relate to the individual and include 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.

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.

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 basic 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.

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.

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.

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.

Application Exercise 2b: Decisions, decisions...

Aisha and Jose are thinking about installing solar panels in their home. The cost of the panels, including installation, is $7000 and Aisha estimates that it will save $1500 per year on their electricity bills. She argues that, in roughly five years' time, they can expect to break even; that is, recoup the costs of installing solar panels. This will therefore enable the couple to enjoy big savings on their electricity bills in subsequent years.

Aisha wants to install the solar panels because she observes that the use of solar energy will save them a considerable sum of money in the long term. However, Jose is against the idea because of the large initial cost. In addition, he is loathe to change their current arrangement as it has worked well for them in the past. In the end, they decide not to install the panels.

Questions

1. **Describe Jose's preferred decision.**
2. **Describe Aisha's preferred decision.**
3. **Explain how this case study might demonstrate the decision-making bias known as present bias.**

Review Questions 2.2a

1. Distinguish between internal and external influences on consumer behaviour.
2. Outline what is meant by a budget constraint and explain how it can influence consumer decisions.
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. Explain how overconfidence can contribute to present bias and provide a supporting example.
11. Explain how procrastination can contribute to 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 typically cost more 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.

Habit

An area of interest for economists is the formation of habits and how they affect consumer behaviour. Put simply, a habit is where consumers regularly purchase certain types or brands of goods or services, using little or no cognitive effort to make the purchasing decision. 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, familiarity, wanting to avoid the hassle of changing products, the influence of family and peers, or because of the strategies used by businesses to foster brand loyalty. Habit is closely related to what behavioural economists call **status quo bias** and this will be considered in more detail later.

In Victoria, the **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 (part of 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 with the outlawing of lightweight, single-use plastic bags in Victoria, and the introduction of a small charge for more sturdy plastic shopping bags at supermarkets. In response to these charges, the overwhelming majority of consumers now bring their own reusable shopping bags with them when doing their grocery shopping. In fact, data showed an 80 percent drop in plastic bag usage in just a few months.

Application Exercise 2c: 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, 13.8% of adults aged 18 and over were daily smokers in 2017-18, down from 16.1% in 2011-12 and 23.8% in 1994-95.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. This type of framing is known as **statistical framing**.

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. This type of framing is known as **emotional framing**.

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 sub-optimal or irrational decisions that compromise a consumer's utility.

Application Exercise 2d: 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 build **brand loyalty**. Brand loyalty refers to a situation where a consumer develops positive feelings or a sense of attachment towards a particular brand. This typically results in them making repeat purchases from the same brand (e.g. Apple) and often across different product categories (e.g. laptop, tablet, smartphone). An effective advertising/marketing campaign, perhaps employing clever framing techniques, or the use of celebrity endorsements, can result in strong brand loyalty. Indeed, it can create an impression in the minds of consumers that substitute products are somehow inferior, and therefore not viable alternatives.

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 for a product to a change in the price of the product 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.

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.

Application Exercise 2e: Advertising, Brand Loyalty and Consumer Demand

Imagine that you have been appointed the marketing manager of a boutique company called Blue Ribbon Sports that specialises in the production of sporting equipment and attire. The company is seeking to raise its profile by building brand loyalty. It believes that this will help it to earn greater revenue and profit. Preliminary research indicates that a successful advertising campaign, combined with an effective overall marketing strategy, will enable it to raise the price of its signature sweat top and pants combo without it having a significant negative impact on the total quantity consumers are prepared to buy (demand). To convince management of the financial impact of your proposal, you present the table below to highlight the potential benefits for the company.

Blue Ribbon Sports – sweat top and pants combo: estimated market movements over the next three years

Time period	Price	% change in price from 2019 price	Quantity demanded	% change in quantity demanded from 2019 level	Total revenue (Price x Quantity)	Change in total revenue from 2019
2019	$100	-	100,000	-	$10,000,000	-
2020	$110	10% increase	95,000	5% decrease	$10,450,000	$450,000 increase
2021	$125		90,000			
2022	$150		85,000			

Questions/tasks

1. **Complete the calculations in the table.**
2. **Using the calculations, describe the responsiveness of consumer demand to higher prices over 2019-2022.**
3. **Explain why total revenue is estimated to increase over the relevant period despite the business charging higher prices.**
4. **Explain how developing brand loyalty can benefit Blue Ribbon Sports and other businesses more generally.**
5. **Describe a possible advertising or marketing strategy that might help the company achieve the above results.**

Government

Governments are in a unique position to influence consumer behaviour. Before reading on, complete the following Give One, Get One thinking routine.

How can the government influence consumer behaviour?

My ideas to give	Ideas from my friends

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.]

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

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.

be vaccinated, as it raises the level of immunity among the population (referred to by doctors as 'herd immunity'). 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 January 1 2016, the Federal Government's 'No Jab, No Pay' legislation came into effect. Under this legislation, parents who do not 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. This is because, when making decisions about what to buy and consume, people typically fail to factor in the harmful effects of their consumption on third parties. That is, they only consider the costs to themselves, while ignoring the costs that 'spill over' to others.

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).

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. Since September 2014, the Federal Government has raised the excise tax on tobacco by 12.5% each year, with further annual increases of 12.5% to continue until 2020. The tobacco companies generally pass on any increases in the excise tax to consumers in the form of higher prices, which acts as a negative incentive to consume tobacco. Of course, this is the government's intention. 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.

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, known as **nudging** to influence consumer behaviour. In their ground-breaking book Nudge: Improving decisions about health, wealth and happiness, behavioural economists Richard Thaler and Cass Sunstein define a **nudge** as:

> ***'…any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not.'***

The term **choice architecture** describes the context in which options are presented. This is similar to **framing**, which was explored in the section on marketing. Thaler and Sunstein argue that the context can have a significant influence over the choices that consumers make. A related idea is the **choice architect**; that is, those who are 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 nudge or subtly coax 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 televised 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 increased the likelihood that children would eat those foods. It also made children feel that the foods tasted 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. This is in stark contrast to imposing sanctions such as heavy financial penalties to change people's behaviour, or even removing choice altogether by imposing outright bans on the consumption of certain products. These approaches can be described as **shoves** or **smacks** and are examples of **hard paternalism**.

Application Exercise 2f: Novel Nudges!

Investigate one novel approach to 'nudging' from around the world. For example:

- The piano stairs at Odenplat subway station in Stockholm, Sweden.
- The world's deepest bin, which was set up in a public park in Sweden.
- Fly stickers etched into the urinals at Amsterdam's Schiphol airport in the Netherlands.
- The 3 light system: red, yellow and green for food served at the cafeteria at Massachusetts General Hospital, USA.
- The Dollar-a-Day programme to reduce teenage pregnancies in Greensboro, North Carolina, USA.

Prepare a brief (2-minute) oral report to the class covering the 5 Ws of the nudge.

- Who is the choice architect?
- What is the choice architecture?
- When was it implemented?
- Where was it implemented?
- Why was it implemented and has it been successful? Provide evidence, if possible

Application exercise 2g: Nudge, Shove or Smack?

Examine the scenarios in the following table and shade the relevant box to indicate whether each scenario could be considered a 'nudge' or a 'shove' (or even so punitive as to be considered a 'smack'). Be prepared to justify your answers in a classroom discussion. The first one has been done for you.

Scenario	Nudge?	Shove?	Smack?
1. Placing healthy food at eye level on supermarket shelves.			
2. Increased private health insurance premiums for those who smoke or who are overweight.			
3. A sugar tax imposed on soft drinks.			
4. TV commercials promoting physical activity (e.g. 'Life Be In It').			
5. Quit smoking campaigns.			
6. Government introduces an opt-out organ donation register, where all registered drivers are listed as organ donors unless they opt out.			
7. Your school canteen bans Coke, potato chips and chocolate.			
8. Excise tax on cigarettes.			
9. Ensuring there is an open-access set of stairs next to each elevator in an office building, and posting signs encouraging employees to use the stairs for short trips between adjacent floors.			
10. Low-fat milk being the default option for hot beverages served at McDonald's.			
11. Requiring office staff to enter their pin number at the machine, in order to release jobs from the office printer.			
12. Banning the use of mobile phones while driving.			
13. A school installs a vending machine, locating it in the foyer of the gym, which is a long way from the main part of the school.			
14. Bans on driving on certain days.			
15. Providing free council 'green waste' and organic waste bins for every house, and regular collection of the waste.			
16. Placing labelled recycling bins next to each rubbish bin in a school.			

Application Exercise 2h: Britain's sugar tax

The British Government in 2018 introduced a 'sugar tax' to curb the country's childhood obesity epidemic. The tax applies to high-sugar, fizzy drinks such as Coca-Cola and Pepsi, which are popular among teenagers. The tax applies in two bands (categories) according to the sugar content of drinks. Drinks with a sugar content above 5g per 100 millilitres, such as Dr Pepper, Fanta and Sprite, are taxed at a slightly lower rate compared to those drinks in a second, higher band. The higher band applies to the most sugary drinks –those with more than 8g of sugar per 100 millilitres, such as Cocoa-Cola, Pepsi and Lucozade. Experts noted the tax would add between 18p and 24p per litre to the price of such drinks. Pure fruit juices and flavoured milk are exempt from the tax. The smallest producers of fizzy drinks are also 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. Academic research reported in May 2019 that major producers, Coca Cola and Pepsi, both reported substantial increases in sales of their sugar-free range, and falls in the sales of their full-sugar products. The UK Government reported in November 2018 that the tax had raised over £150m since its introduction in April that year.

Questions

1. **Explain how the sugar tax discourages the consumption of high-sugar fizzy drinks. Refer to prices in your answer.**
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 2i: 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. With reference to habit, explain why deregulation of the utilities industry in Victoria was not as successful as expected.
3. Define culture and provide an example of how it can influence consumer behaviour.
4. Explain what is meant by framing and give an example of how it is used in advertising to generate increased sales.
5. Analyse the relationship between brand loyalty and market power.
6. Evaluate the proposition that 'advertising is worthwhile'.
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 that result in positive externalities.
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**.

Although the traditional economic viewpoint of consumer behaviour has much to recommend it, it does have its limitations. Through extensive research, experimentation and observation, behavioural economists have sought to address these limitations. This ultimately led to the development of a new theory of consumer behaviour based on three key insights.

The behavioural economists, Richard Thaler and Sendhil Mullainathan neatly summed up these insights as follows:

> ***'Bounded rationality reflects the limited cognitive abilities that constrain human problem-solving. Bounded willpower captures the fact that people sometimes make choices that are not in their long-run interest. Bounded self-interest incorporates the comforting fact that humans are often willing to sacrifice their own interests to help others.'***

The next section explores each of these insights in more detail.

Bounded rationality

Herbert Simon, a pioneer of behavioural economics argued that the notion of Homo economicus, which rests on the assumption that consumers always make fully informed, rational decisions designed to maximise their utility, is a one-dimensional view of consumer behaviour.

He proposed an alternative view of how consumers make decisions, based on **bounded rationality.** This is the idea that consumers' ability to make consistently 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 and energy thinking about decisions, and frugal in the sense that they minimise the costs of collecting and processing the information needed to make decisions.

Therefore, according to behavioural economists, most consumers are **satisficers** rather than utility maximisers. That is, they simply 'muddle along' making decisions that are 'good enough'. Although these heuristics have their advantages and can serve consumers well, they can also lead consumers astray resulting in decision-making errors and biases. Committing these decision-making errors, or being prone to these biases, obviously affects the ability of consumers to make consistently rational decisions.

Study tip

Heuristics are 'mental shortcuts' or 'rules of thumb' that consumers employ when making decisions. Common examples of heuristics are following 'the herd' and sticking with the 'status quo'. An over reliance on heuristics can result in decision-making errors and biases. Interestingly, heuristics are yet another example of a trade-off in Economics. Although they can make the decision-making process easier they are more likely to yield poor choices.

Study tip

Why do people need short cuts? 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.

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

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 outside the range they have given. 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 distance between the Earth and moon is 384,000 km!)

With respect to consumer behaviour, the **overconfidence bias** can result in people 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 the next 'crash' to avoid any losses from their investments.

The **illusion of control bias** - or the belief that consumers can control or at least influence future outcomes when they cannot - contributes to the overconfidence bias. Consider the following experiment. 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 bad 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.

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 sub-optimal 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.

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 smart phone. They have a particular brand in mind but want to know whether it is any good before making a decision. So they read a Consumer Report based on a survey of 1000 people who own that brand of smartphone. Later, they run into a friend who happens to have that brand, who tells them that it is no good. 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' or are 'vivid', consumers can be tempted to place too much importance on them and downplay a host of other relevant information.

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.]

Application Exercise 2j: 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. Note: 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			

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 'psychological trick' can make the 25% discount seem far more attractive, inducing consumers to spend.

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.

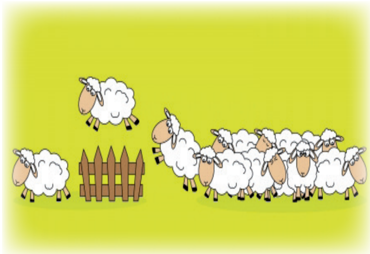
Anchoring example

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 as the share market and property market , herd behaviour is a factor that accounts for the **boom-bust cycle**. Herd behaviour does not conform to the ideal of deliberative, rational decision making. People can resort to herding because they lack access to the necessary information to make the most optimal 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. It was also mentioned in the section on government, where it was shown that nudges often employ framing techniques. From these sections you will recall that the way options or proposals are framed can affect the choices that people make. For example, if the government or the medical community wanted more people to 'donate' a kidney, the outcome is likely to be affected by the way it is framed. For instance, it could be framed as: Is it morally acceptable to pay people to 'donate' a kidney? Alternatively, it could be re-framed as: Do you know that lives could be saved by paying people to 'donate' a kidney? The latter frame is likely to result in more people being prepared to sell a kidney or at least approving of the idea of others selling their kidney. The main point is that framing can improve the decision-making process, but it can also lead to sub-optimal decisions.

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.

Bounded willpower

The notable 18th century Scottish philosopher David Hume asserted that 'reason is a slave to the passions'. Centuries later, behavioural economists drew upon on this insight when developing the idea of bounded willpower. Put simply, this is the view 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 sub-optimal 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.

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 do not 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'.

Application Exercise 2k: Anchoring and the iPhone X

The tech giant and multi-national corporation Apple Inc. competes in a number of markets from smartphones to tablets and laptops. It is a public company listed on the NYSE (New York Stock Exchange) with a share price of $USD 204.41 and a market capitalisation of $USD 940.51 billion (as at July 3, 2019).

The market for smartphones, in which Apple is a major player along with the likes of Samsung, Huawei and Google, can best be described as an oligopoly. In this type of market structure a few, very large businesses each possess a significant market share (percentage of total sales in the market) and competition is usually based on non-price factors, such the product's appearance and features and the quality of customer support. Indeed, the combination of product differentiation and relatively few competitors bestows a degree of market power for the oligopolists, giving each firm an ability to set (higher) prices without fearing a meaningful loss of customers or revenue. For this reason, oligopolists are said to be price makers. The presence of only a few, large businesses can be attributed to high barriers to entry, which make it difficult for new businesses to enter the market in competition against the incumbents. In the case of smartphones, the prohibitively large sums of money that must be invested into research and development (R&D) to constantly develop and improve the technology, can be a significant barrier to entry.

Apple recently launched its much-vaunted new smartphone, the iPhone X with great fanfare. As a moonwalking Cuba Gooding Jr declares in a recent Optus TV commercial for the iPhone X "we're going next level baby" and with a price tag of $AUD 1829 for the 256GB version, this slogan seems justified. After all, consumers are being asked to pay a premium of $AUD 500 above the comparable model it replaces, the iPhone 8.

However, some consumers are prepared to stump up $AUD 1829 to get the iPhone X. These people typically have a strong emotional connection to the brand, which Apple has carefully cultivated and curated since its inception. Some commentators refer to the "cult of Jobs", referring to Apple's late founder and CEO, Steve Jobs. It could be said that Apple's products have a cult-like following: its numerous devotees are a testament to this. They also have a strong need to possess the latest technology. Further, these people aren't particularly responsive to price. The term low price elasticity of demand (PED) is used by economists to describe this reality where an increase in the price of a product leads to a less-than-proportional reduction in the quantity consumers are prepared to purchase. These 'devotees' can be found camping outside an Apple store the night prior to the launch date to be the first to get their hands on this much-coveted product.

Those consumers that are prepared to pay $AUD 1829 for an iPhone X can be described as high-value consumers because of their willingness to pay a relatively high price. Apple is well aware of this and uses its market power to set the price high to extract as much of the 'consumer surplus' as possible in order to maximise revenue. The consumer surplus refers to the difference between the amount that a consumer is willing and able to pay for a product and the amount that they actually pay. Over time, Apple will lower the price of the iPhone X to generate sales from low-value consumers, or more specifically, consumers who are unable or unwilling to pay a relatively high price.

The steep price tag of AUD $1829 also serves another purpose: anchoring. According to Harvard University's Program on Negotiation "***…. Anchoring is a cognitive bias that describes the common human tendency to rely too heavily on the first piece of information offered (the "anchor") when making decisions. During decision making, anchoring occurs when individuals use an initial piece of information to make subsequent judgments. Once an anchor is set, other judgments are made by adjusting away from that anchor, and there is a bias toward interpreting other information around the anchor."*** (https://www.pon.harvard.edu/tag/anchoring-effect/).

The price tag of $AUD 1829 for the iPhone X effectively acts as an "anchor" for the entire iPhone product line. Although many consumers are not prepared to pay this large sum of money for an iPhone X, the hefty price tag serves to change the way they think about Apple's other product offerings. That is, it essentially makes the prices of other iPhone models become more attractive, such as the 256GB iPhone 8 at $AUD 1329 or the 128GB iPhone 7 at $AUD 999. So, anchoring can be used to generate more sales of other products in the iPhone stable, while at the same time enabling Apple to extract as much of the consumer surplus as possible from those high-value consumers who are prepared to pay the price attached to an iPhone X.

Anchoring can be observed in many other contexts too. Take for example hardware retailers such as Bunnings that place the ludicrously expensive, "bells and whistles", $AUD 5,000 barbeques at the entrance to their stores. Very few consumers want to part with that sort of money. Nonetheless, it serves the purpose of making the somewhat cheaper barbeques located further back in the store more attractive and, in doing so, increases the likelihood of consumers making a purchase.

Using anchors to make snap decisions is an example of what the behavioural economists and winners of the Nobel Prize in Economics, Daniel Kahneman and Amos Tversky called *thinking fast*. This is where very little mental effort is expended when making a decision. It is the opposite of *thinking slow*, which describes the careful consideration that typically goes into making big decisions, such as which house to buy or whether to make a marriage proposal to the person you have been dating.

Thinking fast is also aided by what Kahneman and Tversky dubbed heuristics or mental shortcuts. These rules of thumb are essentially a substitute to thinking hard about a decision. People resort to rules of thumb because they are generally busy, lead complicated lives and are time poor, making it impossible to analyse the minutiae of every decision. Thus, rules of thumb can be a convenient and useful tool in the decision-making process. Using the price of the iPhone X or a $AUD 5,000 barbeque as an anchor to make a judgement about whether other iPhone models or barbeques are good value or not is an example of a heuristic. So, anchoring is an example of a cognitive bias and a heuristic (mental shortcut).

Although heuristics such as the use of anchors can be good thing, they can also lead to irrational or anomalous choices. This occurs when consumers' judgements are unduly affected by an arbitrary starting value or anchor. The end result can be decisions that fail to maximise consumer satisfaction or utility at the lowest possible cost.

Businesses are aware of such cognitive biases that affect the decisions that consumers make and seek to exploit this chink in the psychology of consumers. This is why practices such as anchoring are so common. These practices are sometimes called "supermarket psychology". The lesson for consumers is to be more attuned to these cognitive biases and to perhaps take the time to think more slowly.

Questions [Note that for some of these questions you will need to refer to the glossary and Chapter 4 on market structures.]

1. **Describe the characteristics of an oligopoly.**
2. **Define market power and outline how it is connected to the characteristics of an oligopoly.**
3. **Explain what is meant by a customer having a 'low price elasticity of demand'.**
4. **Describe why some consumers are prepared to pay $AUD 1829 for an iPhone X.**
5. **Define consumer surplus.**
6. **Distinguish between a high-value and a low-value consumer and outline how businesses such as Apple use this concept when making pricing decisions.**
7. **Explain anchoring and how it is used by businesses such as Apple to generate sales.**
8. **Distinguish between thinking fast and thinking slow.**
9. **Explain why consumers resort to heuristics.**
10. **"Although anchors can be useful decision-making tools, consumers must be alert to them". Analyse this statement**

Application Exercise 2l: Decision-making errors & biases

Below are some examples of the decision-making errors & biases that limit consumers' ability to make consistently rational decisions, but the explanations and the names of the errors/biases have been mixed up. Match the correct explanation to the decision-making error/bias.

Decision-making error/bias	Explanation
Anchoring effect	Consumers often overestimate their ability to make good decisions and do not acknowledge the limits of their knowledge and understanding. For example, people mistakenly assume that their chances of winning Tattslotto are greater if they choose the numbers themselves than if a computer randomly generates the numbers in a QuickPick.
Overconfidence bias	Consumers place too much weight on a small number of observations that 'stand out'. For example, we may undertake significant research into the performance of different washing machines (using sources such as Choice or other consumer information websites) before we decide on a particular model to purchase, but we put more weight on the negative feedback about that model from our friend than on the significant independently-researched evidence on the model's performance.
Herd behaviour	Consumers tend to stick to a particular choice even though that choice is no longer in their self-interest. For example, all new mobile phones come with default settings, and research shows that many people stick with the default settings, even if those settings do not actually suit the customer.
Vividness	Consumers' judgements are affected by some arbitrary starting value or point of reference. For example, when choosing to buy something very expensive (such as a car or house), consumers are much less fussy about spending money on the optional extras (e.g. marble kitchen benches) than if they were being asked to spend that money on the extras without the expensive 'major purchase' making the 'additional' purchase look relatively cheap.
Framing bias	When confronted by decisions where the outcomes are highly unpredictable, people often follow the crowd, or the 'general consensus' because it feels safer. For example, when choosing somewhere to eat in an area with which the customer is unfamiliar, they may choose the restaurant that looks the most popular or crowded.
Status quo bias	How options or choices are presented can influence consumer decision-making. For example, if a treatment is stated as having a 90 per cent success rate it is likely to be more palatable than if the same outcome is framed as having a 10 per cent failure rate. In fact, they are the same outcome, but just presented differently.

Application Exercise 2m: Your decision-making errors & biases

Complete the table by providing an example of how each of the decision-making errors/biases could affect or has affected a decision you have made. In answering, consider how each decision-making error/bias could lead you to make a less-than-100 per-cent-rational choice in a particular context. It does not have to be a real example, but you should attempt to make it realistic. The first one has been done for you.

Factor	Example
Overconfidence bias	You are overconfident about your ability to understand and write up an Economics research task. Consequently, you underestimate how long it will take to complete it, leaving it too late to begin the task. The result is that your task is handed in late, and you lose marks.
Vividness	
Status quo bias	
Anchoring effect	
Herd behaviour	
Framing bias	

Bounded self-interest

Bounded self-interest is the idea that consumers care about fairness and are not 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 2n: 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 or '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 purely driven by the objective of maximising their personal benefit.

Application Exercise 2n: 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 key insights of behavioural economics.
3. Explain why consumers are likely to exhibit bounded rationality.
4. Contrast 'satisficing' behaviour with 'utility maximising' behaviour.
5. Explain what is meant by the overconfidence bias and provide an example of how it can result in sub-optimal decisions.
6. With reference to an example, explain how the use of a 'rule of thumb' can contribute to the overconfidence bias.
7. Explain the connection between the 'illusion of control' bias and the 'overconfidence' bias.
8. With reference to an example, explain how a 'vivid' account can affect the ability of a consumer to make rational decisions.

9. Using an example from your personal experience, explain the status quo bias.
10. Explain the anchoring effect and provide an example of how it can influence consumer decisions.
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 subtle 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 are 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 2o: 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.

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.

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 government is using **incentives** to tackle this challenge. For example, in recent federal budgets the government has included various adjustments to childcare subsidies and rebates. These measures are 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.

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.

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.

Additionally, lowering the marginal rates of personal income tax on the middle- and upper-income brackets, as announced in the 2018-19 and 2019-20 Commonwealth Government Budgets, 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) results in more goods and services (the output) being produced. 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.

Application Exercise 2p: Child care and incentives

In Economics, an incentive is anything that motivates an economic agent (e.g. a consumer or a business) to behave in a particular way. Incentives can be extrinsic or intrinsic. An extrinsic incentive is external to an economic agent and includes things such as cash rewards, bonuses, profits and fines. It also encompasses non-monetary incentives, such as peer recognition or disapproval, social status, power or even the threat of incarceration. On the other hand, intrinsic incentives are internal to the economic agent. For example, getting satisfaction from the work one does or the "warm inner glow" from making a positive difference to society, perhaps through volunteering or participating in civic life.

As Levitt and Dubner, the co-authors of the popular Economics book Freakonomics assert "incentives are the cornerstone of modern life". Indeed, understanding them is the key to solving just about any riddle, from match fixing to online dating to violent crime. Economists have great faith in incentives. They believe that properly designed incentive schemes can fix just about any problem, economic or otherwise. At a simple level, price discounting can be an effective incentive for consumers that ultimately helps a business to clear excess (surplus) stock. Similarly, offering complimentary eye tests can incentivise individuals to undergo important testing that has the potential to identify the risk of developing diabetes and conditions such as hypertension. Such information can then be used by the patient in consultation with their doctor to make timely lifestyle changes.

However, seemingly well-designed incentives can sometimes go awry. A case-in-point is the incentive scheme used in childcare centres in Israel. In the coastal city of Haifa, child care centres close at 4.00 pm. They essentially rely on the goodwill of parents to pick their children up on time. More often than not, parents collected their children on time and rarely, if ever, came after 4.30 pm. Parents were rarely late because it meant relying on the generosity of one childcare worker, who would have to stay back to look after the children of latecomers. Being late meant having to face a potentially irate childcare worker and possibly having to make a grovelling apology for the inconvenience caused.

These observations prompted a pair of behavioural economists, John List and Uri Gneezy, to conduct an experiment. What would happen if a financial disincentive, such as a fine, was introduced to discourage parents from picking up their children late? The results were unexpected. The introduction of the financial penalty actually caused parents to show up late. In fact, parents stopped showing up on time entirely.

The experiment involved 10 childcare centres across Haifa. In six of these centres a small fine of $3 per child was introduced for every time a parent showed up more than 10 minutes late. These fines would then be added to parent's monthly childcare bill. In these childcare centres, parents immediately started showing up late, with tardiness eventually settling at about twice the pre-fine level. In other words, the introduction of the fine caused twice as many parents to show up late. Interestingly, tardiness remained unchanged in the four childcare centres that did not introduce fines!

This experiment called into question the so-called 'power' of financial or monetary incentives to bring about the desired change in human behaviour. In the case of childcare centres, non-financial incentives such as avoiding the guilt of inconveniencing childcare workers were far more effective. The introduction of the fine simply meant that parents could assuage their guilt (i.e. they could turn up late 'with a clear conscience'). The great economist, Adam Smith, described 'conscience' as "a permanent partner in an inaudible conversation, who acted as a check and scrutineer". So, in cases like these, it is clear that the power of financial or monetary incentives can be undermined by the role that conscience plays in decision making. Undesirable patterns of behaviour that are ordinarily controlled, to some extent, by the operation of a person's conscience are perversely encouraged by financial incentives designed to discourage this behaviour (e.g. the simple payment of a fine).

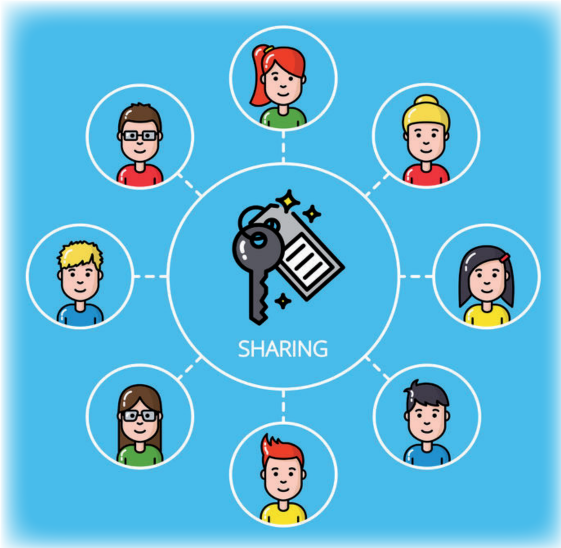
In the completely unrelated example of car safety, incentives also yielded unexpected results. The introduction of laws mandating the wearing of seat belts in the United States led to drivers driving less safely, a phenomenon known as the 'Peltzman effect'. The heightened sense of security engendered by a seat belt unexpectedly led to more risk taking and reckless driving on US roads.

Questions

1. **Define incentives.**
2. **Distinguish between extrinsic and intrinsic incentives and provide examples.**
3. **With reference to the experiment at childcare centres in Haifa, analyse why the introduction of a fine for tardiness failed to have the desired effect. In your answer, make reference to the role of a person's 'conscience'.**
4. **Explain why well-meaning laws such as the mandatory wearing of seat belts resulted in perverse outcomes.**

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 Go Get. Their role is to match up people with assets to rent with those people looking to rent assets, for a fee. Advocates 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 are 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 2q: 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**
- **Go Get**
- **Snapgoods**
- **DogVacay**
- **Taskrabbit**
- **Liquid**
- **Lending Club**
- **Airtasker**
- **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 essentially claimed 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, and which also happen to be the most profitable for businesses to produce.

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 when new information becomes available businesses will naturally respond by reallocating resources to the production of those goods and services being demanded.

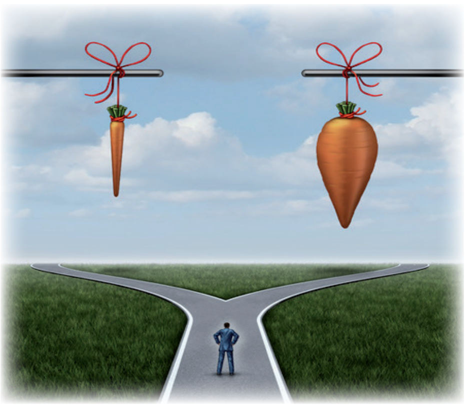
Study tip

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.

Apart from allocating resources in accordance with consumers' wishes, businesses also seek to improve their productivity 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, 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 are therefore used by farmers 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 food security and the Australian economy more generally.

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 at 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 imported cars compared to locally-produced vehicles.

The removal of **tariffs** (taxes on imports) is also an example of how the government can use negative 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 CO2 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 CO2 emissions over time in order to lower their production costs and remain competitive. Furthermore, given that these additional costs were typically 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, the carbon tax aimed to lower the level of CO2 emissions.

The government also pledged a proportion of the revenue generated from the carbon tax to support the development of green sources of energy. This financial support (a production subsidy) strengthens the business case for 'green energy' by lowering the costs of production and incentivising large-scale investment in renewables such as wind and solar. Further, by increasing the supply of 'green energy' this helps to drive down its cost and ultimately reduce 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 aimed 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 provided internship placements of between four and 12 weeks would get an upfront payment of $10,000. In Stage 3 of the program (the 'hire' stage), businesses that offered interns ongoing jobs, would receive a wage subsidy of $6,500 to $10,000 over six months. These incentives were expected to create 120,000 employment opportunities for young people by 2021-22, and by the end of 2018, slightly more than 61,079 young people had participated in the program, with 39,786 of them (i.e. 65%) obtaining employment. The use of the subsidies has therefore contributed to approximately 40,000 young people moving from low transfer incomes (e.g. the Newstart Allowance) to relatively higher factor incomes (e.g. wages and salaries).

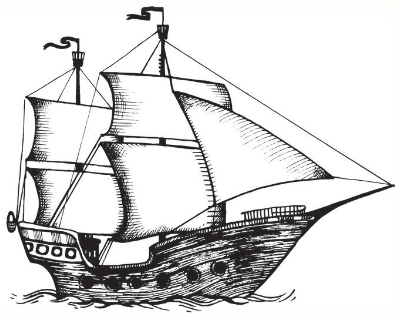
In the section on consumers and incentives, the issue of moral hazard was introduced, where products such as insurance can create 'perverse incentives'. Moral hazard can also create 'perverse incentives' for businesses. For example, during the Global Financial Crisis there were rising concerns about 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

Application Exercise 2r: The Second Fleet and incentives

In 1790 the Second Fleet set sail from Portsmouth, England. However, unlike the First Fleet, this was a commercial operation as the British Government 'outsourced' the transportation of nearly 1000 convicts to shipping contractors Camden, Calvert & King, for a flat fee of 6 pennies for each convict that boarded their vessels for the fledging colony of New South Wales. Accordingly, they crammed their 'human cargo' onto the ships the Surprize, Neptune and Scarborough for the journey.



The five-month voyage around the Cape of Good Hope and across the vast Indian Ocean was notoriously harsh for the convicts. This was further compounded by decisions taken by the management at Camden, Calvert & King to keep costs down. The first of which was to recruit the crew from seedy dock-side taverns.

This crew of hard-drinking illiterates, were brutal in their treatment of the convicts, frequently administering vicious floggings with the cat-o'-nine-tails. The convicts also received starvation rations, so surplus food could be sold on arrival at Sydney Cove. They were also kept in squalid conditions below deck and in leg-irons for long periods of time. Further, scurvy, a disease caused by a lack of Vitamin C, ran rampant. Its symptoms included bleeding gums, loosening of teeth, the opening of previously healed wounds and general malaise. By the time the ships berthed at Sydney Cove the convicts were covered in lice, and about one-third of the convicts who had departed England had perished. Many of the survivors of what came to be known as the 'Death Fleet' were left in a terrible state, lean and emaciated, barely able to move and speak. An eye witness, the Reverend Johnson, wrote: "the misery I saw amongst them is indescribable…their heads, bodies, clothes, blankets, were all full of lice. They were wretched, naked, filthy, dirty, lousy, and many of them utterly unable to stand, to creep, or even to stir hand or foot." (Wikipedia, Second Fleet).

When news reached England of the calamity there was outrage. This prompted the British Government to change the payment mechanism for the transportation of the Third Fleet of convicts. Shipping contractors would now be paid on results, with approximately 20 per cent of the payment depending on the convict arriving in good health. Needless to say, the outcomes were vastly better. There was less overcrowding and far better treatment of the convicts. These improvements in conditions was ultimately reflected in a sharp drop in the death rate from 1 in 3 convicts to 1 in 11 convicts. The change to incentives – a theme central to the study of Economics - led to a change in the way Camden, Calvert & King treated their 'human cargo'.

The improvements between the Second Fleet and Third Fleet also highlights another major theme in Economics: trade-offs. This is where an economic agent chooses a course of action and, in the process, sacrifices something of value. For example, when Camden, Calvert & King were paid by the number of convicts that set sail from England they chose to pack as many convicts as they could aboard the ships. The trade-off was a higher death rate, much to the dismay of the British Government and public. However, once they had a strong financial incentive to get their 'human cargo' to Sydney Cove alive and in a good state of health they opted for a different trade-off: fewer convicts per ship, more rations per convict and better treatment during the voyage.

Questions

1. Compare the outcome of the voyage of the Second Fleet with the Third Fleet.
2. Describe some of the decisions Camden, Calvert & King made to maximise their profits when transporting convicts as part of the Second Fleet.
3. Compare the incentive schemes used for the transportation of convicts for the Second and Third Fleets.
4. Explain why the incentive scheme used for the Third Fleet resulted in vastly improved outcomes.
5. Define trade-offs.
6. Compare how the trade-offs changed when the incentive scheme used for the transportation of convicts changed.
7. "At its root, economics is the study of incentives". Discuss.

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 used 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 its '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 world, businesses must not only serve their shareholders' interests but be 'good corporate citizens' too. In other words, businesses must act in a 'socially responsible' manner. This is because society's expectations have changed and businesses are now being held to higher standards of behaviour. In fact, recent research shows that six in ten Australians believe that businesses have a responsibility to prevent environmental damage. Indeed, 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. Environmental groups, such as Greenpeace, are quick to bring bad corporate behaviour to the attention of 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. To this end, 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 2s: 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 2t: Social Responsibility

Read the edited article by Ann Arnold ***Australian consumers are becoming ethically-minded and businesses are taking note*** and answer the questions that follow.

Charles Murgha is 36 and had never had a job until he got a carpentry apprenticeship a few years ago. Soon he'll be a qualified tradesman, and will have helped build 29 homes in his Indigenous community of Yarrabah, not far from Cairns.

The town has a 45 per cent unemployment rate. Charles says boys stop by to watch him work, and ask him how they can also get a job building houses when they leave school. Asked if that makes him proud, Charles eventually says, quietly: "Gives me goosebumps." Charles was assisted in his apprenticeship not by government agencies but by Cairns-based construction and property development company Mihaven. The company, which doubles as a registered training provider, is one of a growing number of businesses — here in Australia, but also globally — seeking to show ethically-minded consumers that they're driven by more than profits.

Founded five years ago and run by former town planner Sarah Mort and her builder husband James, the company focuses on training and employment for Indigenous and other disadvantaged job-seekers. Twenty-five per cent of Mihaven's workforce is Indigenous, and Ms Mort says its training staff go 'the extra mile' to help trainees lock in work experience and job placements.

The need for a social purpose is increasingly expected by consumers, who are disaffected with big business in particular. *"The public expectations of your company have never been greater. Society is demanding that companies, both public and private, serve a social purpose,"* Larry Fink, the chairman of giant asset management company BlackRock, wrote in his annual letter to CEOs. Companies have little choice but to respond, or risk a community backlash that can threaten the bottom line or the viability of a brand. *"Business is experiencing increased numbers of popular protests, consumer boycotts, legal suits, various public shaming campaigns,"* says Associate Professor Bronwen Dalton, from the UTS Business School.

Ken Henry, the former chairman of National Australia Bank and a former Treasury secretary, says it's time for businesses to be responsible — and accountable. *"I think business leaders right across Australia should be taking ownership of all of the consequences of their business's activities. All of the consequences,"* he said in February.

Last year Mihaven went through a fairly exhaustive box-ticking exercise to become accredited as a B Corp, or Benefit Corporation — the only construction company in Australia to have this distinction. B Corp is a movement that began in the United States, as a means of setting standards for companies to prove they are making a positive difference, both internally with staff and suppliers, and externally with society at large. Mihaven has multiple projects running, including a new student accommodation complex in Cairns, which will house mature age healthcare students from remote Cape York communities, among others.

It has worked with several remote communities on the Cape, with a model of training locals to build their own houses. The idea was to counter the common pattern of prebuilt houses being delivered into a community where there's little or no employment. The end goal is to hand over to the communities themselves to manage their own construction. One of Mihaven's major backers is Roger Allen, who founded the Computer Power Group, which became a global, billion-dollar IT business. These days he's a venture capitalist and social impact investor, with a passion for Indigenous advancement.

"One of the real problems in Indigenous communities is there's so much 'top down'," he says. *"The government tells you if you want a benefit you've got to work for the dole, you've got to do this, you've got to do that. But the only way forward is for communities themselves to really want to do something and be passionate, and then we can support and help them."*

Source: https://www.abc.net.au/news/2018-04-06/more-businesses-being-socially-responsible-to-attract-consumers/9622668"

Questions

1. **Describe why Mihaven is considered to be a socially responsible business.**
2. **Explain why businesses have little choice and cannot afford to act in a socially irresponsible manner.**
3. **Explain what is meant by 'B Corp' and what led to Mihaven being accredited as a 'B Corp'.**

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 2019, women comprised 47% of all employed people 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 61.1%, compared to the male participation rate of 71.3%. This means that, of all the women aged 15 years and over (and therefore of working age), 61.1% of them are either working or actively looking for work, compared to 71.1% 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 (August 2019), show that the national gender pay gap is 14% (having hovered between 15% and 19% for the last two decades.) This is despite the fact that women complete higher education at a greater rate than men.

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

In 2017-18, women held 13.7% of chair positions, 25.8% of directorships, as well as representing 17% of CEOs and 30.5% of key management personnel in the organisations that were required to report annually to WGEA (all non-public sector organisations with 100 employees or more). More than one third (35.2%) of those organisations had no key management personnel who were women. Women made up only 29.7% of the directors on ASX 200 company boards, and 4of the ASX 200 companies (Australia's largest 200 ASX listed companies) had no women at all on their board. The AICD has a target of 30% of all ASX 200 directors being women by 2018, and this target has clearly not been met. Nevertheless, the overall trend is favourable, as only 8% of all directors were women ten years ago in 2009.

Women on average accumulate less retirement and superannuation savings

Average superannuation balances for women at retirement age 42% lower than those of men at the same age. 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 shared responsibilities for child rearing

Only 41.8% 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 2018 report:

> ***Gender parity is fundamental to whether and how economies and societies thrive. Ensuring full development and appropriate deployment of half of the world's talent pool has a vast bearing on the growth, competitiveness and future-readiness of economies and businesses worldwide.***

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 improvements 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 strategies 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 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 processes. 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. These details have no bearing on the fitness of the applicant for the role, but research has shown it can influence recruiters' responses to the applications. 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 2018, 45.4 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.

Application Exercise 2u: 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 "Busting the Merit Myth": 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**
- **Listen to Annabel Crabb talking about her Quarterly Essay on 'Men at work' and why men don't take parental leave, Conversations, www.abc.net.au**

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'.

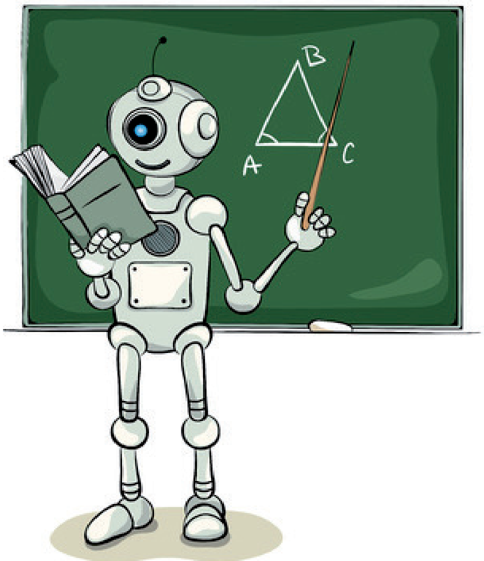
Innovation is generally driven by businesses seeking to maximise profits. There are numerous examples of innovations, such as: Cochlear's bionic ear, Ikea's flat packed furniture, Rio Tinto's driverless trucks, Pozible's crowd funding platform and Domino's plans to use drone technology to deliver pizzas. 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.

The research component involves businesses spending time, money and resources to investigate and discover:

- new or better products
- improved (cost-effective) production methods
- more efficient ways of distributing products to markets

The development component involves going one step further by building on the research that has been undertaken. This part of the innovation process entails developing the research into something of value to the business, enabling the business to earn a profit from its efforts.

Innovation can be a risky venture, with businesses allocating large amounts of money, time and effort into 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, which allows businesses to recoup R&D costs and earn a sizeable profit before the patent expires. When the patent eventually expires, other businesses are permitted to copy the innovation, which enables the full society-wide benefits to be realised. Patent protection is particularly relevant in the pharmaceutical industry, providing the catalyst for R&D into new medicines that ultimately help to improve health outcomes for society.



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 claim as an 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 2017-18, Australian businesses spent $17,438 million 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. Distinguish between the terms 'research' and 'development.'
10. Provide an example of a product innovation and an example of an innovation in service delivery.
11. Explain what is meant by 'creative destruction' and its role in innovation.
12. Explain why governments support innovation.
13. 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 have been greatly affected by technology in recent years. Businesses seek to incorporate the latest advancements in technology into the production process for numerous reasons, including the desire to raise productivity and drive down average costs of production, as well as the imperative to increase **market share** by better meeting the needs of customers.

In the first instance, technological innovations that reduce costs of production enable businesses 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 increase 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. In this case, businesses compare the price of technology (a capital resource) with the price of 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 2u: New Technology (driverless trucks)- relating to the use of technology 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 no longer need to maintain as many branches. Supermarkets have also introduced self- service checkouts to reduce the number of checkout operators required.

In the case of using technology to enable businesses to better meet the needs of their customers, an example is the 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 $29.32 billion over the most recent 12 month period, which compares to $16.6 billion over the 12 months to January 2015. It is now approximately 9% of traditional 'bricks and mortar' retail sector, compared to 6.9% in 2015. Domestic retailers account for about three-quarters of online retail sales, while international online retail sales account for the other quarter.

In addition to these positive effects of technology, technological advances have also resulted in the demise of some businesses. For example, 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, Spotify and Google Play has led to the closure of stand-alone music retailers such as Sanity and HMV. Even stores such as JB Hi-Fi 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 2v: 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, northwest 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 and 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 has already invested in approximately $1 billion in autonomous trains and continuing research and development is occurring to develop technology that is suited to repetitive tasks or those involving high risk to the safety of employees. All of Rio's autonomous equipment is monitored and controlled from its control centre close to the Perth airport, which is approximately 1500 kilometres from the mine. 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. This includes the need for data scientists and engineers in mechatronics, automation and artificial intelligence. Rio executive, Steve McIntosh, notes that the changing demands on the Rio workforce has necessitated reskilling and training programs.

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."

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 miners. "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."

Other mining giants, BHP and Fortescue Metals have also invested heavily in automation. Fortescue has a fleet of 112 driverless trucks that has delivered a 30 per cent improvement in productivity, according to Fortescue chief, Elizabeth Gaines. She also claims that the company is on track to become the first iron ore mine in the world to have a fully autonomous haulage fleet by 2020. At BHP's Pilbara mine, there are 50 autonomous trucks, and over the past five years, BHP has increased its investment in technology innovation five-fold."

Questions

1. **Outline examples of the new technology that have been implemented and planned at Australian iron ore mines.**
2. **Explain what has motivated Australian mining companies to develop new technology.**
3. **Outline some advantages of this new technology for the company and the economy more generally.**
4. **Outline some disadvantages of this new technology for the company and the economy more generally.**
5. **Describe how the companies deal with some jobs (e.g. truck drivers) becoming redundant.**
6. **Explain how new technology can create jobs on Australian mines.**

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 iPhone X, 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, some of which have also been considered above::

- 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. Examples of legal strategies include **price discrimination** and **multiple branding**, while examples of illegal (anti-competitive) strategies include **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). The strategy of differentiating between high and low value customers was outlined previously in Application Exercise 2k on Apple's marketing of its iPhone X.

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.

Price discrimination 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.

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 original price. [See Application Exercise 2w on cinema tickets]. 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 this because 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 signalling 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.

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 multibranding? 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 labelled 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 labelled or 'no name' products are identical to their branded counterpart, there are many examples of branded products that are identical to plain brand labelled 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).

Application Exercise 2w: 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'.**

Anti-competitive strategies: Predatory pricing and cartel conduct

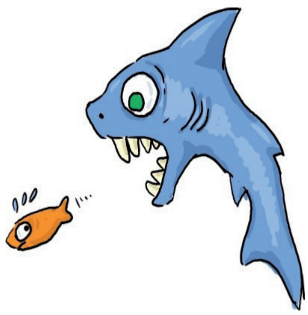
The government is quite active in the economy to minimise the existence of **anti-competitive behaviour** by businesses. The government has established competition laws that are set out in the Australian 'Competition and Consumer Act (2010)', formerly known as the 'Trade Practices Act (1974)'. The current 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 their 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 2015-16. 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 2x which examines the 2016 changes to s46 which will make it easier for the ACCC to prosecute larger businesses engaging in predatory pricing.]

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 (covered in Chapter 3). 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. The ACCC initiated legal proceedings in 2014, 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 and was immediately appealed by the ACCC. Despite forthright arguments by the ACCC, and the imposition of a pecuniary (monetary) penalty of $120,000 on the managing director of 'Farm Pride' (for an attempt to induce a cartel arrangement between competing egg producers) the appeal was dismissed by the Full Federal Court in late 2017.

Application Exercise 2x: s.46 of the Competition and Consumer Act 2010

In its 'Guidelines on misuse of market power', the ACCC highlights that markets function best when firms strive to develop and offer products that are more attractive to customers than the products offered by their rivals. A firm with substantial market power may be able to damage this competitive process by preventing or deterring rivals, or potential rivals, from competing on their merits. That is, a firm with substantial market power may maintain or advance its position by restricting or undermining its rivals' ability to compete, rather than by offering a more attractive product. Sometimes this is referred to as 'exclusionary conduct' and such conduct undermines the effective operation of markets and the economy. Accordingly, ACCC plays an active role in discouraging anti-competitive behaviour, particularly the misuse or abuse of market power as set out in Section 46 of the Competition and Consumer Act 2010 (CCA).

Section 46 of the CCA was revised in late 2017 following the Harper Review into competition policy found Australia's misuse of market power provision was not reliably enforceable and permitted anti-competitive conduct. This was largely because the previous wording of the section required the ACCC to prove '**intent**' (i.e. the intent of larger businesses when reducing prices, for example, was to substantially lessen competition). Given that 'intent' was very difficult to prove, it allowed anti-competitive behaviour to continue unabated and ultimately slowed the entry and expansion of new and innovative firms, delayed the entry of new technologies into Australia and impeded economic growth in the long term. The Harper Review recommended that Section 46 be replaced by a new provision, which would be better able to deal with harm to competition in Australian markets.

The new Section 46 now prevents firms with substantial market power from engaging in conduct that has the '**purpose, effect or likely effect' of substantially lessening competition in a market**. This effectively gives smaller businesses more grounds to complain against the 'anti-competitive behaviour' of larger rivals because the ACCC no longer needs to prove 'intent' on behalf of the larger businesses. The current wording of the section only requires that the ACCC to prove that 'the purpose, effect or likely effect' of their actions was to eliminate competition.

The ACCC points out that section 46 does not prohibit a firm from obtaining a substantial degree of market power. Nor does it prohibit a firm with a substantial degree of market power from 'out-competing' its rivals by using superior skills and efficiency to win customers at the expense of firms that are less skilful or less efficient. It acknowledges that this conduct is part of the competitive process, driving firms to improve their performance and develop products that are more attractive to customers, and should not be deterred.

Predatory pricing is a good example of the type of anti-competitive behaviour that contravenes section 46 and in its publication, 'Guidelines on misuse of market power', the ACCC refers to a hypothetical example relating to the market for advertising space in a regional town.

Hypothetical example of predatory pricing

A firm publishes the only newspaper in a major regional town. The firm provides the newspaper for free and has built up a substantial readership through its focus on local news and events. The firm attracts substantial revenues from local businesses who advertise in the newspaper and earns substantial profits. Most local businesses consider it essential to advertise in the newspaper. A new entrant commences publishing a competing regional newspaper and offers advertising rates comparable to those offered by the firm. The new entrant starts to win some advertising sales from the firm. The original firm reduces its advertising rates for all of its customers to less than 50 per cent of the rates offered by the new entrant. At the new advertising rates, the firm does not cover its costs of printing and distributing its newspaper. The firm's board documents indicate it is willing to incur these losses to reinstate its position as the sole regional newspaper and the profits that position generates. The new entrant is unable to attract sufficient advertisers and closes its newspaper. After the closure, the firm raises its advertising rates to their original level.

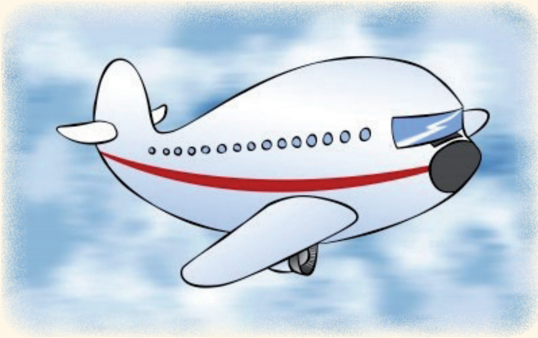
It is likely that the firm has a substantial degree of market power. Being the only regional newspaper has enabled the firm to build a substantial readership. Advertising in the newspaper is the most effective way for local businesses to reach local residents, and there are no close substitutes available. The firm's reduction in advertising rates was substantial. The reduced rates were substantially below those offered by the new entrant and were not sufficient to cover the costs of printing and distributing the newspaper. The reduced advertising rates were not a short-term offer, lasting until the rival newspaper closed. The financial losses made by the firm during this period were substantial. The firm had the purpose of forcing the rival newspaper to close and prevent it from competing on its merits. In reducing its prices, the conduct had the purpose, effect or likely effect of substantially lessening competition. The ACCC is of the view that the conduct is likely to breach s.46.

Source: https://www.accc.gov.au/publications/guidelines-on-misuse-of-market-power

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 'exclusionary conduct' can undermine the effective operation of markets.
3. Describe how the new wording of section 46 makes it easier for the ACCC to prosecute larger businesses who engage in predatory pricing.
4. Explain how the pricing decisions of large businesses is likely to change as a result of s46 becoming law.
5. Explain how small businesses and consumers might benefit under the new provisions of s46.
6. Referring to the hypothetical example, explain why the conduct of the regional newspaper is likely to contravene section 46.

Application Exercise 2y: 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 (the market had only two producers) 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 traveller. It offered fares of between 20% to 50% cheaper than the two existing airlines, seeking to both expand the size of the market, by luring leisure travellers 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

1. **Identify Compass' objective when entering the market in 1990.**
2. **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.**
3. **Explain why Compass was the only airline to effectively 'go broke' at this time, forcing it to exit the industry.**
4. **Provide a possible reason for the government being unable to prove that Ansett and Australian Airlines engaged in predatory pricing.**

Application Exercise 2z: Global air cargo cartel

'Garuda ordered to pay $19 million for price fixing'

The Federal Court has ordered PT Garuda Indonesia Ltd (Garuda) to pay penalties of $19 million for colluding on fees and surcharges for air freight services. The penalties follow the ACCC's court action against a global air cargo cartel, which has so far resulted in penalties of $132.5 million against 14 airlines, including Air New Zealand, Qantas, Singapore Airlines and Cathay Pacific. The Court found that between 2003 and 2006, Garuda made and gave effect to agreements that fixed the price of security and fuel surcharges, as well as a customs fee from Indonesia. It was ordered to pay $15 million. A further $4 million was ordered for the imposition and level of insurance and fuel surcharges from Hong Kong.

"Price fixing is a serious matter because it unfairly reduces competition in the market for Australian businesses and consumers, and this international cartel is one of the worst examples we have seen," ACCC Chair Rod Sims said. "We are committed to pursuing cartel conduct from both domestic and overseas operators, and think the total penalty ordered against all the airlines involved sends a strong deterrent message, particularly when it comes to international anti-competitive conduct."

"The ACCC has recently entered more formal agreements with the FBI on cooperation and information sharing, and has strong links to other competition regulators worldwide, which mean our scope is much broader than Australian businesses," Mr Sims said. *"Any business anywhere that enters an agreement that affects Australian businesses and consumers should clearly take note."*

This case is a long running one for the ACCC. In 2014, the Federal Court initially dismissed the ACCC's case against Air New Zealand and Garuda. The ACCC appealed the decision and the Full Court of the Federal Court upheld the ACCC's appeal. Garuda and Air NZ appealed the decision to the High Court, which unanimously dismissed the appeal. *"We are pleased to finally have resolution of this matter, which confirms our view that it was an important matter for us to appeal."*

Source: https://www.accc.gov.au/media-release/garuda-ordered-to-pay-19-million-for-price-fixing [30 May 2019]

Questions

1. **Define price fixing.**
2. **Describe the nature of the cartel between the airlines.**
3. **Explain how the penalty imposed by the ACCC sends a strong deterrent message when it comes to international anti-competitive conduct.**
4. **Describe the role of the FBI in making Australia's competition laws more effective.**
5. **Explain how consumers are negatively affected by the actions of the airlines.**
6. **[Extension: Explain why the penalties made headlines in the middle of 2019 when the alleged conduct occurred between 2003 and 2006.]**

Review questions 2.9

1. Discuss three possible strategies, apart from price discrimination, that could be used by a business seeking to maximise profits.
2. Define price discrimination and discuss how it can be a profit maximising strategy.
3. Discuss how the airline companies effectively use price discrimination as a means of maximising profit.4.
4. Define the term multibranding, providing some examples to illustrate.
5. Explain how multibranding can help a company to maximise profits.
6. Explain how plain label ('homebrand') 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.
7. Define predatory pricing and explain why it is considered 'anti-competitive'.
8. Identify the key ingredient needed to prove that predatory pricing has taken place.
9. Define a cartel and describe two ways that a cartel can effectively 'rip off' consumers.

2.10 Multiple choice review 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

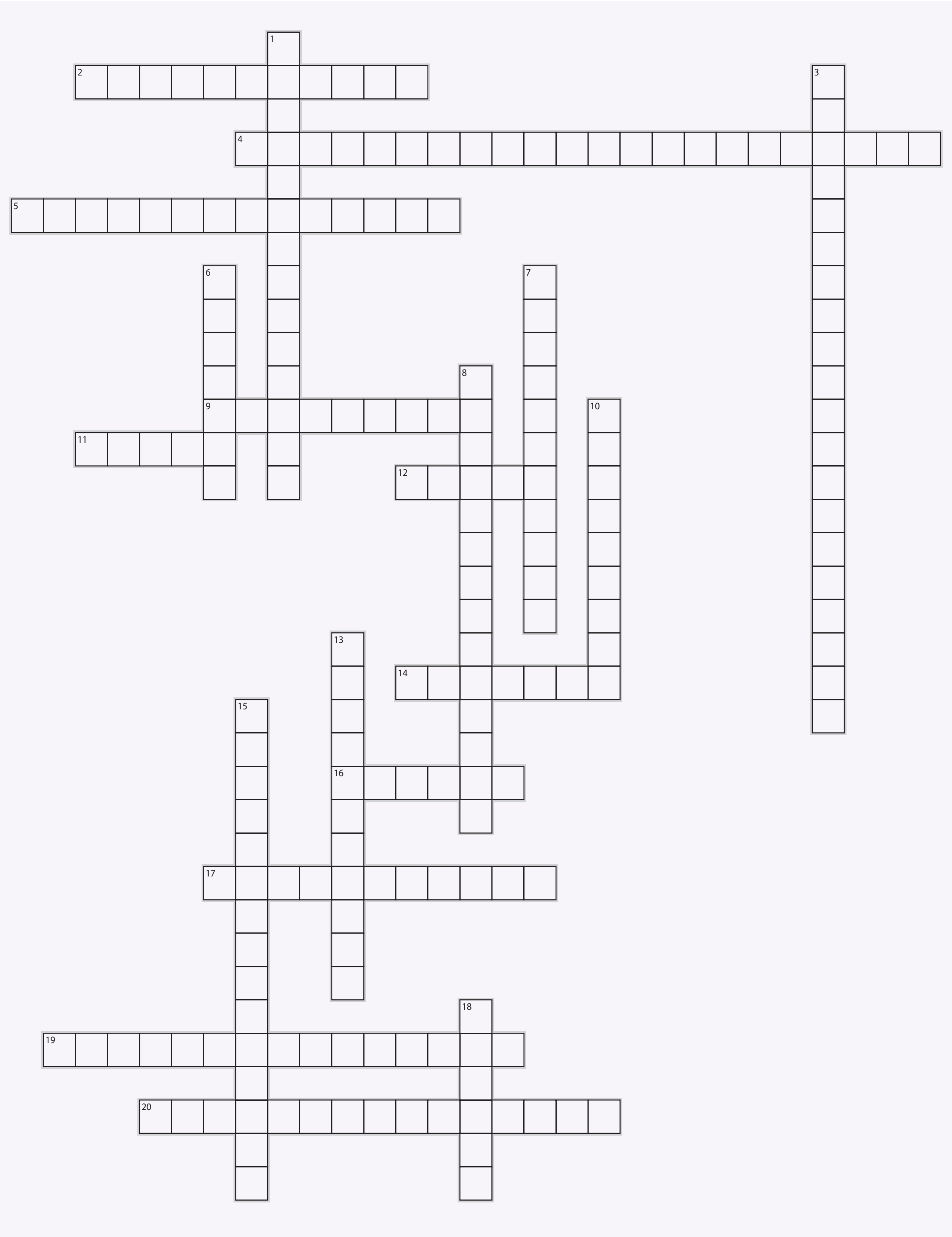
Across

2. A field of economics that seeks to incorporate the insights of psychology into economics, to enhance the explanatory power of economics
4. When 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. A common form of incentive used by the government, where part of the original payment for a good or service is returned to the buyer.
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', which is 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’ (as distinct from decisions that maximise utility) because of the availability of information, the complexity of decisions, the brains’ cognitive limitations and time constraints..
17. 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.
18. 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.
19. 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.
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. 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.